6-30-2009

Annual Report of the University, 2008-2009, Volumes 1-6

University of New Mexico

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THE UNIVERSITY OF NEW MEXICO

2008-2009
ANNUAL REPORTS
Volume I
# ANNUAL REPORTS
## 2008-2009
### VOLUME I

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The Division of Enrollment Management
Annual Report

July 1, 2008 to June 30, 2009

Divisional Report
Communication Center
Office of Admissions
Office of the Registrar
Student Financial Aid

Submitted by Terry Babbitt, Associate Vice President of Enrollment Management
Division of Enrollment Management 2008-2009 Goals and Accomplishments

- Enrollment Results:
  - Broke the funding formula 3% “enrollment band” in 2009. This had not been done since 2003.
  - Increased Fall 2008 new freshmen by 10.8%.
  - Increased Spring 2009 transfer students by 12.6%.
  - Increased National Scholars from 14 in 2007 to 39 in 2008 and 73 in 2009 (92% increase).
  - Overall enrollment for Fall 2009 increased 5.75% including 5.7% for new freshmen, 30% for new transfers with large growth in non-residents.
- Expanded our communication capacity by purchasing Hobson’s EMT E-Mail software that allows us to communicate more frequently and effectively with all students. A Customer Relationship Management (CRM) solution has also been purchased and will be automating communications in Fall 2009.
- Developed email letterhead prototype for all enrollment units.
- Re-engineered the admissions office to allow for more accountability and productivity of staff and service level.
- Set service level expectations for admissions to two working days. We are now committed to communicating with students within two working days of receipt of documents.
- Re-engineered the financial aid process and reduced the number of forms required. This resulted in 7,000 less pieces of paper students had to submit and be processed.
  - We no longer require verification of childcare expenses as we will be using average cost of childcare.
  - Driver’s license number is no longer required for the FAFSA form.
  - No forms needed for second bachelors degree as we can retrieve this information through Banner.
  - No need for graduation date change form as it can be pulled from Banner.
- Established a Communications Center that will handle all incoming calls for the entire division as well as provide telecounseling efforts in the evening. Additionally, the Center will house “Chat With Us” initiative allows students to engage with us by way of online chat. The result is phone calls answered in a timely manner and a student friendly virtual environment to conduct business.
- Rolled out “How Can We Help You” campaign during Fall registration. This campaign is ongoing during every registration period where staff are deployed to assist students with their registration questions. All personnel involved with this campaign wear “How Can We Help You” stickers so that students know that we are there to assist them.
- Initiated the first comprehensive recruitment plan for transfer students.
• Enhanced the recruitment strategies for first time college students.
• Began using the imaging product (Hershey) at the initial intake of documents, not when the file is completed. This ensures that students will no longer have to bring the same documents multiple times because they were misplaced.
• Created workflow in the image process so that staff assigned to a given alphabet will work with all documents received on a daily basis. In financial aid this process has resulted in one day processing of files.
• Hired a regional recruiter for Florida who produced National Merit, Achievement, and American Indian Scholars as well as a large increase in admitted students.
• Began cross-training of staff.
• Further enhanced communication for prospective students by designing and implementing various positioning statements, postcards and emails that will go out to prospective students.
• Introduced Enrollment Management Work Plan; all directors and associates have identified critical issues that need to be resolved or implemented in support of the University enrollment goals. This plan allows us to monitor closely the progress of the initiatives and ensure that we are within the allotted timeframe.
• Established multiple One-Stop Services. Students conduct enrollment business through a Main Campus One-Stop, virtual chat environment, and the new Student Support and Services Center.
• Implemented the National American Indian Scholars Program in partnership with ACT.
• Redesigned Gateway program for 2009 class that will allow more students to accept the UNM offer, and expanded program to other educational partners; San Juan Community College, Santa Fe Community College and our branch campuses.
• Revised financial aid process to allow transfer and graduate students provisionally admitted to receive early financial aid disbursement.
• Re-designed the Admissions letter that now includes a congratulatory envelope and a newly designed Bridge to Success Scholarship certificate.
• Developed a brochure called Top 10 Reasons to Attend UNM. This new communication will assist the university in improving the yield.
• Began designing communication protocol to parents in collaboration with the Parent Association.
• Instituted an email communication to all students that visit enrollment services. A message from the VP is going out weekly to them asking if they were able to get their enrollment issue resolved.
• Survey feedback is encouraged through email as well as in person by staff at One-Stop locations and virtually from online chat. Achieved 90% satisfaction level.
• The Registrar's office has begun work in establishing a multi-term registration process which will allow students to register for two semesters at a time. This would allow the
university better class planning and ensure that students’ class needs are met. Implementation of a new class scheduler will also contribute to improved efficiency of classroom utilization and analysis of course offerings.

• We are upgrading the degree audit system to allow students an easier, more efficient way of retrieving their graduation requirement and it would also allow early class schedule planning. This will assist students with graduating early and it will improve the university’s graduation rate. The projected completion date will be February 2010.

• Working closely with CNM and appropriate staff at UNM to begin planning for electronic transfer of records. Students attending CNM will no longer have to chase their transcript but rather each respective Registrar’s office will request the student’s records.

• Working with ITS to develop auto-admit for all undergraduate students that meet the university minimum requirements as this will provide quicker admission decisions to students.

• Working with ITS to provide prospective students with self-service information. This will allow new, prospective students to search for the information they need to complete their admissions file on the web.

2009-10 Goals and Objectives

To continue to improve operational efficiency through the use of technology and application of the best business practices for the purpose of improving the University’s graduation and retention rate.

• Update and upgrade the degree audit program reflecting 2009-10 catalogue.
  – Registrar to complete undergraduate coding by 8.31.09
  – Registrar to finalize plan to complete graduate by 8.31.09
  – Upgrade to interactive degree audit by 4.2010
  – Provide monthly updates on these projects

• Introduce multi-term registration.
  – Registrar to test 9.2009
  – Implementation scheduled for 10.2009

• Implement new class scheduler.
  – Registrar will implement by 9.30.09

• Implement Banner 8 and adapting best business processes allowing the University community more flexibility with student database maintenance.
  – All units business process consulting 7.2009
  – All units testing fall 2009

• Enhance OCR by initiating supplemental transcript processes.
• Improve self service for students.
  – Admissions priority and completion date: Status check for paper applicants by 9.2009
  – Financial Aid to be determined
  – Registration priority and completion date: Print unofficial transcripts from LoboWeb (date to be determined)

• Implement electronic transfer of records.
  – CNM and APS priority for this project led by the Registrar
    – Project specs by 8.2009

• Move the University catalog to an online edit program allowing for a more efficient and effective way to design a yearly catalog.
  – Registrar will have plan and implementation dates by 8.2009

• Automatic packaging of TEACH grants
  – Financial Aid by 12.2009 (for 2010-2011 awarding)

To continue to improve our communications to all we serve.

• Redesign the University’s search piece and view book.
  – Admissions by 8.2009

• Enhance communication plan to students.
  – All units with updated communication binders by 8.2009
  – Admissions outstanding student plan by 8.2009
  – Admissions juniors and sophomores by 12.2009

• Minimize wait times on queues to less than three minutes at the Communication Center.
  – Staff in place to meet goal by 8.2009

• Continue to improve our divisional website.
  – Divisional website complete by 8.15.2009
  – Unit upgrades ongoing with new/consistent look by 11.2009

• Enhance communication to outstanding students by way of implementing Hobson’s CRM.
  – Admissions consultation by Hobson’s by 9.15.2009
  – Testing of all components by 9.30.2009
  – Operational by 10.2009

To continue to provide exemplary service and achieve a 90 percent satisfactory rate or better on our service surveys.

• Work closely with One-Stop services and the Communications Center to allow for appropriate human resource support at all times.
Unit directors will submit monthly updates on management leave schedules and processing staff lunch schedules as well as master calendar additions.

- Continue cross-training of all staff and greater integration into the One-Stop environments at both Main Campus and SSSC.
  - All units will continue advanced cross-training of staff with second-level training completed for all staff and third-level completed for select staff by 12.2009.

- All unit directors will submit operational data reports at management meetings.

Further enhance the University’s presence in primary and secondary markets.

- Work with American Indian Pueblos to establish greater communication and linkage to the University.
  - Admissions will add specific outreach strategies with this market to communication plans by 10.2009.

- Reach out to community colleges specifically those in our secondary market and establish articulation agreements with those community colleges that could be great feeders to UNM.
  - Admissions will identify secondary markets such as El Paso, TX, Phoenix, AZ, Denver, CO, large metropolitan areas in Texas, and strategic areas in California, Florida, and Texas among others and create plan by 11.2009 with execution beginning in January 2010.

- Work closely with our branch campuses to promote educational opportunities beyond two years.
  - All units participate in scheduled joint meetings with branches to explore opportunities in fall 2009.

- Work closely with the University’s distance learning division in support of the institutional enrollment goals.
  - All units incorporate strategy based on collaboration with Extended University by 12.2009.

- Increase the number of Veterans enrolled by 25%.

Enrollment Plan

- Work closely with all stakeholders to produce a state-of-the-art five-year enrollment plan.
  - New version of working draft complete by 8.01.2009

Community Outreach

- Continue to provide support to our community for the purpose of access and success for all future students.
- ENLACE will report on all activities including number of students reached and quantifiable results by 12.2009.

- Work closely with parents in the nurturing and recruitment of future students
  - ENLACE and UNM parent groups will establish a communication strategy with plan included in binder by 10.2009.

- Build coalitions and partnerships in our community
  - ENLACE will create a brief report identifying groups with whom they have collaborated and a summary description of the nature of the work including objectives by 12.2009.

- Work with all pre-collegiate programs and special programs to ensure that all students participating in the programs are part of our prospect database.
  - ENLACE will report on total number of prospects created in the UNM database by 12.2009 and begin analyzing how many of these prospects attend UNM.

Scholarships

- Re-engineer the scholarship process for the purpose of making it more efficient and effective in the recruitment of students.
  - Financial Aid will implement substantial changes by 8.2009

Create a zero error expectation among all staff

- Closely monitor daily reports by all Associates and Directors for the purpose of addressing errors and workflow delay immediately.
  - All units should have front-end scanning and workflow processes in place and be able to report daily, weekly, and monthly summaries

- Duplicate clean-up on a daily basis
  - All units

- Training staff to produce an error free process when using student records that have been suspended in Banner.
  - All units
OFFICE OF ADMISSIONS

ANNUAL REPORT

For the Period From July 1, 2008 to June 30, 2009

Deborah V. Kieltyka
Associate Director, Office of Admissions
December 2009
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Departmental Mission
Assessment of 2008-09 Strategic Plan Department Goals
Enrollment Goals and Results
Significant Developments 2008-2009
Scan and Mail
Proposed Strategic Department Goals for 2009-10
DEPARTMENTAL MISSION

- To recruit, evaluate, and admit qualified students to UNM, including beginning freshman, transfer, returning, non-degree, international, and graduate applicants;

- To provide information about UNM admission requirements, policies, and academic preparation to our internal and external constituents;

- To provide guidance for academic success and, as necessary, advise students about appropriate alternative options to help them meet their academic goals.

We do this through teamwork by providing individualized quality service to our constituents. We are committed to creativity and flexibility in working in an ever-changing environment. We strive to provide service in a way that exceeds our constituents' expectations.

Main Functions:

1. Foster relationships with New Mexico high school counselors and collaborate with two- and four-year institutions and UNM Branch Campuses to facilitate enrollment of qualified students.

2. Facilitate the matriculation of students between New Mexico high schools and the university.

3. Represent the university and its academic programs in the development of statewide and out-of-state freshman, transfer and articulation initiatives.

4. Execute the university's admission and enrollment regulations, as well as INS regulations, governing international students.

5. Review and evaluate applications and credentials for approximately 20,000 applicants per year.
I. ASSESSMENT OF 2008-09 STRATEGIC PLAN DEPARTMENT GOALS

1. Support university new student enrollment goals
   a. Improve quality and quantity of prospective student communications
      *Implemented advanced technology to deliver improved email communications.*
      *Contracted with design group to enhance publications and messaging.*
   b. Enhance out-of-state recruitment
      *Increased communication plan and refined to strategies resulting in 20% increase in non-resident transfers and beginning freshmen.*
   c. Implement efficient processing changes
      *Implemented Hershey workflows in scanning, data entry, and processing; Reorganized personnel for efficient work structure; Improved the web application and created heads down data entry form. The result was a much quicker application to decision timeframe.*
   d. Develop improved organizational structure
      *We continued to integrate recruitment and processing personnel to facilitate a better understanding of both components. Efficiency has been gained in the processing area resulting in improved services with less staff.*

2. Cross-Training for all staff
   a. Prepare for consolidated enrollment services concept
      *Admissions has taken a lead role in developing and implementing cross-training for the division.*

3. Prepare for system upgrade to Banner 8.0
   a. Deploy designated staff to the upgrade project as needed
      *We are currently testing Banner 8. All milestones have been met.*

4. Integrate training and meetings
   a. Entire office participation in appropriate meetings and training sessions
      *The entire office approaches goals and objectives as a team.*
**ENROLLMENT GOALS AND RESULTS**

- Broke the funding formula 3% “enrollment band” in 2009. This had not been done since 2003.
- Increased Fall 2008 new freshmen by 10.8%.
- Increased Spring 2009 transfer students by 12.6%.
- Increased National Scholars from 39 in 2008 and 73 in 2009 (92% increase).
- Overall enrollment for Fall 2009 increased 5.75% including 5.7% for new freshmen, 30% for new transfers with large growth in non-residents.
- Branches did very well with large enrollment and student credit hour increases.

**REGISTRATION STATISTICS – FALL 2009**

<table>
<thead>
<tr>
<th>ABQ CAMPUS</th>
<th>HEADCOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATUS</td>
<td>Fall 2008</td>
</tr>
<tr>
<td>RETURNING</td>
<td>18,542</td>
</tr>
<tr>
<td>READMIT</td>
<td>1,475</td>
</tr>
<tr>
<td>NEW BEGINNING FRESHMEN*</td>
<td>3,225</td>
</tr>
<tr>
<td>NEW BEGINNING OTHER</td>
<td>60</td>
</tr>
<tr>
<td>UNDERGRAD TRANSFERS*</td>
<td></td>
</tr>
<tr>
<td>from New Mexico</td>
<td>710</td>
</tr>
<tr>
<td>from outside New Mexico</td>
<td>285</td>
</tr>
<tr>
<td>NEW NONDEGREE</td>
<td>426</td>
</tr>
<tr>
<td>NEW GRADUATE</td>
<td>932</td>
</tr>
<tr>
<td>NEW FIRST PROFESSIONAL</td>
<td>165</td>
</tr>
<tr>
<td>TOTAL HEADCOUNT*</td>
<td>25,820</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STUDENT CREDIT HOURS*</th>
<th>Fall 2008</th>
<th>Fall 2009</th>
<th>CHANGE</th>
<th>%CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>297,956</td>
<td>317,377</td>
<td>19,421</td>
<td>6.52%</td>
<td></td>
</tr>
</tbody>
</table>

| HEADCOUNT GOALS (+3.6%) | 26,750 |
| CREDIT HOUR GOALS (+3.9%) | 309,576 |

* Record Highs
• The Fall 2009 Beginning Freshman enrollment at the University was 3,409, a 5.71% increase from the previous fall semester. The University of New Mexico continued to offer the Bridge to Success Scholarship to entering freshmen for Fall 2009. The Bridge GPA requirement remained a 2.50 and staff continued to mail a personalized certificate to every eligible freshman admitted. The scholarship amount was reduced from $1,200.00 to $1,000.00.

• In addition to the day-to-day student contact and evaluation of credentials, the Freshman Admissions and Recruitment team coordinated numerous programs and projects that have university-wide impact:
  
  o The staff coordinated several recruitment events. Senior Day is our annual event hosting high school seniors and their families to visit our campus. We host an information session detailing admission, financial aid and scholarship information. Families tour campus and housing facilities as well as other activities on campus. In addition we host several visitation days focused on minority recruitment.

  o The High School On-Site Admission Program spans four months (August to November) from planning to completion. This initiative personalizes the admission process for local students by taking it to the high schools. Staff analyzes the applications and credentials prior to the high school visit and admission letters are mailed to students. This enables students to come to the on-site visit with a decision already in hand and ready to ask questions about the next step. Those students who are not admissible at the time of the on-site visit have the benefit of a personal one-on-one advisement session with a University Recruiter or Academic Advisor to guide them toward available options. In addition to more personal service, this program shows the positive impact of an earlier admission decision for participants.

• Budgetary cuts eliminated certain positions and the office had to restructure with less personnel and still improved service substantially.
• Continued to Transition Dual Credit Processes to the University Advisement Center. This statewide initiative requires coordination among Albuquerque Campus, Branch Campuses, School Districts, and the Higher Education Department. The program allows students to earn high school and college credit for college level courses taken during high school, without having to pay tuition for the college courses.

• Collaborating in the UNM/CNM Gateway Program – Students in this new partnership program have the advantages of taking classes at CNM while at the same time enjoying the benefits of being part of the UNM community.

• Website Redesign – Our departmental website has been completely redesigned for ease of use and information finding. The new design also includes many more exciting features such as a student map illustrating the volume and home location of our students, recruiter introduction pages, student profiles, blogs and other items. Student focus groups participated in this redesign.

• Brochures & Publication Redesign – Many of our standard brochures and publications now have an improved look to make them more appealing for students.

• Regional Recruiters – We hired specialists recruiting for UNM in California and Florida.

International Admissions

The University of New Mexico continually seeks to foster a global perspective across the entire spectrum of academic, cultural, and social life, and be a “University for the Americas.” Through involvement in the various dimensions of educational and cultural exchange, the University endeavors to strengthen communication and mutual understanding on an international level. It is the mission of International Admissions to support this commitment, while carrying out the policies of the Office of Admissions and the Office of International Programs and Services (OIPS).

International Admissions processes all prospective, non-citizen graduate and undergraduate students applying to the University of New Mexico. Every case involving transfer of credit requires the staff to do extensive research to determine comparable course content and level. They also work with U.S. and foreign organizations involved in international educational exchange.

Branch Campus and Community College Recruitment

• Held on-site Admissions and Advisement sessions twice a year at each Branch campus with admission personnel and advisors from various colleges available to students.

• Continued efforts to encourage articulation of coursework and application of technical credit where appropriate.
Graduate Admission

The University transferred the responsibility for graduate student admission to the Admissions Office beginning April 2006. Since then the application and credential processing functions of graduate students has been merged with the undergraduate process, resulting in a more consistent flow of work. Efforts to improve the over-all experience will continue as Admissions works with the Office of Graduate Studies and the departments.

SCAN AND MAIL

With the move from Main Campus to our new location at South Campus SSSC, the Admissions and Financial Aid offices have begun the process of merging scan and mail into a unified Enrollment Management division process. The scan and mail functions for both offices are located in one area and the scanning personnel are cross-trained to work in both areas.

PROPOSED DEPARTMENT GOALS FOR 2009-10

1. To continue to improve operational efficiency through the use of technology and application of the best business practices for the purpose of improving the University’s graduation and retention rate.
   a. Implement Banner 8 and adapting best business processes allowing the University community more flexibility with student database maintenance
      i. All units business process consulting 7.2009
      ii. All units testing fall 2009
   b. Enhance OCR by initiating supplemental transcript processes
   c. Improve self service for students
      i. Admissions priority and completion date: Status check for paper applicants by 9.2009

2. To continue to improve our communications to all we serve.
   a. Redesign the University’s search piece and view book by 8.2009
b. Enhance communication plan to students
   i. Updated communication binders by 8.2009
   ii. Outstanding student plan by 8.2009
   iv. Implement Hobson's CRM
      1. Consultation by Hobson's by 9.15.2009
      2. Testing of all components by 9.30.2009
      3. Operational by 10.2009

3. To continue to provide exemplary service and achieve a 90 percent satisfactory rate or better on our service surveys.
   a. Work closely with One-Stop services and the Communications Center to allow for appropriate human resource support at all times
      i. Submit monthly updates on management leave schedules and processing staff lunch schedules as well as master calendar additions
   b. Continue cross-training of all staff and greater integration into the One-Stop environments at both Main Campus and SSSC
      i. Continue advanced cross-training of staff with second-level training completed for all staff and third-level completed for select staff by 12.2009
   c. Submit operational data reports at management meetings

4. Further enhance the University's presence in primary and secondary markets.
   a. Work with American Indian Pueblos to establish greater communication and linkage to the University
      i. Add specific outreach strategies with this market to communication plans by 10.2009
   b. Reach out to community colleges, specifically those in our secondary market and establish articulation agreements with those community colleges that could be great feeders to UNM
      i. Identify secondary markets such as El Paso, TX, Phoenix, AZ, Denver, CO, large metropolitan areas in Texas, and strategic areas in
California, Florida, and Texas among others and create plan by 11.2009 with execution beginning in January 2010

c. Work closely with our branch campuses to promote educational opportunities beyond two years
   
i. Participate in scheduled joint meetings with branches to explore opportunities in fall 2009

d. Work closely with the University’s distance learning division in support of the institutional enrollment goals
   
i. Incorporate strategy based on collaboration with Extended University by 12.2009

5. Create a zero error expectation among all staff

   a. Closely monitor daily reports for the purpose of addressing errors and workflow delay immediately

   b. Clean up duplicates on a daily basis

   c. Train staff to produce an error free process when using students records that have been suspended in Banner
THE UNIVERSITY OF NEW MEXICO
DIVISION OF ENROLLMENT MANAGEMENT

COMMUNICATIONS CENTER
ANNUAL REPORT
JULY 1, 2008 TO JUNE 30, 2009

ALEX GONZALEZ, DIRECTOR
DECEMBER 14, 2009
Overview

The basic premise of the Communication Center is to streamline student service delivery. This involves streamlining the registration process, to stopping the student runaround and providing individualized service through a one-stop environment. The Center handles all incoming calls for the Office of Admissions & Recruitment, Registrar's and Financial Aid. It also provides services to students that wish to engage us using the Internet (Chat). Additionally, the Center houses all yield strategy related to student telecounseling initiatives.

Vision

Students will experience UNM as a friendlier, accessible, and helpful place to be. Students will also receive responsive services using current technology, which is consistent with the service experience and culture of the incoming generation of students.

Solutions

- We will improve customer service by ensuring all calls are answered appropriately
- Students will be able to conduct business relating to the various offices online.
- No more unanswered phone calls in the Enrollment offices.
- No need to wait in long lines to see an Enrollment Service representative.

Significant Developments during the academic year

- Establishment of Communication Center
  In October of 2008 the online chat center was created on main campus and had three full time and five student employees assisting students via chat.
  In February 2009, Telecounseling became part of the Communication Center and it moved to the Student Support & Services Center (SSSC) in April of 2009.
  In March of 2009, the Communication Center opened at the SSSSC, answering phone calls for the entire division and answering chats.

- Creation of the Virtual Student One-Stop
  This newly created web based service reduces the run around students experience conducting business with Enrollment Services. Students can search a knowledge base, submit questions, and chat with experts from across enrollment services.
• Cross training for all staff
Division wide cross training in financial aid, admissions and registration was conducted during the months of February and March to prepare staff to support the Communication Center and One Stop Center on main campus.

• Collaboration with Information Technology (IT)
Collaborated with IT in creating the Communication Center. Met with IT every other week during the 2008-09 academic year.

• Improving Telecounseling efforts
Hired and trained 8 undergraduate students to serve as telecounselors who make outbound calls to prospective students. Creation of several calling campaigns (transfer, freshman and orientation) to assist in meeting enrollment goals.

Data

**Phone Calls (March 18, 2009 to June 30, 2009)**

<table>
<thead>
<tr>
<th>Department</th>
<th># of calls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions</td>
<td>16,516</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>10,308</td>
</tr>
<tr>
<td>Registrar</td>
<td>9,292</td>
</tr>
<tr>
<td>Total</td>
<td>36,116</td>
</tr>
</tbody>
</table>

**Chat (October 2008 to June 30, 2009)**

<table>
<thead>
<tr>
<th>Department</th>
<th># of chats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions- International</td>
<td>289</td>
</tr>
<tr>
<td>Admissions/Recruitment</td>
<td>1,660</td>
</tr>
<tr>
<td>Advisement/Advising</td>
<td>713</td>
</tr>
<tr>
<td>Bursar/Cashiers</td>
<td>1,265</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>8,869</td>
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<tr>
<td>Graduate Studies</td>
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<tr>
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<tr>
<td>Scholarships</td>
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AAQ (Ask a Question) (October 2008 to June 30, 2009)

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<tr>
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<td>Registration</td>
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<td>308</td>
</tr>
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Significant Plans and recommendations for the near future

- Provide technology upgrades including summary page
- Minimize wait times on queue to less than three minutes at the Communication Center.
- Re-engineer telecounseling efforts and draft work plan focusing on improving yield rates for all students and targeted campaigns.
- Continue to improve our divisional website.
- Enhance communications to outstanding students by way of implementing Hobson’s CRM. Implement telecounseling component.
- Work closely with all units to plan for appropriate human resource support at all times.
- Submit operational data reports at management meetings.
- Work closely with the University’s distance learning division in support of the institutional enrollment goals.
- Continue to provide exemplary service and achieve a 90% satisfactory rate or better on our service surveys.

Appointments to Faculty/staff

Six staff members were appointed to work in the Communication Center from within Admissions, Financial Aid and Registrar.

Separation of faculty/staff

Georgieanne Grey separated from the Communication Center in December of 2008.
Publications of the division; publications of individual faculty/staff

None

Outside professional activities of staff members

EOD training – Working with Difficult Customers
National Association of Student Personnel Administrators
Learning Central Cross Training
Hispanic Association of Colleges & Universities

Outside sponsored research

None
THE UNIVERSITY OF NEW MEXICO
DIVISION OF ENROLLMENT MANAGEMENT

ENLACE
Increasing Access and Success in Education

ENLACE NEW MEXICO
ANNUAL REPORT
JULY 1, 2008 TO JUNE 30, 2009

DR. TERRY BABBITT, PRINCIPAL INVESTIGATOR
LAWRENCE ROYBAL, EXECUTIVE DIRECTOR
DECEMBER 2, 2009
Project Summary and Goals

Historically, affirmative action policies have evolved from initial programs aimed at providing equal educational opportunities to all students, to the legitimacy of programs that are aimed at achieving diversity in higher education. In June 2003, a U.S. Supreme Court ruling on affirmative action pushed higher education across the threshold toward creating a new paradigm for diversity in the 21st century. The court clearly stated that affirmative action is still viable but that our institutions must reconsider our traditional concepts for building diversity in the next few decades. This shift in historical context of diversity in our society has led to an important objective: If a diverse student body is an essential factor in a quality higher education, then it is imperative that elementary, secondary, undergraduate, graduate and professional schools fulfill their missions to successfully educate a diverse population. In NM, the success of graduate programs depends on the state’s P-12 schools, the community and institutions of higher education, and their shared task of educating all students. Further, when the lens is broadened to view the entire P-20 educational pipeline, it becomes apparent that the loss of students from elementary school to high school is enormous, constricting the number of students who go on to college. Not only are these of concern to what is happening in terms of their academic education but also in terms of the communities that are affected to make critical decisions and become and stay involved in the political and policy world that affects them.

Guiding Principles

ENGaging LAtino Communities for Education New Mexico (ENLACE NM) is a statewide collaboration of gente who represent the voices of underrepresented children and families—people who have historically not had a say in policy initiatives that directly impact them and their communities. Therefore, they and others from our community are at the forefront of this initiative. We have developed this collaboration based on a process that empowers these communities to find their voice in the pursuit of social justice and educational access, equity and success.

Core Values

- **Inclusivity**: We believe that a Latino-focused educational initiative will create a world-class educational system for all students. Every student must experience the opportunity and support necessary to achieve academic success.
- **Transparency**: We believe that remaining responsive and responsible to students, parents, educators and communities is imperative to educational success for students in New Mexico.
- **Cultural Humility**: We believe that our work recognizes, validates and embraces the core cultural values of our stakeholders—the strength of familia, the bonds of comunidad, and the mutuality of respeto.
- **Bottom-Up Change**: We believe students, parents, educators, and communities themselves must define the programmatic and policy issues necessary to affect systematic change. Policy recommendations will reflect best practices and lead to institutionalized programmatic innovations that will be assessed through qualitative and quantitative research.
As a collaborative, we realize that to truly transform New Mexico’s educational system, all corners of the state must be represented. Statewide coordination and a common agenda will bring a deeper recognition of the necessity for a seamless P-20 system and the basis for social improvement and the advancement of New Mexico’s human capital. A broader collaborative will generate strategies for addressing concerns in a strategic and focused way through a well-informed process. This process will lead to closer ties with more communities and will provide a way for our communities’ voices to speak as one. New Mexico is regularly listed at the bottom of national rankings for child poverty, low graduation rates, and lack of economic opportunity. New Mexico is depicted as a state that does not recognize the assets that Latinos, who represent 42% of the population, provide. With our statewide work, we as a collaborative team will bring about educational reform that in turn puts New Mexico on the map in a way that truly represents the strengths that this state and our citizens possess. ENLACE rejects the language of educational deficits and focuses on the strengths and potential of the students. Our work has profound implications for the future of New Mexico and its youth and will serve as a national model for other states and communities.

Framework

Our work is based on a framework for success that addresses the following interdependent components in the public education system:

- **Families and Community**: Generate a new culture within participating educational institutions, and accompanying procedures, that value and respect community and family involvement as a key factor in contributing to the academic success of Latino youth.

- **Educators**: Enhance the professional development of current and potential educators in a manner that encourages respect for Latino culture, history, and language; instills high academic expectations for Latino youth; results in the production and use of culturally relevant curricula; and increases role models and mentors for Latino youth.

- **Standards and Assessment**: Create strong accountability systems that focus on improving Latino academic performance, retention, and graduation, and that facilitate a seamless pathway to college. Institute fair and ongoing assessment that is culturally and linguistically appropriate.

- **Funding**: Mandate equitable funding across all districts and within districts; fund outcome-based programs that incorporate genuine community involvement; and provide appropriate financial and other support services that ensure that postsecondary education is accessible to Latino youth.

- **Policies**: Identify the best-methods and lessons-learned and convert them into legislation, regulations, policy, programs and practices that institutionalize and systematize the innovations that have been developed by ENLACE.

With regard to these target areas, ENLACE New Mexico has worked to raise awareness about the inequities in the current system, provided information on the types of alternative models and approaches that can utilized, explored how to institutionalize effective models and ideas, and used research to contribute to the continuous improvement of changes that are made.
Significant Developments

As a collaborative, ENLACE has required that we set aside our individual interests for the good of the whole, something that has challenged our teamwork and stretched our creativity. Through commitments, collaboration and sharing of resources, we have accomplished much in the last several years:

- The ENLACE Family center model has been funded for statewide dissemination by the state legislature in recognition of the fundamental importance of parents and families in their children’s education.
- ENLACE worked with state legislators to mandate changes in the way school districts track graduation rates as a means for improving accountability, and to require the inclusion of multicultural content in 10% of all instructional materials on the approved state textbook lists.
- ENLACE helped bring a dialogue regarding school counselors and the counselor-student ratio to the state level.
- ENLACE representatives have provided testimony and briefings to key state and national legislators and policy groups, hosted national conferences, and have served on the Governor’s Education Transition Team and Education Task Force. ENLACE has earned a reputation as the voice for educational reform in New Mexico.
- As a result of our activities, ENLACE students’ attendance rates, grade point averages, and persistence’s and graduation rates have shown measurable increases. Most importantly, students and families have begun to understand that college, for them, is a reality.

Successful Project Activities and Partnership Efforts

ENLACE New Mexico has evolved and changed with the goal of meeting the needs of students and families to improve academic achievement and graduation rates as well as education on health and well being that has large effects on New Mexico’s communities. The ENLACE Collaborative’s “bottom up” work has far exceeded program expectations in terms effectively meeting this policy goal. Consider that many Latino and other underserved parents and family members do not know how to navigate urban and rural school systems. School personnel, including classroom teachers, are often inaccessible; they neither speak Spanish nor share the cultural backgrounds of the majority of the students. Consequently, parents and students feel alienated from the school. The ENLACE New Mexico Collaborative was specifically designed to address the problem through policy development. The Collaborative creates a sense of value, purpose and ownership among parents of students in the targeted schools and surrounding neighborhoods. In fact, bilingual English-Spanish communication is one of the most prominent quality indicators offered by parent volunteers in the ENLACE movement. Moreover, ENLACE New Mexico is an oasis for many Latino and other minority and underprivileged students. Equally important, we address the need for many policies and services that are bilingual and geared toward immigrants. Parents import into the schools a set of competencies and skills that help students feel more at ease. In addition, evaluation findings revealed 1) increases in frequency of communication between families and schools; 2) increases in the quality of the
relationship established between families and schools; and 3) increases in the involvement of parents in supporting students’ learning and policy work.

Public Policy & Legislative Initiatives

During a relatively difficult legislative session where budget cuts were a concern for most groups, ENLACE was widely successful, receiving equal funding to that of the previous, 2008 legislative session. For the fiscal year 2009 – 2010 the legislature, through the New Mexico Higher Education Department, allotted ENLACE $1,147,300. The funds were equally distributed to the five ENLACE regions. As in the 2008-2009 fiscal year, the regions then voted to fund the ENLACE State Office at an amount of $147,300, leaving each region with a total budget of $200,000.

Below is an outline of the issues and priorities that the ENLACE community agreed upon for the 2009 legislative session.

ENLACE New Mexico Statewide Collaborative
The ENLACE Statewide Collaborative seeks to maintain current funding in order to sustain programmatic levels across the state, providing continuity of services to students, families and communities.

ENLACE Mentoring & Tutoring Initiatives
UNM undergraduate and law students provide culturally relevant mentoring and tutoring programs promote academic and personal success among middle and high school students. Programs focus particularly on students from diverse economic and cultural backgrounds. Without the leadership and support of Representative Janice Arnold-Jones and Senator Cisco McSorley these initiatives would not have such high rates of success.

Improved Student Advisement Plan
During the 2008 legislative session, ENLACE worked closely with Senator Cynthia Nava to create a task force charged with studying issues regarding the student to counselor ratio. This remains a policy priority as ENLACE leads the task force to develop policy recommendations for 2010 that lower the ratio and improve student achievement rates using Next Step Plans and other innovative strategies.

Think New Mexico: Small School Initiative
Think New Mexico championed legislation to cap the size of future public schools built in New Mexico and establish smaller learning communities in the state’s existing large schools by 2011. New Mexico’s graduation rate ranks second from the bottom of the 50 states and the District of Columbia. Only 54.1% of New Mexico’s children graduate from high school, compared with a national average of 70.6%. Decades of research have shown that smaller schools have higher graduation rates, high student achievement, lower levels of student alienation and violence, and higher levels of satisfaction among students, parents, principals and teachers. Small schools also dramatically improve the performance of low-income children, which helps to narrow the achievement gap.
ENLACE’s Ongoing Legislative Focus Areas:

- Bilingual Education
- Curriculum
- Financial Literacy
- Health & Law Career Pipeline Programs
- Lottery Scholarship
- Parental Involvement
- Professional & Leadership Development
- Public School Funding Formula
- Service Learning
- Youth Entrepreneurship

ENLACE leaders and participants have actively worked to inform, influence and change education policies to better serve New Mexico’s students, with special emphasis on underrepresented students. This has required identifying effective strategies for supporting Latino and other minority students’ education and then engaging in policy discussions to advocate for replication of these strategies to impact an increasing number of students and to sustain the work begun at the local community levels. Additionally, ENLACE continues to develop and maintain relationships with policy makers across the state.

Because of the diverse representation characterizing ENLACE partnerships, the Collaborative’s views of statewide issues are well rounded. While some of the partners are more experienced in developing policy, the ENLACE New Mexico Collaborative takes pride in integrating community voices to develop its policy recommendations. ENLACE creates an opportunity for parents and families, many without strong English language skills or educational achievement themselves, to gain confidence in their capabilities to serve as advocates for their own children, as well to assume leadership roles promoting the betterment of children in their communities. Moreover, as students feel their opinions are listened to with respect and help shape the final recommendations for changes in state policy, their commitment to support those efforts intensifies. When ENLACE organizes its annual legislative day, ENLACE Day at the New Mexico Legislature, community members, families and students convene at the New Mexico Legislature to advocate on behalf of ENLACE, to learn about the legislative process, and to share their personal experiences and successes with ENLACE programs.

An important specific example of ENLACE’s impact on New Mexico’s educational policy is accomplishment from the 2008 legislative session. With Senator Nava’s leadership, ENLACE was allotted $50,000 from the New Mexico Public Education Department (PED) to create a task force, now known as The New Mexico School Counselor Task Force. The New Mexico School Counselor Task Force is a diverse group of educational stakeholders who met to discuss, brainstorm and problem solve the high student to counselor ratio, the lack of universal quality counseling, and other issues that affect high school graduation rates. At two separate meetings in May and June of 2009, the task force met to carry out this work and build consensus on critical issues and policy recommendations. The final report will be submitted through PED to the New Mexico Legislature, which will define a number of policy recommendations for the legislature to consider for future legislation. Part of ENLACE’s success with regard to this task force was the
process by which if formed. The task force includes a number of student, parents and community members along with administrators and agency representatives; this is not typically the case with the state’s legislated task forces.

ENLACE has played a critical role in placing the issue of Latino and other minority students’ academic success on local, state and national policy agendas. We are committed to continuing to work toward systemic change by improving the capacity of our partners to serve as informed advocates, enhancing our ability to produce and disseminate concrete evidence and information about best practices and outcome-based results, and to build broad bases of support that will ensure that policies are adopted and implemented based on communities to become a statewide movement for transformational change.

Project Benefits from Collective Efforts

A major benefit that ENLACE New Mexico has gained from collective efforts is the sustainability of the project. That is, the relationships and networks that were formed via ENLACE New Mexico programs and activities will remain and continue to operate regardless of ENLACE’s formal presence or absence. Wealth of knowledge, i.e., insights gained, has accrued to individuals, neighborhoods and communities, and may still be activated when interacting with mainstream policy makers and institutions. In terms of ENLACE New Mexico partnerships, the ENLACE New Mexico Collaborative increased its number of partnerships during the last year. Although a handful of partners have had to address other priorities and reduced their activities within the collaborative, new partners have joined the network of ENLACE New Mexico and have ultimately strengthened the initiative in a variety of ways. First, current partners have access to new and updated evaluations and other materials as part of an effort to improve outreach to new stakeholders and other allies. In addition, the institutional resources of the University of New Mexico, New Mexico State University, Santa Fe Community College, Clovis Municipal schools, San Juan College, Northern New Mexico College and Highlands University are also available as well as regional to support project management activities and the Statewide Leadership Team, which advises project leaders and focuses on marshaling additional resources. The Collaborative is committed to continually seeking new partners who will contribute to the ongoing vitality of current programs and can bring a range of new assets to the partnership.

To accurately measure student achievement it is imperative to measure factors not simply relating to academic success, but also to familial support as well as emotional, mental and physical wellness. While academic achievement is necessary for a student to succeed in seeking a higher degree, it is not sufficient. Students need a more balanced measure of achievement. Therefore, ENLACE makes certain to track non-academic measures — contact hours and participant levels in ENLACE programs — along with academic measures — students’ GPA, attendance rates and graduation rates.

In 2008-2009, more than 5,700 students and 5,400 family members were served by ENLACE. The New Mexico Legislature recognized the Family Center model in its Family and Youth Resource Act, and the model is proving suitable for replication elsewhere in New Mexico. Based on the ENLACE Annual Report due to the Higher Education Department the statewide average GPA for ENLACE students is 2.52 and average absences are 4.05. Statewide averages for
Retention rates (students who stay in ENLACE programs), graduation rates, college acceptance rates and matriculation rates (students who complete one grade and move onto the next) are 88%, 86%, 86% and 91% respectively. One of the greatest strengths of ENLACE is seen in the number of students and families served particularly with respect to contact hours. The 5,700 students served accounted for 115,546.5 contact hours. Family contact hours were roughly 61,853. Research has demonstrated that time on task, or student engagement has a positive effect on academic achievement. The greater the time that the students spend with school related activities, the greater the opportunity for successes. Teachers are also positively influenced by students’ demonstrating interest in classroom activities. As a result, the contact hours that students spend with ENLACE programs increases their chances of succeeding in the classroom.

Collaboration & Partnerships

The partnerships ENLACE has established have fostered the belief that broader systems impact is created through leveraging all resources, not simply funding, while holding all stakeholders accountable. These partnerships serve as a vehicle for change. ENLACE forges partnerships between educational institutions and students, families, educators and community leaders. These partnerships include preschools through high schools, community colleges and universities. Because of their high enrollments of Hispanic and low-income students, efforts are centered on public institutions of higher education that are designated Hispanic-Serving Institutions.

The nature in which ENLACE partners with particular organizations says much about the strength and integrity of community partnerships. Partnerships are formed with various organizations that have similar missions and values because there is a common understanding that the challenges are greater than our programs alone and united advocacy is necessary for bottom up change. Although ENLACE prides itself on its positive student outcomes we believe the broader systems impact comes into play when we not only develop our students but also our communities. This is accomplished through civic engagement, parental involvement, leadership development and pipeline programs at a grassroots level.

Examples of ENLACE leveraging its resources to impact a greater community are the relationships established with the College Enrichment and Outreach Program (CEOP), Title V, Mentoring Institute, El Centro de la Raza, Latin American Network in Government and Public Policy, Southwest Hispanic Research Institute (SHRI), Parent Relations, the Health Sciences Center and the School of Law at the University of New Mexico. A specific example of ENLACE leveraging its resources to impact a greater community is the Los Compañeros mentors collaborating with the College Enrichment Program (CEP) at the University of New Mexico to orient and develop incoming University freshman. These mentors have the leadership skills and passion for education to influence anyone from middle and high school students to legislators. In return, the mentors are exposed to professionals who, in many cases, become mentors and role models to undergraduate and professional students, creating a web of opportunities. ENLACE’s involvement with think tanks and committees have had favorable outcomes in regard to educational reform and policy development.
National Networks and Partnerships

Sharing ENLACE models and best practices at a national level has been an important focus. ENLACE leadership and staff have partnered with many national organizations to share ENLACE information and have brought national partners to visit ENLACE sites. The efficacy of these efforts is best measured through the program audit done by Excelencia in Education. Excelencia in Education is a 501(c)(3) organization, based in Washington, D.C., which aims to accelerate higher education success for Latino students by providing data-driven analysis of the educational status of Latino students, and by promoting education policies and institutional practices that support their academic achievement. Excelencia is building a network of results-oriented educators and policymakers to address the U.S. economy’s need for a highly educated workforce. In January of 2009, Excelencia in Education produced a report summarizing and emphasizing the effectiveness of ENLACE’s programs.

ENLACE leadership, staff and volunteers have traveled to Denver, Chicago, Florida, Sacramento and Washington D.C. to take part in presentations of ENLACE models and best practices. With each connection, it became more apparent that national partnerships are necessary for ENLACE to have the impact it wishes. These national partnerships accomplish the following:

- Demonstrate ENLACE New Mexico’s dedication to educational reform, at the state and national levels;
- Provide information on local policies and practices;
- Establish and strengthen working relationships with national allies;
- Network with political leadership from across the country.

Proposed Strategic Goals for 2008 – 2013

Through a series of statewide meetings, ENLACE has developed a comprehensive strategic plan focusing on the upcoming five years. Three broad action items were developed along with several more core action strategies, determined by focus groups consisting of students, family members and the leadership team, each of which align with the broader items. The overarching action items include: sustainability, policy development and student success; each of the focus group strategies fall into one of the three overarching action items.

The student group listed the following six items as their core actions:

1. Work on the legislative priority to improve the student-counselor ratio
2. Hold legislative forums at colleges and universities
3. Provide opportunities for students of all regions to participate in internships
4. Host statewide ENLACE meetings for post-secondary students
5. Improve college retention
6. Incorporate arts and music into ENLACE.

The core action strategies developed by the family member group are as follows:

1. Organize and facilitate a multi-cultural community event
2. Expand the training and workshop events throughout the state
The final group, the leadership team recorded four core action strategies:

1. Provide annual paid training retreats for state ENLACE leadership
2. Improve ENLACE communication processes and capacities
3. Produce with continual updates the ENLACE state directory and organizational chart
4. Maintain and grow a unified and grassroots statewide ENLACE structure.

Through ENLACE, we have the opportunity to change that picture. In the future, we see New Mexico as a state with:

- An excellent public education system, which is vital to the quality of life of all New Mexico citizens and communities and fundamental to preserving a strong democratic society now and in the future.
- Public schools that are held to high standards of accountability at both the state and federal levels. Education policies are formulated to assure that all New Mexico children learn to their fullest potential; and continually strive for improvement and progress with an understanding of the need for commitment to the highest standards of student achievement.
- Students who are engaged in the educational process and take responsibility for their own education; helping to improve systems for others; and mentoring, tutoring, and/or otherwise supporting higher educational achievement among their peers, parents and community members. Students are supported in their efforts to enter and complete college through sustainable partnerships among higher education institutions, P-12 schools and local communities.
- Hispanic-serving institutions and other institutions acting in partnership with Latino communities to articulate and implement comprehensive plans aimed at strengthening the educational pipeline, decreasing high school dropout rates and increasing college completion rates. Latino faculty and students’ leadership roles and capacity are expanded in the process of developing and implementing plans in sustaining partnerships.
- Latino organizations, communities and students represented substantively in decision-making, in the formation of plans, in the implementation of creative educational models and in the governance process.
- Innovative plans, based on the objectives of ENLACE, promoting a sense of communal responsibility for greater academic access and success for Latino/a youth.
- Models and information about university/P-12/community/business partnerships reaching a variety of local, state and national audiences, including policy and other decision makers, colleges, universities, school districts.

If current demographic changes continue, in twenty years the great majority of students in the public schools will be Latino. We must create schools that reflect the variety of Latino histories, narratives and aspirations. We must produce educators who will respect and develop this ethnic diversity as part of New Mexico’s cultural capital. If New Mexico can rise to this challenge, we will serve as a model for the region, the nation, and the globe.
ENLACE’s Work Plan as Part of UNM Division of Enrollment Management

- Continue to provide support to our community for the purpose of access and success for all future students. Generate monthly report in these efforts.
- Work closely with parents in the nurturing and recruitment of future students.
- Establish a communication strategy with plan to integrate all ENLACE students and build every ENLACE student as a prospect in our University recruitment database. A special code needs to be identified, and final business plans and procedures need to be outlined in concert with the recruitment cycle.
- Build coalitions and partnerships in our community. Coordinate with a variety of partners to execute special presentations targeted toward community outreach.
- Work with all pre-collegiate programs and special programs to ensure that all students participating in the programs are part of our prospect database.
- Report on total number of prospects created in the UNM database and begin analyzing how many prospects attended UNM.

Publications

- Excelencia in Education Report (January 2009)
- Policy Agenda (January 2009)
- Strategic Plan Brochure (June 2009)
- Progress Report to Higher Education Department (February 2009)
- Secondary Progress Report to Higher Education Department (June 2009)
- Annual Report to Higher Education Department (September 2009)
- New Mexico School Counselor Final Report to Public Education Department (November 2009)
- Family and Youth Resource Act Progress Reports to Public Education Department (January, May 2009)
- ENLACE Annual Report to UNM (November 2009)

Staff Development

Lawrence Roybal, Executive Director
Diana Montoya-Boyer, Community Relations Manager
Christina Tapia, Education Support Coordinator
Brenda Chavez, Education Support Coordinator
Maria Acosta, Education Associate
Josh Corbin, Education Specialist
Cynthia Sanchez, Education Support Coordinator

The above staff members were active in the following community organizations:

- Albuquerque Partnership
- American Bar Association
- AmeriCorps
- Appleseed Foundation
- Association of Community Colleges
- Bank of America Foundation
- Celebra la Ciencia
Center for the Education and Study of Diverse Populations (CESDP)
Children Youth and Families Department (CYFD)
Citizen Schools
Comadre a Comadre
Daniels Fund
De Colores, Inc.
El Centro de Igualdad y Derechos
Excelenia in Education
Family Leadership Institute (FLI)
Family Parent Advocacy Council
GEAR-UP
Hispanic Association of Colleges and Universities (HACU)
Hispanic Statement of Cooperation (HSOC)
Hispano Round Table of New Mexico (HRT)
Juvenile Detention Centers
League of United Latin American Citizens (LULAC)
LULAC National Education Service Centers (LNESC)
MANA
Mathematics, Engineering, Science & Achievement (MESA)

Nation Association of Latino Elected and Appointed Officials (NALEO)
National Council for Community and Education Partnerships (NCCEP)
National Hispanic Caucus
National Hispanic Institute (NHI)
New Mexico Economic Development
New Mexico Educators Federal Credit Union (NMEFCU)
New Mexico Hispanic Bar Association
NM Work
Parent Advisory
Parent Teacher Association (PTA)
Parent Teacher Organization (PTO)
Parents Reaching Out (PRO)
Qwest Foundation
Rural Education of New Mexico
Self Reliance Foundation
Somos Un Pueblo Unido
Southwest Creations
SPARX/Lorenzo Antonio Foundation
Think New Mexico
Upward Bound
W.K. Kellog Foundation
Youth Development Incorporated (YDI)

2008-2009 Personnel Changes

HIRED: N/A
RETIRED: N/A
RECLASSIFIED: N/A
Introduction

The economic down-turn impacted all university budgets during the course of the year, however, the Office for Equity and Inclusion and all of the units (El Centro de la Raza, African American Student Services and American Indian Student Services, and Office of Equal Opportunity) that report to OEI have received special consideration in order to minimize the impact. This effort has greatly influenced confidence in the University’s commitment to diversity, equity and inclusion and to its support of the work of the OEI units in advancing diversity at the University of New Mexico.

While the impact to budgets has been minimized, the persistence of budgetary constraints and the anticipation of future cuts have made it difficult for the Office for Equity and Inclusion to become fully staffed. During the 2008-2009 academic year, a program specialist was hired in February 2009. This individual left her position in June 2009 to pursue a teaching position with CNM. Due to the hiring pause and hold, a position announcement was not approved until August. The Office for Equity and Inclusion relied on three graduate assistants and a part-time data analyst for the majority of the 2008-2009 academic year. Despite a very lean staff, the Office for Equity and Inclusion has moved forward in meeting its goals and has focused on building collaboration across the OEI units and departments campus-wide.

Mission

The UNM Division for Equity and Inclusion supports system-wide diversity initiatives to enhance student recruitment and retention, academic excellence, employee diversity and a campus climate that embraces its diversity as an asset.

Vision

The UNM Division for Equity and Inclusion will advance and sustain a university environment that values differences and inclusiveness for all members of the UNM community and will promote diversity as an essential element in fulfilling the University’s mission of student success, teaching, scholarship, public service and community engagement.
Diversity Plan Goals

• Goal 1: Building Minority Student Success in Undergraduate and Graduate Programs
• Goal 2: Recruitment and Retention of Minority and Female Faculty
• Goal 3: Faculty Development to Support Diversity, Equity and Inclusion
• Goal 4: Diversity and inclusion Development for Staff and Students
• Goal 5: Leadership and Management Development
• Goal 6: Promote a Healthy and Inclusive Campus Climate
• Goal 7: Develop Marketing, outreach, and communications strategy
• Goal 8: Develop a structure for implementation and Continuous Quality Improvement

OEI and Branch Campuses

During the course of the year, the VP for Equity and Inclusion visited the branch campuses and met with faculty and staff. In addition, the VP delivered the commencement address for the UNM-Taos campus. During the year, she has interacted with the branch campuses directors at meetings and about issues specific to their campuses. The Director of the UNM-Los Alamos campus was invited to participate on the Race and Ethnicity Compliance Project and served as a representative for the branch campuses. In addition, the following been key focal areas in OEI’s work with the branches:

• Identified some of common issues across campuses — recruitment of underrepresented faculty, success of underrepresented students, over-representation of minorities in staff positions with no opportunity to move into teaching and decision-making positions, lack of any effort on campus to address diversity;
• Working collaboratively on common goals to address diversity and establishing their own Diversity Councils;
• Providing diversity training and other assistance;
• Developing opportunities for transition of students from branch campuses to bachelor’s or graduate programs.

Student-Focused Activities

Student-focused activities have been central to the work of the Office for Equity and Inclusion. There is a strong and continuous connection to several student organizations. In addition students from underrepresented groups are provided support through the ethnic student services. Some of the student-focused areas have included the following:

• Working closely with ethnic student services programs to address student retention and student success;
• Seeking sources of funding to assist ethnic student services programs in enhancing their programs;
• Working closely with student groups, GPSA and PNMGC
• Met and established a connection with the Queer Straight Alliance
• Incorporated the Black Graduate Professional Student Association under OEI.

Creating Inclusive Excellence

Creating inclusive excellence includes students, staff and faculty. The VP for Equity and Inclusion set up three luncheon discussions with faculty, staff and students to discuss issues and matters of interest to them in advancing inclusive excellence. In addition, the largest number of scholars from underrepresented groups were recruited to UNM. These included the following:

• American Indian Scholars (7)
• Hispanic National Merit Scholars (47)
• National Achievement Scholars (2 Native Americans, 1 Hispanic)
• National Hispanic/Regents Scholars (2)
• National Merit/American Indian (1)
• National Merit/Hispanic (1)
• 25NM, 2FL, 16CA, 14TX, 1 NC, 1 VA, 1 WA, 1 NY.

The Office for Equity and Inclusion worked with the ethnic student services centers in connecting with these students in a more personal way.

Faculty-Focused Activities

Most of the faculty activities involved working with faculty committees or working with faculty groups to sponsor faculty professional development opportunities in diversity areas. Some of these included the following:

• Co-chairing Title V Steering Committee
• Meeting with faculty groups
• Sponsorship of Dr. Aimee Carrillo Rowe Presentation
• Sponsorship of Dr. Rusty Barcelo Presentations
• Sponsorship of Faculty Workshop Series – Spring 09
• Working with Alliance for Faculty Diversity

In addition, a Search Manual focused on the recruitment and retention of underrepresented faculty was created with the assistance of the Office for Equal Opportunity and Dr. Joy Griffin.
Faculty Recruitment and Retention 2008 – 2009

Faculty recruitment and retention funded totaled $203,323 in 2008/2009. These funds were used to support the following:

• African American – Engineering
• Native American – Education
• African American – University College
• African American – University College
• Native American – Arts and Sciences
• Native American – Arts and Sciences

Activities to Address Campus Climate

The Office for Equity and Inclusion has worked collaboratively with several entities across campus to deliver symposia focusing on diversity. Some of these include the following:

• Sponsored Civil Rights Symposium
• Sponsored Immigration Symposium
• Sponsored Power Lines Presentation
• On-going collaborative initiatives and presentations

In addition, the VP has met individually with deans and other groups on campus.

Communication and Outreach Activities

Most communication has been accomplished by meeting with various groups on campus. In addition, the VP for Equity and Inclusion has met with various community groups as well. The VP is a member of the NM Mesa Board and the Ralph J. Bunche Board. Through her involvement with these boards she is able to connect with individuals from the community and the public schools. This has increased awareness of the work of the Office for Equity and Inclusion. Some of the activities that have been accomplished include:

• Initiated 57 internal and 17 external outreach activities (2008-2009)
• Provided Outreach to branch campuses
• Latino Education Summit
• NM Mesa Board
• Ralph J. Bunche Academy Board

Implementation and Accountability

The Provost's Diversity Council and the OEI Advisory Team provide direction to the Office for Equity and Inclusion. The Diversity Report Card that was developed to
provide baseline data was produced in 2007/2008 for the first time. The second report with 2008/2009 is being printed.

Work with Units Reporting to OEI

The Office for Equity and Inclusion has worked closely with the Office of Equal Opportunity to address the transition of an interim director, Theresa Ramos. In addition, the VP has worked closely with the Ethnic Student Services Centers (El Centro de la Raza, American Indian Student Services and African American Student Services) to develop and implement assessment and evaluation strategies to focus on the impact of their services on student retention and graduation. A retreat was held in February 2009 to establish annual goals and define the focus of the newly created Division of Equity and Inclusion.
UNIVERSITY OF NEW MEXICO
Annual Report for Academic Year 2008-2009
July 1, 2008 – June 30, 2009

Submitted by:
Douglas M. Brown
Dean
The Anderson School of Management
The Anderson School of Management

The faculty and staff of the Anderson School of Management are dedicated to excellence in teaching, research, and service. This commitment is focused on ensuring the success of our 1,500 students.

In the academic year 2008-2009, the leadership of the Anderson School of Management (Anderson) continued to implement strategic goals and plans set forth in 2006. The faculty performed a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis at the faculty retreat in Fall 2008. This information informed a thorough review of the school’s strategic plan by faculty and Anderson administration. The strategic plan was evaluated and updated with specific objectives to direct the activities and resources of the school for 2008-2013. Additionally, the Anderson Foundation Board performed a SWOT analysis and used this information along with the school’s updated strategic plan as the basis for evaluating the Board’s strategic plan and goals. The school successfully completed the search for a permanent dean with the appointment of Douglas M. Brown as of July 2009.

The Anderson School’s programs and faculty members continued to achieve international recognition in key areas of knowledge advancement and quality education: U.S. News and World Report recognized Anderson as one of the top MBA programs for enrollment of ethnic minorities and women. Anderson continued to lead in the area of social responsibility and was placed in the top ten business schools nationwide for its focus on social and environmental management issues by the Bridgespan Group. Faculty continued to participate in and present their research at a diverse set of international conferences.

For the fourth year, Anderson managed the annual UNM Technology Business Plan competition, which supports the creation of high technology businesses. Eleven teams from a variety of colleges competed for $40,000 in start-up funding. Anderson faculty directly mentored many of the teams participating in the competition.

Anderson’s commitment to economic development in New Mexico continued through a variety of outreach efforts. For example, Anderson and the American Indian Business Association (AIBA) sponsored the Third Annual Native American Career Fair which helps Anderson build bridges with the Native American business community and allows the school to identify good jobs for its students. The Small Business Institute program was reinvigorated under the direction of Dr. Raj Mahto. Anderson students in graduate and undergraduate entrepreneurship classes worked with an experienced faculty member and graduate assistant to provide consultation services to local businesses. Through the program, students are able to apply classroom learning to real life cases and gain critical hands-on experience, and businesses gain valuable information and advice from student consultants at a fairly inexpensive price. Anderson hosted the 2008 FIBEA (Fostering Indigenous Business and Entrepreneurial) conference in Manaus, Brazil and had attendees from South America, Central America, the United States, Canada, Germany, and New Zealand. The conference gave participants the chance to network, share ideas, and explore
Anderson was one of three universities selected to participate in the CIA Collegiate Marketing Program. During this semester-long marketing program, students formed a marketing agency, Inspire Anderson Marketing, to develop, implement, and measure a comprehensive marketing program for the CIA. The peer-to-peer marketing program developed by Anderson students was featured on “Happening Now” on the FOX News Channel.

In 2008-2009, Anderson continued to sponsor direct engagement opportunities with and for UNM faculty, students, staff, local business leaders, the business community and leading experts in various business fields. The Anderson faculty lecture series continued with three evening lectures for the public based on the faculty presenter’s research. Anderson held one Business-to-Business Breakfast for the business community. The Distinguished CEO Lecture Series continued with a presentation by Garrett Thornburg discussing the “Financial Crisis: The U.S. Government’s Ultimate Role.” Departments and student organizations sponsored numerous speakers and panel discussions throughout the year.
Statement of Vision, Mission, and Goals

Vision
We envision a nationally recognized management school that will build on the University of New Mexico's strategic advantages to provide high quality education, research, and service to enhance the quality of life of our constituents.

Mission
We seek to develop and inform business and management leaders through a balance of teaching and scholarship, and to contribute to economic development and the quality of life of our constituents.

Goals
- **Quality Education**: Provide high-quality, value added management education programs at the undergraduate and graduate levels for students who come primarily from the diverse population of New Mexico.
- **Knowledge Advancement**: Advance the knowledge and practice of management through scholarly activities.
- **Economic and Professional Development**: Promote economic development in New Mexico and continue to provide professional development opportunities for our constituents.
- **Vibrant Intellectual Atmosphere**: Foster a vibrant climate of academic excellence that actively engages all elements of the Anderson community.
- **Careers for Graduates**: Enhance the career preparedness of students by expanding quality employment opportunities for Anderson graduates through strong ties with organizational recruiters.
- **Stakeholder Relationships**: Strengthen relationships with and support to internal and external constituents to enhance Anderson’s visibility and reputation.

The Anderson School comprises four departments: Accounting; Department of Organizational Studies (DOS); Finance, International, Management of Technology, and Entrepreneurship (FITE); and Marketing, Information and Decision Sciences (MIDS). The individual departments' annual reports follow.
DEPARTMENT OF ACCOUNTING (JULY 1, 2008-JUNE 30, 2009)

Chair: Joni J. Young  Professor

Full-time faculty: Philip D. Bougen  Associate Professor
Rich Brody  Professor
Ann K. Brooks  Lecturer
Michele Chwastiak  Associate Professor
Norman Colter  Lecturer
Reed McKnight  Visiting Professor
Leslie S. Oakes  Associate Professor
Alistair M. Preston  Professor
Robert J. Tepper  Lecturer
Dennis F. Togo  Professor
Craig G. White  Associate Professor

Part-time faculty: Dawn Addington  Jason Deshayes
Angela Ekofo  Charles Emmons
Brandon Haines  Jeanine Steffy
Carol Stephens  Dennis Sterosky

SIGNIFICANT DEVELOPMENTS FOR ACADEMIC YEAR, 2008-2009
DEPARTMENT OF ACCOUNTING

The following narrative documents goals and actions taken during 2008-2009 that support the Department's ongoing commitment to continuous improvement.

Progress on Strategic Goals

Goal: Continuously improve the graduate accounting concentration curriculum to include:

1. We added a governmental accounting course (MGT 641) and devoting MGT 640 to nonprofit accounting issues. This change to the curriculum was made in recognition of the importance of governmental and nonprofit organizations to the New Mexico economy. In addition, these organizations frequently comprise the bulk of audit and consulting work for the accounting firms that hire our students.

2. We developed a list of course offerings in other departments that we can recommend to our advanced/tax track MACC students. This list is designed to enhance our advising and to suggest skill sets that our students may wish to develop during their graduate studies.
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

Goal 2: Provide faculty support to continue to enhance the Department’s national and international reputation for excellence in interdisciplinary research in accounting and taxation as well as to ensure compliance with AACSB requirements for academically qualified faculty.

1. Departmental funds were used to provide travel support for conference attendance and/or presentations for Michele Chwastiak, Joni Young, Reed McKnight, Rich Brody and Craig White.
2. The department hired Professor Robert Gary to provide needed expertise in the taxation area. Professor Gary will join the department in Fall 2009.
3. The department unanimously supported the promotion of Prof. Craig White to full professor and the promotion was approved at all university levels.

Goal: Provide support for the exchange of ideas with the wider scholarly community by inviting nationally and internationally recognized scholars to the UNM campus.

Stephen Zeff provided a public lecture on the importance of IFRS and tensions between US and European interests in this area.

Goal: Continue our ongoing evaluation of departmental learning assurance efforts and their consistency with ASM initiatives

During the AY, the department refined and approved our learning objectives for the BBA, MACC professional and advanced/tax tracks and MBA accounting concentration. We also identified appropriate rubrics to employ in evaluating student achievement of these objectives and incorporated higher expectations for our graduate relative to undergraduate students. Using the curriculum map that was developed during the previous academic year, we identified appropriate courses in which to gather information and evaluate the accomplishment of our stated objectives. We developed a two-year plan for gathering information. During this year, we gathered information previously identified and met as a department to discuss the materials gathered.

Goal: Maintain good relationships with external stakeholders in the professional community.

The advisory council met twice during the year to discuss curriculum issues and to provide the council members with information about the service and research activities of departmental faculty. The breakfast meetings were well attended.

SIGNIFICANT PLANS AND RECOMMENDATIONS
DEPARTMENT OF ACCOUNTING

During the 2009-2010 academic year, the department is continuing its on-going maintenance of accreditation work. These efforts include assessing learning outcomes and incorporating results
into course content, assessing strategic goals, and maintaining faculty sufficiency. The department’s five-year assessment visit is scheduled for October of 2010.

The department is currently engaged in a faculty and an administrative assistant searches. This recruitment is in response to the growing numbers of undergraduate and graduate accounting majors. We expect this growth to continue given the demand for accounting graduates in the New Mexico workforce.

**PROMOTIONS, SABBATICALS, SEPARATIONS, AWARDS**

**DEPARTMENT OF ACCOUNTING**

**Rich Brody** – Anderson Foundation – 2008 Anderson Community Service Award

**James Hamill** – resignation from the faculty – May 2009

**Alistair Preston** – one-year leave without pay – May 2009

**Craig White** – promotion to Full Professor – June 2009

**Joni Young** – 2008 New Mexico Accounting Educator of the Year – New Mexico Society of CPAs

**PUBLICATIONS**

**DEPARTMENT OF ACCOUNTING**

**Rich Brody**

**Publications**


**Presentations**


Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

Presentations - Invited


Michele Chwastiak
Publications

Presentations


Norman Colter
Presentations – Invited
Colter, N. & Tepper, R. (2009). *The Paperless Classroom.* Success in the Classroom: Sharing Practices that Work, the Fourth Annual Community Conference for Faculty by Faculty, Albuquerque, New Mexico.

Reed McKnight
Publications


Presentations – Invited
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

**Leslie Oakes**

**Publications**


**Robert J. Tepper**

**Presentations – Invited**


**Dennis F. Togo**

**Publications**


**Proceedings**

Full Paper


Abstract Only


**Presentations**


**Presentations – Invited**


**Craig G. White**

**Presentations**


Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

**Joni J. Young**

**Publications**


**Presentations**


**Presentations – Invited**


**SERVICE ACTIVITIES**

**DEPARTMENT OF ACCOUNTING**

**Philip Bougen**

Service: Professional

Reviewer: Ad Hoc Reviewer for a Journal

2008-2009: Canadian Social Science Council

Service: University

College assignments:

Faculty Advisor: 2008-2009: Beta Gamma Sigma

**Rich Brody**

Service: Professional

Board Member: Advisory Board

2008-2009: Franklin Publishing Company

Member: Committee/Task Force

2008-2009: New Mexico Society of CPAs
2008-2009: Institute of Internal Auditors
2008-2009: American Psychological Society
2008-2009: American Institute of Certified Public Accountants
2008-2009: Association of Certified Fraud Examiners
2008-2009: American Accounting Association
2008-2009: Association of Certified Fraud Examiners, Editorial Advisory Committee

Reviewer - Article / Manuscript
2008-2009: Southwest American Accounting Association
2008-2009: American Accounting Association, Annual meeting
2008-2009: American Accounting Association, Mid-Year AAA ABO meeting
2008-2009: American Accounting Association, Mid-Year AAA Auditing meeting

Reviewer - Book / Textbook

Reviewer: Ad Hoc Reviewer for a Journal
2008-2009: Advances in Accounting Education
2008-2009: Managerial Auditing
2008-2009: Journal of Business Disciplines
2008-2009: Issues in Accounting Education
2008-2009: Behavioral Research in Accounting
2008-2009: Advances in Accounting Education
2008-2009: Advances in Accounting Behavioral Research
2008-2009: Advances in Accounting

Service: University

College assignments:
2008-2009: ASM Policy and Planning Committee

University assignments:
Member:
2008-2009: UNM Library Committee

Other Institutional Service Activities:
2008-2009: UNM Center for Information Assurance Research and Education: Associate Director
Ann Brooks
Service: Community

Other Community Service Activities

Service: Professional

Other Professional Service Activities
2008-2009: Internal Auditors Conferences

Reviewer: Book / Textbook
2008-2009: Reviewed accounting textbooks

Service: University

Department assignments:

Other Institutional Service Activities:
2008-2009: AACS贝尔 Learning Assessment & Professional Interaction: WebCT, the new Banner System and MyUNM
2008-2009: Distance Learning: Develop, design and deliver internet accounting classes using web course tools; Anderson's WebCT administrator. Integrate webcasting and video streaming in online courses.

College assignments:

Chair:
2008-2009: Faculty Senate Budget Committee

Member:
2008-2009: Statewide Business Articulation Group
2008-2009: Extended Programs Committee: Working with NMEL to develop distance learning and web enhanced WebCT templates for Anderson School
2008-2009: Beta Alpha Psi Faculty Mentor
2008-2009: IT Committee (Task Team): Create a technology vision for the school designed to enhance the use of technology by students, faculty and staff in learning, research and operational endeavors.

Other Institutional Service Activities:
2008-2009: Anderson Technology Showcase

University assignments:

Member:
2008-2009: Faculty Senate Rep to Regent's Finance & Facilities Committee
Michele Chwastiak
Service: Professional

**Board Member: PRJ Editorial Review Board**
2008-2009: Accounting and the Public Interest
2008-2009: Accounting Forum

**Board of Directors: Moderate Involvement**
2008-2009: New Mexico Teen Pregnancy Coalition

**Editor: Associate Editor**
2008-2009: Accounting History, Co-Editor with Warrick Funnell

**Reviewer - Article / Manuscript**
2008-2009: Accounting History
2008-2009: Critical Perspectives on Accounting
2008-2009: Accounting and the Public Interest

Service: University

**University assignments:**

**Faculty Advisor:**
2008-2009: SGI Buddhist Club

**Member:**
2008-2009: Graduate Curriculum Subcommittee
2008-2009: Senate Graduate Committee

**Other Institutional Service Activities:**
2008-2009: University of New Mexico, University Library: Faculty Acknowledgment Award Presentation

Norman Colter
Service: Community

**Other Community Service Activities**
2008-2009: Association of Latino Professionals in Finance and Accounting Holiday Event, Hosted Charity Event, Toys for Tots
2008-2009: IMA Student Night Dinner/Presentation, Attended
2008-2009: Pride in the Profession Luncheon, Attended
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

Service: Professional

**Other Professional Service Activities**
2008-2009: Association of Latino Professionals in Finance and Accounting
2008-2009: AACSB, Attended a conference on Faculty Learning and Research

Service: University

**Department assignments:**

**Member:**
2008-2009: Faculty Search Committee

**Student Placements:**
2008-2009: Deloitte Presentation on Career Opportunities for Students

**College assignments:**

**Faculty Advisor:**
2008-2009: Association of Latino Professionals in Finance & Accounting

**Member:**
2008-2009: Master of Accounting Committee
2008-2009: Anderson Scholarship Committee

**Mentoring Activities:**
2008-2009: KPMG Case Study Competition: Competition at the Association of Latino Professionals in Finance & Accounting annual meetings

**Other Institutional Service Activities:**
2008-2009: Anderson School Orientation for Students
2008-2009: Freshmen Interest Group Class

**Student Placements:**
2008-2009: Attend Anderson School Career Fair and Accounting Career Fair

Reed McKnight
Service: University

**Department assignments:**

**Member:**
2008-2009: Accounting faculty job search committee
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

Leslie S. Oakes
Service: Community
Chair of a Committee
2008-2009: Healthcare for the Homeless

Other Community Service Activities
2008-2009: NGO New Mexico, working to expand health of non-profit sector in New Mexico

Service: University
Department assignments:
Member:
2008-2009: Curriculum & Programs Committee

Other Institutional Service Activities:
2008-2009: Anderson Accounting Advisory Board

University assignments:
Member:
2008-2009: Academic Freedom & Tenure Committee

Other Institutional Service Activities:
2008-2009: RW Johnson Public Health Center Advisory Board

Alistair M. Preston
Service: University

Department assignments:
Member:
2008-2009: Accounting Search Committee

College assignments:
Member:
2008-2009: Anderson Leadership Council
2008-2009: Foundation Finance Committee

Robert Tepper
Service: Professional

Other Professional Service Activities
2008-2009: Faculty Training for Becker CPA Review Course
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

**Presentation**

**Service: University**

**University assignments:**

**Member:**
2008-2009: Online Course Standards Task Force

**Dennis F. Togo**

**Service: Community**

**Other Community Service Activities**
2008-2009: The Church of Jesus Christ of Latter-Day Saints, Stake Financial Auditor, Albuquerque West New Mexico Stake

**Service: University**

**Department assignments:**

**Member:**
2008-2009: Department Recruiting Committee Member
2008-2009: Accounting Department's Curriculum Committee

**College assignments:**

**Chair:**
2008-2009: Anderson Curriculum and Programs Committee
2008-2009: Anderson Entrance and Credits Committee

**University assignments:**

**Member:**
2008-2009: Anderson Dean Search Committee

**Craig G. White**

**Service: Community**

**Member of a Committee**
2008-2009: Voices for Children, Audit Committee

**Service: Professional**

**Reviewer: Ad Hoc Reviewer for a Journal**
2008-2009: Accounting and the Public Interest
Service: University

College assignments:

Chair:
2008-2009: Anderson Faculty

Faculty Advisor:
2008-2009: Beta Alpha Psi

Joni J. Young
Service: Professional

Board Member: Advisory Board
2008-2009: Beta Alpha Psi Advisory Board
2008-2009: SSRN History of Accounting eJournal

Board Member: PRJ Editorial Review Board
2008-2009: Accounting History
2008-2009: Accounting and the Public Interest
2008-2009: Accounting Historian's Journal

Member: Committee/Task Force
2008-2009: New Mexico Society of CPAs, Awards Committee

Reviewer: Ad Hoc Reviewer for a Journal
2008-2009: Accounting Auditing and Accountability
2008-2009: Accounting and the Public Interest
2008-2009: Accounting, Organizations and Society

Service: University

Department assignments:

Chair:
2008-2009: Accounting Advisory Council

Faculty Advisor:
2008-2009: MACC Advanced Concentration
2008-2009: MBA Accounting Concentration

College assignments:

Member:
2008-2009: Anderson Leadership Council

Other Institutional Service Activities:
2008-2009: Graduate Program (MACC) Open House
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

SPONSORED RESEARCH
DEPARTMENT OF ACCOUNTING

New Mexico Small Business Assistance Program - $125,000; provide funding to students developing technological forecasts, market analyses, etc. to New Mexico small businesses.
SIGNIFICANT DEVELOPMENTS FOR ACADEMIC YEAR, 2008-2009
DEPARTMENT OF ORGANIZATIONAL STUDIES

This past year Dr. Shelly Arthur was promoted to Associate Dean at the Anderson School.

Dr. Shawn Berman served on the Editorial Boards of the *Journal of Management*, *Strategic Management Journal*, *International Journal of Organizational Analysis*, and *Business and Society*, served on the Executive Committee of the International Association for Business and Society (IABS), was elected to the leadership track for the Social Issues in Management (SIM) division of the Academy of Management, and during the 08-09 academic year served as the chair for the Professional Development Workshops.
Dr. Rob Del Campo continued his position as associate editor of the Business Journal of Hispanic Research and of the International Journal of Diversity in Organizations, Communities, and Nations. He also served as the faculty advisor to the Anderson School chapter of the Society for Human Resource Management. In addition, he was honored as one of "Fifteen People who Will Change Albuquerque in 2008" by Albuquerque: The Magazine.

Dr. Jackie Hood served on the Editorial Review Board for Equal Opportunities International, the UNM Steering Committee for the Higher Learning Commission Accreditation, as Past-President of the Faculty Senate, and on the Operations Committee of the Faculty Senate. She was an invited presenter for the ASTD New Mexico Annual Conference, the Human Resource Excellence Awards and Seminar for SHRM of New Mexico, 2008 SHRM of NM State Conference, and gave two presentations for the Anderson Faculty Lecture Series.

Dr. Jeanne Logsdon is a member of the editorial board of International Journal of Organizational Analysis and the Journal of Public Affairs. She served the on the UNM Faculty Senate and UNM Faculty Senate Operations Committee. Dr. Logsdon was a Guest commentator on KNME's "New Mexico In Focus" about social entrepreneurship. She was also active locally as the Ward Chair for a major political party, Board member of her neighborhood association, and gave a presentation on ethics to Leadership New Mexico.

Ms. Arnie Nelson is a participating Member of Young Lawyers Division, State of New Mexico and in 2008 provided pro bono assistance to a client with Black Lung for benefits compensation, presented a seminar on Interview Techniques and Fraud Investigation to Allstate Insurance Company and Nevada General Insurance Company, and presented a New Mexico Law Update seminar to Young America Insurance Company.

Dr. Karen Patterson served on the UNM Governmental Relations Committee and as a reviewer for several journals.

Ms. Sarah Smith provided oversight to student groups for the Samaritan Counseling Center's Ethics in Business Awards Program, served on the Samaritan Counseling Center's Task Force on Center for Congregational Life and Leadership, and testified in support of Ethical Public Service Act for the City Council.

Dr. Harry Van Buren continued his service as a volunteer teacher for Junior Achievement, Vice-President of Community of Joy Congregational Council, Board member of CANNICOR, and member of the Environmental Justice Working Group for the Interfaith Center on Corporate Social Responsibility.

**Significant Plans and Recommendations**

**Department of Organizational Studies**

The Department of Organizational Studies prepares people to lead socially responsible organizations in diverse contexts through education, scholarship, and service, by focusing on:
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

- Personal, professional, and organizational development
- Ethical decision-making and behavior
- Business growth and economic development

The Department and the Anderson School are planning on sponsoring the Organizational Behavior Teaching Conference in June 2010. This conference is the annual conference of the Organizational Behavior Teaching Society. OBTS is dedicated to innovative teaching and learning in the organizational and management sciences. Its members include faculty at universities and colleges throughout the world, as well as business educators and consultants in the profit and non-profit sectors.

The Department and the Anderson School will also be sponsoring the second bi-annual Qualitative Research in Management Conference in March 2010. The conference goal is to create a space where qualitative scholars doing research in and around organizations using a multiplicity of methods, voices, and ways of writing qualitative work, can exchange ideas and engage in critical discussion.

The Department intends to continue to encourage activities related to achieving recognition for the Beyond Grey Pinstripes Award. Beyond Grey Pinstripes is a biennial survey and alternative ranking of business schools. Its mission is to spotlight innovative full-time MBA programs that are integrating issues of social and environmental stewardship into curricula and research. In 2007-2008, the Anderson School of Management was ranked 18th of 112 schools surveyed and 6th for small schools.

Finally, the Department intends to hire an additional tenure-track faculty member in strategic management to ensure that Anderson students are able to think strategically and critically and become responsible top level decision makers.

PROMOTIONS, SABBATICALS, SEPARATIONS, AWARDS
DEPARTMENT OF ORGANIZATIONAL STUDIES

Two new lecturers were hired effective July 2009. Ms. Amie Nelson was hired as a Business Law Lecturer and has her JD from Drake University School of Law and her BA in Social Sciences/International Relations from Edgewood College. Ms. Sarah Smith was hired to teach Business and Society. She has her JD from the University of New Mexico School of Law and her BA in Political Science from Austin College.

Dr. Ann Cunliffe continued her leave without pay at the University of Hull in England for the 2008-2008 academic year.
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

**Publications**

**Department of Organizational Studies**

**Michelle Arthur**

**Web Publications**


**Presentations**


**Shawn Berman**

**Presentations**


**Presentations – invited**


**Ann Cunliffe**

**Publications – invited**


**Chapters – invited**

Presentations


Rob DelCampo

Publications


Chapter-Supplement


Proceedings

Full Paper


Abstract Only


Presentations


Presentations – Invited

Jacqueline Hood

Presentations


Proceedings

Full Paper


Kathryn Jacobson

Presentations


Jeanne Logsdon

Presentations


Amie Nelson

Presentations – Invited

Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

**Susan Michie**

**Publications**


**Presentations**


**Karen Patterson**

**Publications**


**Presentations**


**Scott Taylor**

**Proceedings**

**Full Paper**


**Presentations**


Presentations - invited
Taylor, S. N. (2009). How important is it to see yourself as others see you? Going beyond self-other rating agreement. Invited presentation at Department of Organizational Behavior Symposium at Case Western Reserve, Cleveland, Ohio.

Harry Van Buren III

Publications


Presentations


SERVICE ACTIVITIES
DEPARTMENT OF ORGANIZATIONAL STUDIES

Michelle Arthur
Service: Professional

Reviewer: Ad Hoc Reviewer for a Journal
2008-2009: Journal of Occupational Health Psychology
2008-2009: Journal of Management
2008-2009: Industrial and Labor Relations Review
2008-2009: Feminist Economics
2008-2009: Canadian Journal of Administrative Sciences
2008-2009: Business and Society
2008-2009: Academy of Management Review
2008-2009: Academy of Management Journal
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

Service: University

Department assignments:

Faculty Advisor:

College assignments:

Member:
2008-2009: Anderson Leadership Council

Shawn Berman
Service: Professional

Board Member: PRJ Editorial Review Board

Other Professional Service Activities
2008-2009: International Association of Business and Society, At Large Representative Executive Committee

Reviewer: Ad Hoc Reviewer for a Journal
2008-2009: Business and Society, Ad hoc reviewer

Reviewer: Conference Paper
2008-2009: Society for Business Ethics, Ad Hoc Reviewer
2008-2009: International Association of Business and Society, Ad Hoc Reviewer

Service: University

College assignments:

Chair:
2008-2009: Anderson Policy and Planning Committee

Ann Cunliffe
Service: Professional

Chair: Conference/Track/Program
2008-2009: Academy of Management, Program Chair: Critical Management Studies Interest Group

Editor: Guest Editor of Journal

Member: Committee/Task Force
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

2008-2009: Academy of Management, Executive Committee: Critical Management Studies Interest Group

Service: University

_University assignments:_

_Other Institutional Service Activities:_

2008-2009: Supervisor of Ph.D. and Masters student dissertations: Supervision of Ph.D. students and Masters student dissertations at Hull University Business School, The University of Hull, UK.


2008-2009: Grant Proposal Coordinator: Coordination of grant proposal submission at Hull University Business School, The University of Hull, UK

2008-2009: Seminar Organizer: Organizing seminars for faculty and Ph.D. students at Hull University Business School, The University of Hull, UK.

Rob DelCampo

Service: Professional

_Board Member: Advisory Board_

2008-2009: New Mexico Chapter, National Society of Hispanic MBAs

_Chair: Conference / Track / Program_

2008-2009: National Society of Hispanic Masters of Business Administration, Conference Chair, NSHMBA Academic Forum, Atlanta, GA

_Editor: Associate Editor_


_Member: Committee/Task Force_

2008-2009: Golden Key National Honor Society

2008-2009: Phi Beta Kappa

2008-2009: Academy of Business Education

2008-2009: National Society of Hispanic Masters of Business Administration, Steering committee for the formation of New Mexico Chapter of the National Society of Hispanic MBAs

2008-2009: Society for Industrial and Organizational Psychology

2008-2009: American Psychological Association

2008-2009: Academy of Management

_Officer: Organization / Association_

2008-2009: National Society of Hispanic Master of Business Administration, New Mexico Chapter
Reviewer - Book / Textbook
2008-2009: Thompson/South-Western Learning
2008-2009: Pearson/Prentice-Hall

Reviewer - Grant Proposal Related to Expertise
2008-2009: National Science Foundation, Research Grant Proposals

Reviewer: Ad Hoc Reviewer for a Journal
2008-2009: Organizational Behavior and Human Decision Processes
2008-2009: Journal of High Technology Management Research
2008-2009: Asia Pacific Management Review
2008-2009: Journal of Business and Management
2008-2009: Journal of Business Research
2008-2009: Organizational Research Methods

Reviewer: Conference Paper
2008-2009: Western Academy of Management
2008-2009: Academy of Management, Gender and Diversity in Organizations Division
2008-2009: Academy of Management, Organizational Behavior Division

Service: University

Department assignments:

Member:
2008-2009: Anderson Search Committee: Strategy Faculty Search Committee

College assignments:

Faculty Advisor:

Member:
2008-2009: Anderson Search Committee: Dean Search Committee
2008-2009: Anderson School of Management Information Technology Task Force: Member, Anderson IT Task Force
2008-2009: Anderson School of Management Library Committee: Member, Anderson Library Committee
Jacqueline Hood

Service: Community

**Speech / Presentation at a Community Meeting**

- 2008-2009: Bohannon Huston Annual Retreat, Invited Speaker on Tools to Create an Ethical Organization
- 2008-2009: Core of Engineers, invited speaker on Genderspeak: How Men and Women Communicate in Organizations
- 2008-2009: Greater Albuquerque Chamber of Commerce Leadership Conference, invited speaker on The Bully Next Door: How a Difficult Behavior can Kill Your Culture
- 2008-2009: ASTD New Mexico Annual Conference, invited speaker on Creating and Maintaining an Ethical Culture Free of Bullying Behavior
- 2008-2009: Anderson Faculty Lecture Series, invited speaker on Explore the Possibility: Creating an Organizational Culture Built on Communication, Honesty, and Trust

Service: Professional

**Board Member: PRJ Editorial Review Board**
- 2008-2009: Equal Opportunities International

**Member: Committee/Task Force**
- 2008-2009: Transportation Research Board, Management and Productivity Committee

**Chair: Conference / Track / Program**
- 2008-2009: Academy of Management, Chairperson for a session in the Gender and Diversity in Organizations Division

**Reviewer: Ad Hoc Reviewer for a Journal**
- 2008-2009: Psychology of Women Quarterly
- 2008-2009: Equal Opportunities International

**Reviewer: Conference Paper**
- 2008-2009: Academy of Management, Social Issues in Management Division
- 2008-2009: International Association for Business and Society
- 2008-2009: Academy of Management, Gender and Diversity in Organizations Division
- 2008-2009: Transportation Research Board Conference

Service: University

**Department assignments:**

**Other Institutional Service Activities:**
- 2008-2009: Chair, Department of Organizational Studies
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

College assignments:
Member:
2008-2009: Anderson Leadership Council

University assignments:
Other Institutional Service Activities:
2008-2009: Faculty Senate: Past-President
2008-2009: Faculty Senate Operations Committee
2008-2009: Faculty Senate Policy Committee
2008-2009: Steering Committee, Higher Learning Commission Accreditation
2008-2009: Graduation Marshall

Kathryn Jacobson
Service: Professional

Chair: Conference / Track / Program
2008-2009: Academy of Management, Session Chair, Anaheim, California

Reviewer: Ad Hoc Reviewer for a Journal
2008-2009: Journal of High Technology Management Research
2008-2009: Management Research
2008-2009: Administrative Science Quarterly

Reviewer: Conference Paper
2008-2009: Academy of Management, Human Resources Division
2008-2009: Academy of Management, Organizational Behavior Division

Jeanne Logsdon
Service: Community

Speech / Presentation at a Community Meeting
2008-2009: Bohannon Huston Annual Retreat, Invited Speaker on Tools to Create an Ethical Organization

Service: Professional

Board Member: PRJ Editorial Review Board
2008-2009: Journal of Public Affairs

Chair: Committee / Task Force
2008-2009: Washington Campus Program, Chair of the Audit Committee, Washington Campus Program
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

Service: University

**College assignments:**

*Member:*
2008-2009: Anderson School of Management Dean's Faculty Review Committee

**University assignments:**

*Member:*
2008-2009: University of New Mexico Faculty Senate: Anderson School of Management Representative

**Susan Michie**

Service: Community

**Member of a Committee**
2008-2009: Nob Hill Mainstreet Steering Committee

**Karen Patterson**

Service: Professional

**Academic Conference: Moderator / Facilitator**
2008-2009: Academy of Management
2008-2009: Western Academy of Management

**Editor: Associate Editor**
2008-2009: Journal of Management Inquiry, Editorial Associate

**Member: Committee/Task Force**
2008-2009: Southern Academy of Management
2008-2009: Western Academy of Management
2008-2009: Academy of Management

**Reviewer: Ad Hoc Reviewer for a Journal**
2008-2009: Journal of Management Inquiry
2008-2009: Gender, Work and Organizations Conference
2008-2009: Academy of Management Journal

**Reviewer: Conference Paper**
2008-2009: Southwestern Academy of Management
2008-2009: Southern Academy of Management
2008-2009: Western Academy of Management
2008-2009: Academy of Management, Health Care Administration Division
2008-2009: Academy of Management, Organization Management Theory Division
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

Service: University

**University assignments:**

*Member:
2008-2009: UNM Governmental Relations Committee

Sarah Smith

Service: Community

**Member of a Committee**

2008-2009: Equal Access to Justice, Pamela B. Minzner Memorial Event Committee
2008-2009: New Mexico Ethics Alliance, Programs and Best Practices Committee
2008-2009: New Mexico Ethics Alliance, Membership Development Committee
2008-2009: New Mexico Ethics Alliance, Executive Committee
2008-2009: Samaritan Counseling Center, Task Force: Congregational Life and Leadership
2008-2009: Samaritan Counseling Center, Steering Committee NMEBA

**Positions Held in Civic Organizations**

2008-2009: New Mexico Ethics Alliance, Vice-President and Secretary

**Speech / Presentation at a Community Meeting**

2008-2009: Immanuel Presbyterian Church, Global Ethics and the Christian Response
2008-2009: New Mexico Ethics in Business Awards Screen Committee, Ethics 101

Service: Professional

**Member: Committee/Task Force**

2008-2009: Academy of Marketing Science, Member
2008-2009: Society for Business Ethics, Member
2008-2009: New Mexico State Bar, Member

**Presentation**

2008-2009: Albuquerque City Council, Testimony in support of the Ethical Public Service Act

Service: University

**College Assignments**

*Member:
2008-2009: Anderson Policy and Planning Committee
Scott Taylor
Service: Professional

Member: Committee/Task Force
2008-2009: Society for Industrial and Organizational Psychology
2008-2009: Society for Human Resources Management
2008-2009: Cross Cultural Management Network
2008-2009: Consortium for Research on Emotional Intelligence in Organizations
2008-2009: American Psychological Association
2008-2009: Academy of Management

Other Professional Service Activities
2008-2009: HayGroup, Emotional Competence Inventory, Certified Executive Coach

Reviewer: Ad Hoc Reviewer for a Journal
2008-2009: Journal of Business and Psychology
2008-2009: Human Relations
2008-2009: Academy of Management, Management Education Division
2008-2009: Journal of Business and Psychology
2008-2009: Human Relations

Reviewer: Conference Paper
2008-2009: Academy of Management, Organizational Behavior and Management Education Divisions
2008-2009: Organizational Behavior Teaching (OBTC) Conference

Harry Van Buren III
Service: Community

Other Community Service Activities
2008-2009: Program Staff, Program staff to the Social Responsibility in Investments and the Economic Justice Loan Committees, Episcopal Church, New York, NY

Service: Professional

Board Member: Advisory Board
2008-2009: CANNICOR

Board of Directors: Moderate Involvement
2008-2009: CANNICOR
Other Professional Service Activities
SIGNIFICANT DEVELOPMENTS FOR ACADEMIC YEAR, 2008-2009
DEPARTMENT OF FINANCE, INTERNATIONAL, TECHNOLOGY AND ENTREPRENEURSHIP

- 3rd annual Native American Career Fair, April 2009 at the Anderson School of Management
- November 2009 – 3rd Annual FIBEA - Fostering Indigenous Business & Entrepreneurship in the Americas Conference at Manaus, Brazil.
- July 2008 – Doug Thomas took UNM students (20+) to Mexico
- June 2009 – Chuck Crespy brought CIDESI students from Mexico for summer program.

The annual Business Plan Competition was held in the Spring semester of 2009 with an even greater level of participation and funding from the business community. The competition was open to UNM students (any program) enrolled in at least six (6) hours in Fall 2007-2008 or Spring 2009. Teams constructed a business plan for a technological product developed in New Mexico, assess key feasibility issues and market potential, and presented plans to judges, including entrepreneurs, venture capitalists, and other business leaders.
SIGNIFICANT PLANS AND RECOMMENDATIONS
DEPARTMENT OF FINANCE, INTERNATIONAL, TECHNOLOGY AND ENTREPRENEURSHIP

The Business Plan Competition will be in the Spring of 2010 with an even greater level of participation and funding from the business community. The competition is open to UNM students (any program) enrolled in at least six (6) hours in Fall 2009 or Spring 2010. Teams will construct a business plan for a technological product developed in New Mexico, assess key feasibility issues and market potential, and present plan to judges, including entrepreneurs, venture capitalists, and other business leaders.

Annual Albuquerque Hispano Chamber of Commerce Day at Anderson – Fall 2010
Native American Career Fair – Spring 2010
FIBEA Conference – Fall 2010
Native American Business Student Day – Fall 2010
2nd Annual Non-Profit Day – Fall 2010

Finance Search for an Associate/Full finance Professor to be hired by Fall 2010
John Schatzberg will be on sabbatical for Fall 09

PROMOTIONS, SABBATICALS, SEPARATIONS, AWARDS
DEPARTMENT OF FINANCE, INTERNATIONAL, TECHNOLOGY AND ENTREPRENEURSHIP

Dante Di Gregorio – promoted to Associate Professor Spring 09
T3 review Emmanuel Morales-Camargo Spring 09
Na Dai – resigned from Anderson Schools Spring 09

Kaye Summerhays received the Charter Bank Award of Excellence (Staff)
Steve Walsh received the Faculty Acknowledgement Award

FITE awards
Jennifer Bayley – Outstanding Service
Emmanuel Morales-Camargo – Outstanding Service
Steve Walsh – Outstanding research
Hsuan-Chi Chen – Outstanding research
Raj Mahto – Outstanding research
Doug Thomas – Outstanding research
Ward Hickey – Outstanding Teaching
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

**PUBLICATIONS**

**Charles Crespy**

**Publications**


**Chapter**


**Presentations**


**Dante Di Gregorio**

**Publications**


**Chapter-Reading**


**Presentations**

Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

Raul Gouvea
Proceedings
Full Paper

Presentations

Sul Kassicieh
Proceedings
Full Paper

Presentations
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

**Raj Mahto**

**Publications**


**Presentations**


**John Schatzberg**

**Publications**


**Presentations**


**Doug Thomas**

**Publications**


**Presentations**

Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

Presentations—Invited


Gautam Vora

Presentations—Invited


Steve Walsh

Publications


Presentations


SERVICE ACTIVITIES

DEPARTMENT OF FINANCE, INTERNATIONAL, TECHNOLOGY AND ENTREPRENEURSHIP

Hsuan-Chi Chen

Service: Professional

Reviewer:

2008-2009: Chapter in The Handbook of Technology Management
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

Session Organizer:

Academic Conference: Discussant

Service: University

College assignments:
Member:
2008: IT Committee member: served as a committee member of the IT committee

Charles Crespy
Service: Professional

Reviewer: Ad Hoc Reviewer for a Journal
2008-2009: Mid-American Journal of Business

Reviewer: Conference Paper
2008-2009: Consejo Latinoamericano de Escuelas de Administración
2008-2009: Business Association of Latin American Studies
2008-2009: Academy of Marketing Science Annual Conference
2008-2009: American Marketing Association Educators Conference
2008-2009: Academy of International Business Conference
2008-2009: Southern Marketing Association Annual Conference

Board Member
2008-2009: New Mexico Coalition for Financial Education

Board of Directors
2008-2009: The Next Generation Economy
2008-2009: Albuquerque Economic Development

Member
2008-2009: New Mexico Economic Forum

Dante DiGregorio
Service: Professional

Reviewer:
2008-2009: Mid-American Journal of Business
2008-2009: Academy of Management Journal
2008-2009: Research Policy
2008-2009: Academy of Management Review
2008-2009: Journal of Management Studies
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

2008-2009: Journal of International Business Studies  
2008-2009: Journal of Technology Transfer  
2008-2009: Strategic Entrepreneurship Journal  

Chair: Conference / Track / Program  
2008-2009: Academy of Management Annual Meeting (IM Division)  

Member Editorial Board: Academic PRJ  
2008-2009: Journal of Management Studies  

Service: University  

University assignments:  
Member:  
2008-2009: Interdisciplinary Committee on Latin American Studies UNM: appointed by Dean of Arts & Sciences  
2008-2009: Executive Committee Latin American and Iberian Institute UNM: Secretary  
2008-2009: Steering Committee, UNM Rome Campus Initiative  

Other Institutional Service Activities:  
2008-2009: KNME-TV: On Board of Directors  
2008-2009: Director of Anderson International Student Exchange Programs  

State-wide assignments:  

Other Institutional Service Activities:  

Raul de Gouvea Neto  
Service: Professional  

Chair: Conference / Track / Program  
2008-2009: Fostering Indigenous Business and Entrepreneurship in the Americas (FIBEA), Manaus, Brazil  
2008-2009: SUFRAMA, Co-chair, 'Water and the Sustainable Development of the Amazon' Region. Manaus, September 10-12., Manaus, Brazil  

Other Professional Service Activities  
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

Service: University

**College assignments:**

*Member:
2008-2009: Anderson Leadership Council*

**Sal Kassicieh**

Service: Professional

**Board Member: Advisory Board**

2008-2009: New Mexico Information Technology and Software Association
2008-2009: Women Self Sufficiency Economic Team (WESST)
2008-2009: Verge Venture Fund
2008-2009: Patch Works

**Raj Mahto**

Service: Professional

**Reviewer: Ad Hoc Reviewer for a Journal**

2008-2009: Journal of Management Studies
2008-2009: Small Business Economics

**Emmanuel Morales-Camargo**

Service: Professional

**Board Member: Advisory Board**

2008-2009: National Society of Hispanic MBAs New Mexico Chapter, Albuquerque, New Mexico

**John Schatzberg**

Service: University

**Department assignments:**

*Faculty Advisor:
2008-2009: Finance area student Advisor: Curriculum service assignments, Content study across finance concentration courses, Long-term scheduling of finance courses

*Member:
2008-2009: Department Recruiting Committee: Finance Area*

**College assignments:**

*Member:
2008-2009: Anderson Curriculum and Programs Committee*
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

**University assignments:**

*Member:*

2008: Parish Library Committee

**Doug Thomas**

Service: Professional

**Reviewer: Ad Hoc Reviewer for a Journal**

2008-2009: Journal of International Business Studies

**Reviewer: Conference Paper**

2008-2009: Academy of International Business Annual Meeting

**Service: University**

**College assignments:**

*Faculty Sponsor:*

2008-2009: Director: Director of UNM-UdeG (Universidad de Guadalajara)summer program, May 08

*Member:*

2008-2009: Anderson Leadership Council

**University assignments:**

*Faculty Advisor:*

2008-2009: LDSSA (Latter-Day Saint Student Association)

*Member:*

2008-2009: UNM Latin American & Iberian Institute Grants and Awards Committee
2008-2009: UNM Faculty Senate Curriculum Committee: (Spring 2007-Present)

**Other Institutional Service Activities:**

2008-2009: UNM Faculty Concilium, Latin American Studies

**Gautam Vora**

Service: Community

**Positions Held in Civic Organizations**

2008-2009: New Mexico chapter of the American Association of Individual Investors, President
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

Service: University

University assignments:

Member:
2008-2009: UNM Faculty Senate
2008-2009: Organization Committee for the Ibero-American Research Conference

Steve Walsh
Service: Professional

Editor: Academic PRJ
2008-2009: Technology Entrepreneurship for Technovation, Area editor
2008-2009: Journal of Microlithography, Micromachining and Microfabrication, Area Editor

Service: University

Department assignments:

Faculty Advisor:
2008-2009: Technology Commercialization Association: Student advisor

SPONSORED RESEARCH

DEPARTMENT OF FINANCE, INTERNATIONAL, TECHNOLOGY MANAGEMENT, AND ENTREPRENEURSHIP

Dante Di Gregorio


Sui Kassicieh


Doug Thomas
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

**Steve Walsh**
SIGNIFICANT DEVELOPMENTS FOR ACADEMIC YEAR, 2008-2009
DEPARTMENT OF MARKETING, INFORMATION AND DECISION SCIENCES

- Catherine Roster served as a board member, editorial board of the Journal of Business Research. She has been awarded “2009 Exceptional Reviewer of the Year.”

- Catherine Roster consulted with The ARC of New Mexico on “Peace of Mind” study, 2006, to concept-test a variety of for-profit services, with a $5000 contribution to Anderson Foundation Fund. The ARC of New Mexico later asked Dr. Roster to join their Board of Directors. She is now serving her 2nd term on their board. In 2009, The ARC applied for a United Way grant to support the Peace of Mind for-profit initiative. Dr. Roster helped the ARC prepare the UW proposal and gave a presentation about her
research to the UW committee members. The ARC of New Mexico received UW funding for the first time in their history.

- O.C. Ferrell and Linda Ferrell donated $50,000 to the Anderson Marketing Center to provide for support for students and the center to achieve excellence in Marketing education.

- Linda Ferrell was elected Vice President of Programs for the Academy of Marketing Science World Marketing Congress, Oslo, Norway.

**SIGNIFICANT PLANS AND RECOMMENDATIONS**

**DEPARTMENT OF MARKETING, INFORMATION AND DECISION SCIENCES**

- The Marketing curriculum has undergone significant revisions, centering on the introduction of Marketing Strategy as a required course for Marketing majors pursuing either a BBA or an MBA, which will come to fruition in Fall 2010.

- The MIS curriculum will undergo significant revisions over the course of the 2010 spring semester.

- The Operations Management curriculum will undergo significant revisions over the course of the 2010 spring semester.

- MIDS plans to develop and grow in curricular areas that are in demand by students and reflect changes in emphasis in terms of career potential for our students.

**PROMOTIONS, SABBATICALS, SEPARATIONS, AWARDS**

**DEPARTMENT OF MARKETING, INFORMATION AND DECISION SCIENCES**

Sabbatical: Nick Flor—spring semester 2009

**PUBLICATIONS**

**DEPARTMENT OF MARKETING, INFORMATION AND DECISION SCIENCES**

*Gerald Albaum*

Publications

Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

Books/Textbook

Other Publications

Proceedings

Ranjit Bose
Proceedings

Presentations

Steve Burd
Publications

Proceedings - Invited
Full Paper

Dwane Dean
Publications
Dean, D. (2008), What’s Wrong with IVR Self-Service?, Managing Service Quality, 18 (6), 594-609
Linda Ferrell

Book/Textbook


Presentations – invited


O.C. Ferrell

Publications


Book/Textbook


Presentations - invited


Xin Luo

Publications


Chapter

Anderson School of Management, 2008-2009, Douglas M. Brown, Dean


**Proceedings Full Paper**


**Mary Margaret Rogers**

**Proceedings Full Paper**

Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

**Catherine Roster**

**Publications**


**Refereed Proceedings**

**Abstract Only**


**Book Chapter (Reprint)**


**Awards**

Regents’ Lectureship Award, 2008

**Alessandro F. Seazzu**

**Publications**


**Book/Textbook**


**Proceeding – Invited**

**Full Paper**

Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

Steven Yourstone

Publications


SERVICE ACTIVITIES

DEPARTMENT OF MARKETING, INFORMATION AND DECISION SCIENCES

Gerald Albaum

Service: Professional

Board Member: Advisory Board
2008-2009: Journal of Marketing Theory and Practice, Member, Senior Advisory Board

Board Member: PRJ Editorial Review Board
2008-2009: Management International Review, Member, Editorial Review Board

Chair: Conference / Track / Program

Ranjit Bose

Service: Professional

Board Member: PRJ Editorial Review Board
2008-2009: Journal of Computer Information Systems
2008-2009: Journal of International Technology and Information Management

Service: University

Department assignments:

Other Institutional Service Activities:
2008-2009: MIS Area Coordinator

College assignments:

Chair:
2008-2009: ASM Dean's Advisory Committee

Member:
2008-2009: Anderson Entrance and Credits Committee

University assignments:

Member:
2008-2009: Faculty Senate Admissions and Registration Committee
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

Steve Burd
Service: Professional

**Member: Committee/Task Force**
- 2008-2009: New Mexico Regional Health Information Organization, (RHIO-Grande)
- 2008-2009: New Mexico Telehealth Alliance, Secretary/Treasurer since May 2006

**Officer: Organization / Association**
- 2008-2009: New Mexico Telehealth Alliance, Secretary/Treasurer

Service: University

**College assignments:**

**Member:**
- 2008-2009: Anderson Curriculum and Programs Committee

Linda Ferrell
Service: Professional

**Board Member: Advisory Board**
- 2008-2009 College Advisory Board Cutco/Vector Marketing

**Board Member: PRJ Editorial Review Board**
- 2008-2009: Journal for the Advancement of Marketing Education

**Board of Directors: Substantial Involvement**
- 2008-2009: Marketing Management Association

**Editor: Academic PRJ**
- 2008-2009: Journal of Customer Relationship Management, Internet Editor

**Keynote Address**
- 2008-2009: American Marketing Association, Ethics Committee Member

**Member: Committee/Task Force**
- 2008-2009: Open Compliance Ethics Group, Steering Committee
- 2008-2009: Academy of Marketing Science, Vice President of Membership
- 2008-2009: Marketing Management Association
- 2008-2009: Academy of Management
- 2008-2009: Academy of Marketing Science
- 2008-2009: Society for Marketing Advances
- 2008-2009: American Marketing Association

**Officer: Organization / Association**
- 2008-2009: Marketing Management Association, President
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

2008-2009: Society for Marketing Advances, Vice President of Marketing

Other Professional Service Activities
2008-2009: Mtn, States Better Business Bureau, Marketplace Ethics Award Judge
2008-2009: AACSB - St. Louis, Ethics Content Expert
2008-2009: Open Compliance Ethics Group, Advisory Panel

Reviewer: Ad Hoc Reviewer for a Journal
2008-2009: Marketing Education Review
2008-2009: Journal of Business Ethics
2008-2009: Journal of Business Research

Service: University
College assignments:
Member:
2008-2009: Marketing Search Committee

O.C. Ferrell
Service: Professional
Board Member: Board of Trustees
2008-2009: Sales & Marketing Executives Institute
Officer: Organization / Association
2008-2009: Academy of Marketing Science, Vice President of Publications

Service: University
College assignments:
Member:
2008-2009: Marketing Search Committee
2008-2009: Anderson Dean Search Committee

Howard Krave
Service: Professional
Advisor
2008-2009: Business Advisor for Lockheed Martin's Technology Ventures Corporation

Xin Luo
Service: Professional
Board Member: Advisory Board
2008-2009: Journal of Cases on Information Technology
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

2008-2009: Journal of Internet Commerce and Banking, Managing Editor

Chair: Conference / Track / Program
2008-2009: Decision Sciences Institute, Session chair of Information Security Track

Member: Committee/Task Force
2008-2009: Global Institute of Flexible Systems Management, Program Committee for Conference
2008-2009: IEEE International Conference on Intelligence and Security Informatics, Pacific Asia Workshop on Intelligence and Security Informatics, Program Committee for Conference

Reviewer - Book / Textbook
2008-2009: Handbook of Research on Social Implications of Data Mining and Information Privacy

Reviewer: Ad Hoc Reviewer for a Journal
2008-2009: Journal of Cases on Information Technology

Reviewer: Conference Paper
2008-2009: Southwest Decision Sciences Institute, Track of Information Security
2008-2009: European Conference on Information Systems
2008-2009: Decision Sciences Institute, Tracks of Information Security and Information Systems

Service: University

University assignments:

Member:
2008-2009: Center for Information Assurance Research and Education: Associate Director; Anderson School of Management, The University of New Mexico

Catherine Roster
Service: Professional

Board Member: Advisory Board
2008-2009: The ARC of New Mexico, Executive Board Member At-Large
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

**Board Member: PRJ Editorial Review Board**
2008-2009: Journal of Business Research

**Board of Directors: Substantial Involvement**
2008-2009: National Study Group on Chronic Disorganization, Executive Board Member and Research Director

**Reviewer - Book / Textbook**
2008-2009: The Handbook of Technology Management, Wiley & Sons

**Reviewer: Ad Hoc Reviewer for a Journal**
2008-2009: Journal of Business Research, Business and Market Research Track
2008-2009: Journal of Retailing and Consumer Services
2008-2009: Marketing Letters

**Reviewer: Conference Paper**
2008-2009: Society for Consumer Psychology
2008-2009: Academy of Marketing Science

**Service: University**

**College assignments:**
Anderson School of Management Faculty Chair

**Member:**
2008-2009: Anderson School of Management Strategic Planning: Member Sub-committee
2008-2009: Marketing Faculty Search Committee

**Alessandro F. Seazzu**

**Service: Professional**

**Reviewer: Conference Paper**
2008-2009: Hawaii International Conference on System Sciences (HICSS)

**Presenter**
2008-2009: Albuquerque’s Chapter of Information Systems Audit and Control Association (ISACA)

**Service: University**

**Administrative assignments:**
2008-2009: Director of Information Systems for Anderson
2008-2009: Director of the Center for Information Assurance Education and Research
Anderson School of Management, 2008-2009, Douglas M. Brown, Dean

**Board Member: National Advisory Board**

2008-2009: FBI Regional Forensics Computer Labs (RCFL) – NM Rep

**College assignments:**

*Member:*
2008-2009: Anderson Action Team
2008-2009: UNM’s Active Directory Technical Committee

*Chair:*
2008-2009: Anderson IT Committee

**Doug Stewart**
Service: Professional

*Reviewer: Ad Hoc Reviewer for a Journal*

**Steven Yourstone**
Service: Professional

*Reviewer: Ad Hoc Reviewer for a Journal*
2008-2009: Decision Sciences Journal of Innovative Education

*Chair: Conference / Track / Program*
2008-2009: Decision Sciences Institute National Meeting

Service: University

**University assignments:**

*Member:*
2008-2009: Learning Environments Committee

**College assignments:**

*Member:*
2008-2009: Anderson Leadership Council
ANNUAL REPORT

July 1, 2008 – June 30, 2009

Dr. Uday Desai
Director
THE ANNUAL REPORT OF
THE SCHOOL OF PUBLIC ADMINISTRATION
July 1, 2008 – June 30, 2009

Submitted by Angela Kamman – Administrative Officer

Director       Uday Desai

Faculty
Constantine Hadjilambrinos (75%)
Kun Huang
Mario Rivera
Stephanie Smith
Roli Varma (70%)

Leave of Absence   Bruce Perlman

1. Significant Developments During the 2008-09 Academic Year
   • Bruce Perlman is currently on Leave of Absence.
   • Two Faculty Searches took place during the Fall of 2008. Dr. Chih-Wei Hsieh and Dr. Gao Liu will join SPA faculty in August 2009.

2. Significant Plans and Recommendations for the Near Future
   • Development of Masters in Health Policy and Administration degree.
   • Submission of curriculum changes within the Core Curriculum and Concentrations
   • Development and Submission of new Health Policy and Administration Concentration.
   • Continued examination of SPA goals and direction.

3. Appointments, Promotions, Separations
   • Professor Santa Falcone moved to UNM Administration.
4. Publications, Outside Professional Activities, Outside Sponsored Research, Student Info

PUBLICATIONS

**Dr. Uday Desai:**


**Constantine Hadjilambrinos:**


**Dr. Kun Huang:**


**Dr. Mario Rivera:**


**Dr. Stephanie Smith:**

- "Public Policy & Maternal Mortality in India" completed and degree awarded in May 2009 (Dissertation)

• "Generating political priority for Newborn Survival in Nepal" with Shailes Neupane. Report prepared for Save the Children, USA. Submitted in June 2009 (Report)

Roli Varma:

• Roli Varma and Daya R. Varma. The Making of Indian Immigrant Entrepreneurs in the US. Economic and Political Weekly, 44 (3), 64-69. (Spring 2009)


OUTSIDE PROFESSIONAL ACTIVITIES

Dr. Uday Desai:

• Review of two manuscripts for The American Review of Public Administration

• Series Editor, SUNY Press Series on Global Environmental Policy

Kun Huang:

• Reviewed manuscript “To be or not to be a leader? The experience of Italian Departments of Mental Health with initiating and managing networks” for Health Care Management Review.

• Reviewed manuscript “Interorganizational Connectivity and Organizational Capacity: A Social Network Analysis of a Local Nonprofit Community in Virginia” for Nonprofit and Voluntary Sector Quarterly.

Dr. Mario Rivera:

• Editor-in-Chief, Journal of Public Affairs Education (since 2005)—Journal of the National Association of Schools of Public Affairs and Administration, Washington, D.C.

• Appointee, to the Executive Council (2005-2008) of the National Association of Schools of Public Affairs and Administration. Council Liaison to the Standards Committee (since 2007), working in particular on international accreditation and curricular and diversity standards, in a major standards revision effort concluding in 2009.

• Senior Associate Editor, The Innovation Journal: The Public Sector Innovation Journal/La Revue de l'innovation (of Canada, 2008).

• **Panel Co-Organizer and Presenter**: Teaching Cultural Competency and Diversity in Public Administration Education. October 18, 2008. NASPAA Annual Conference. Charleston, SC.

• **Conference Co-Organizer**: Inaugural Conference of the University of New Mexico Latin American Network in Government and Public Policy, Albuquerque, NM. September 10-13, 2008. Convened and led a panel of network approaches to advocacy and public social service.

**Dr. Roli Varma:**

• Contributing Editor, Bulletin of Science, Technology & Society; 2004 to Current.

• Invited Member, Social Science Advisory Board of the National Center for Women in Information Technology, 2008 to 2010.

• Elected Board Member, International Association of Science, Technology & Society (IASTS), 2005 to 2008.

• Reviewer: SIGCSE, one paper

• Reviewer: The Information Society, one paper

• Reviewer: Handbook on Technology Management, one paper

• Reviewer: Hong Kong’s Research Council, two proposals

• Reviewer: Science as Culture, one paper


**OTHER PROFESSIONAL ACTIVITIES**

**Dr. Kun Huang:**


Dr. Mario Rivera:

- **Conference Presentation:** The Impact of Employment Networks on Diversity and Social Equity. September 12, 2008 at the Inaugural Conference of the University of New Mexico Latin American Network in Government and Public Policy. Albuquerque, NM.

- **Founding Active Member:** The University of New Mexico Consortium for Collaborative Public Policy, and member, Steering Committee.

- **Member:** Workforce Development Committee, the New Mexico Information Technology and Software Association (since 2001): Assessment of the State’s needs in science and technology education and training, particularly insofar as these affect readiness for postsecondary education and employment among New Mexico youth.

- **Program Evaluation Lead,** Albuquerque Area Indian Health Board: Lead analyst in a Native American Research Centers for Health Project of the University of New Mexico (UNM) Health Sciences Center, funded by the National Institutes of Health and Indian Health Service.

Dr. Roli Varma:


- **Conference Presentation:** The Supply of Foreign-Born Skilled Workers. Immigration Symposium, University of New Mexico, Albuquerque, NM. October 14, 2008.

- **Member:** Society for Social Studies of Science

- **Member:** International Association of Science, Technology and Society

- **Advisory Member:** National Center for Women in Information Technology

**OUTSIDE SPONSORED RESEARCH**

The School of Public Administration received the following grants to fund faculty and graduate research during this academic year. Total amount of money for 2008-2009: $65,596.00.

**UNM Research Allocation Committee**

“Cross-National Differences in Women’s Participation in Computer Science Education in India and the United States”

Varma, Roli

$3,830.00


Grant #: 08-04
National Science Foundation
“Cross-National Differences in Women’s Participation in Computer Science Education in India and the United States” Research on Gender in Science and Engineering Program
Varma, Roli
$55,766.00
Grant # 0650410

National Science Foundation
“Cross-National Differences in Women’s Participation in Computer Science Education in India and the United States” Research Experiences for Undergraduates Program
Varma, Roli
$6,000.00
Grant # 0650410

Save the Children
Fund at Syracuse University - Syracuse, NY
“Generating Political Priority for Newborn Survival”
Smith, Stephanie (Co-PI) with Jeremy Shiffman
$365,000.00
August 2008 – August 2010

STUDENT INFORMATION

Master of Public Administration Degree Conferred
2008-2009 Academic Year:

Ryan Beach
Willie Begay
Charlene Cain
Richard Newman
Kristen Schuetz
Alisha Tafoya
Perry Yazzie

Jennifer George
Claire Button
Erin Farley
Margaret Gonzales
Ivan Lopez
Deanna Miglio
April Singleton

PI ALPHA ALPHAf A Inductees
2008-2009 Academic Year:

Kenneth D. Baca
John Brandt
Charlene C. Cain
Diane Carabajal
Robert A. Duncan

Matthew Jacob Gallegos
Whitney Jo Green
Cynthia J. Kemp
Kristin Michael
Michelle Rossell

Ferrel Heady Award for Outstanding Professional Paper
2008 – 2009 Academic Year:

Charlene C. Cain – “The Effects of Conducting Quality Assurance Reviews of Individual Service Plans Before the Annual Expiration Date”
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July 1, 2008–June 30, 2009

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I. Overview

The College of Arts and Sciences is not only the oldest College at the University of New Mexico but it is also the largest. Given its breadth, the College is uniquely positioned within the University in that its departments and programs not only provide the knowledge that is fundamental to the intellectual and educational activities across the entire campus, they also integrate and contextualize that knowledge in ways that connect students to the past and prepare them for the future. The mission of the College is to provide a broad-based education in the natural sciences, the social sciences, and humanities that transforms lives and shapes futures. Faculty in the College create and disseminate new knowledge, foster and support scholars and researchers, educate the next generation of professionals and public servants, and develop engaged, cross-culturally literate citizens.

There are 20 academic departments in the College. In addition, 9 interdisciplinary study programs (curricular) report to the College, and so do 10 research centers and institutes and 2 museums. Nine centers and institutes also report to particular departments (see Table 1 for a listing of all College centers, institutes, and museums). In 2008-09, there were 392 tenure-stream faculty, 58 lecturers, 51 research professors, 215 part-time instructors, 7 visiting faculty members, 858 teaching and graduate assistants, and 314 staff in the College. It is worthwhile to note that the College serves not only its own students but also teaches about 75% of the courses in the core curriculum.

The College of Arts and Sciences has a tradition of excellence and outstanding productivity in all aspects of its mission, including teaching, scholarship and service. For example, College faculty generated a total of 358,641 unrestricted student credit hours.
(SCH) during 2008-2009. This was an increase of approximately 1.5% over the previous year and the most of any college or school in the University by far. Across 20 departments and 9 study programs the Department of Mathematics & Statistics led the way with 44,003 SCH, followed by English (34,311), Psychology (31,603), Biology (27,063), and Sociology (21,855).

Faculty members continued their traditional excellence in teaching and the mentoring of increasing numbers of students. At the level of University awards, Professor Sudhakar Prasad (Physics and Astronomy) won the Faculty Senate Teaching Enhancement Committee and the Office of Support for Effective Teaching (OSET) Teacher of the Year Award, and, Janet Howe Gaines (English) and Lisa Whalen (Chemistry) received the Outstanding Adjunct Teachers/Lecturers of the Year Award. The College recognized two faculty members (Mary Domski, Philosophy; and Margaret Connell-Szasz, History), and two graduate instructors (Leigh Johnson, English; and Jennifer Richter American Studies) with its own Teaching Excellence Award and it selected three Regents’ Professors (Linda Hall, History; Margaret Werner-Washburne, Biology; Zachary Sharp, Earth & Planetary Sciences).

As part of the College’s emphasis on faculty development, the Dean’s office moved into its second year of mentoring the new faculty in the College. The Dean and the Associate Dean for Faculty hosted two special meetings for newly-hired faculty members during the year. An opening luncheon was held during the fall semester, followed by a meeting in the spring semester to discuss the concerns that arose among the new faculty members in the College, including issues related to teaching, research and achieving tenure.
During 2008-2009, faculty continued their outstanding record of publishing scholarly books and articles. College researchers and scholars continued to produce a vast array of publications, performances and presentations reflecting the extensive variety of disciplines represented by departments, programs and research centers. The level of activity was commensurate with UNM being a Carnegie Very High Performing Research University within the United States. To support this high level of scholarly activity, College faculty generated almost $40 million. In addition, they generated almost $40 million in research funding through three hundred and eighty-seven new, or renewal, awards from a wide range of sponsors, including the National Institutes of Health and the National Science Foundation. For example, the Department of Biology generated over $10 million in external funding, while the Department of Physics and Astronomy brought in over $5 million. In addition to awards made to faculty through departments, numerous awards were made to faculty through the interdisciplinary research centers and institutes in the College. These units support graduate students and faculty research and provide highly valued services to the State of New Mexico. The Center for Research in Ecological Studies and Technology generated the largest amount of external funding during 2008-2009, receiving awards totaling over $3 million during 2008-2009. The Center for Advanced Studies and the Institute for Social Research each received over $2 million in new awards while the Earth Data Analysis Center brought in well over $1 million. The researchers at Center for Evolutionary and Theoretical Immunology were awarded nearly $1 million and the Long Term Ecological Research Network and the research station at Sevilleta generated over $2 million in FY09 to continue their work.
In a continuation of the pattern from the previous year, the bulk of new awards made to College units, particularly to the STEM departments, supported graduate programs. Consistent with the growing concern in federal grant programs, the participation of under-represented groups in the sciences received primary attention in the following projects: Bridge to the Doctorate, Initiative to Maximize Student Diversity, Minority Access to Research Careers Program, and Post-baccalaureate Research Education Program. As expected, all of the hundreds of research grants awarded to College faculty members support research publications, and provide equipment and stipends for graduate students.

Community service also formed a priority for the College in 2008-09. K-12 pipelines to higher education were carried out by faculty housed in the Departments of Mathematics & Statistics, English, Biology, Earth and Planetary Sciences, and Physics and Astronomy. College museum programs, including the Maxwell Museum and the Museum of Southwestern Biology continued providing their important service activities, exhibits, docent training, special invitations to the public schools, and archaeological tours for primary and secondary school students and adult audiences. The Institute for Medieval Studies offered a series of popular public presentations on campus. The Sustainability Studies Program sponsored many public activities around sustainable agriculture and energy conservation. The Peace Studies Program organized its annual Peace Studies Fair and once again garnered the extensive involvement of community non-profit organizations. Clinical services to students and the general public continued to be provided in the Departments of Psychology and Speech & Hearing and at the Agora Crisis Center.
The major goals for the College for 2008-2009 were based on the strategic plan that was revised in the Spring of 2008 and included the following: improving student success, increasing faculty diversity, improving opportunities for students to study abroad, increasing private donations, and building a leadership team within the College. Progress on each of these three of these goals is discussed in the various sections below.

Given the importance of the budget challenges in the College in 2007-2008, it is worth noting that the College made significant strides in 2008-2009 toward developing a new budget model for the College and toward containing costs, both recurring and non-recurring. As a result, by the end of the 2008-2009 academic year, the College had enough recurring funds to cover the majority of its recurring commitments, and, importantly, the College had met the rescission in Spring 2009 from non-recurring funds and had saved over $1 million toward a possible rescission in FY10. It should be noted, however, that the measures required to obtain these goals left most departments and programs struggling to meet the needs of the students, the faculty and the community.

II. Administration

Dr. Brenda J. Claiborne completed her second year of her regular appointment as Dean of the College. In August 2008, Associate Dean for Faculty Felipe Gonzales was appointed Senior Associate Dean. Dr. Mark Ondrias resigned as associate dean for curriculum and instruction but continued in the Dean’s office as a special assistant to the Dean. Dr. Sherman Wilcox, former chair of the Department of Linguistics, was appointed Associate Dean for Curriculum and Instruction. At that time also, Dr. Michael Dougher resigned as associate dean of research. Dr. Philip Ganderton, former chair of
the Economics Department, was appointed interim Associate Dean for Research at 50% time, while he continued as the Director of the undergraduate portion of the Combined BA/MD Program. During the year, Elly van Mil, the College grants specialist, took a position with the Office of Vice President of Research (OVPR), and the College was unable to fill the position due to the mid-year rescission. Fortunately, the expansion of the Faculty Research Support Services division in the OVPR helped to fill the gap left by the departure of Ms. van Mil. Despite the inability to expand the College Research Office, sponsored research in the College continued its very strong long-term trend of strength, depth and variety. Dr. Chuck Paine, Professor of English, was hired as a special assistant to the dean for outcomes assessment. His primary duties were to assist the College in preparation for the upcoming site visit by the Higher Learning Commission. Dr. David Jones, former chair of the Department of English was hired as special assistant to the dean for study abroad programs in the College.

In the ranks of the office staff, Carole Jablonski resigned as the College Administrator in March 2009. Administrative Coordinator Yvonne Martinez-Ingram resigned in April 2009 to accept a department administrator position. Neither had been replaced by the end of FY09.

Professor Gonzales continued to supervise the College's core administrative processes, most centrally, the Academic Deadline Schedule. The work included filling, organizing and advising the College Junior (Tenure and Promotion, Mid-Probationary) Review Committee and the Senior Promotion Review Committee (see Table 2); conducting an orientation meeting for faculty candidates coming up for reviews; consulting with department chairs on faculty progress through the ranks; and
reviewing/recommending to the Dean on all tenure, promotion and mid-probationary files. He also advised the Dean and chairs on policies and practices related to annual reviews and post-tenure reviews of faculty and reviewed all applications for sabbatical leaves and leaves without pay. The College approved twenty-nine applications for sabbatical leaves. Professor Gonzales also oversaw the reviews and awards of Research Semester requests; this award provides Junior Faculty with a semester release from teaching responsibilities. Five assistant professors were granted research leaves in fall 2008 and four in spring 2009. He also coordinated the College of Arts & Sciences Award for Teaching Excellence, awarded this year to two faculty members (Mary Domski, Philosophy; and Margaret Connell-Szasz, History), and two graduate instructors (Leigh Johnson, English; and Jennifer Richter American Studies); he also coordinated the selection of three Regents’ Professors (Linda Hall, History; Margaret Werner-Washburne, Biology; Zachary Sharp, Earth & Planetary Sciences).

Professor Gonzales administered the College’s annual Faculty Development Fund, which was funded this year at the level of $30,000 in I&G funds and $9,400 in balance forward monies. Of this amount, $20,617 was allocated to College faculty members and center directors to support 27 distinct projects, including conferences, outside speakers, publishing/subvention costs, and special travel requests (see Table 5 for listing).

Professor Gonzales supervised Dr. Jones's work as Special Assistant to the Dean on Study Abroad Programs. Professor Jones conducted a major survey of study abroad activities in the College and issued a report that included several recommendations for advancing study abroad programming. Professor Gonzales continued to work on the
NSF NM-Paid Advance Grant headquartered at New Mexico State, providing supervision for the new UNM co-PI Professor Les McFadden of Earth & Planetary Sciences (see Section IV Affirmative Action/Diversity). Professor Gonzales engaged individual faculty members in discussions on their retirements for two seriously ill senior faculty members in the Department of Mathematics and Statistics. Gonzales participated with Dean Claiborne in crafting four counter offers to faculty members who were offered positions at other universities.

Professor Gonzales also served as the College Hiring Co-Officer for Faculty, with oversight of the search process, recruitment and selection of new tenure-stream faculty. This year, the College hired nine new tenure-track faculty in seven departments (see Table 3 for listing). Finally, he conducted the College Faculty Senate selection process, identifying faculty members in the various departments for service in the Senate as well as Senate committees.

III. Recent Major Developments in the College

As noted above, the major goals for the College for 2008-2009 were taken from the Strategic Plan for the College of Arts and Sciences that was revised in the Spring of 2008. The Dean's office focused a considerable amount of effort on three of the six goals: improving student success, fostering diversity, and building a leadership team within the College. A brief overview of the progress made on each of these goals is discussed in this section and additional details are provided throughout the Report.

Improving Student Success
In 2008-2009, the College focused on five objectives under the rubric of improving student success: 1) outcomes assessment; 2) identifying a new location for the College Advising Center; 3) enhancing the College advising services; 4) improving the quality of Academic Program Reviews; and 5) finalizing the design for the Sciences and Mathematics Learning Center.

Outcomes Assessment: As a member of the UNM Steering Committee for Accreditation and Chair of the Criterion III subcommittee, the Dean worked with the Subcommittee and Department Chairs in the College to "close the loop" in College assessment activities. As noted in the 2007-2008 Annual Report, Dean Claiborne hired Professor Chuck Paine (English) as a Special Assistant to the Dean to oversee course and program assessment activities in the College. Professor Paine worked to ensure that at least some faculty members from each department were using their data to drive course content and delivery. The Dean also worked closely with Professor Paine and the Criterion III subcommittee to finalize the Criterion III section of the Self-Study. The College is very proud of the results of these activities: all of the departments are now engaged in assessment activities, a number of instructors have begun to use their assessment data to influence course content and delivery, and our University-wide activities were judged adequate by the HLC Accreditation review team.

New Location for the College Advising Center: The Dean worked with the Office of the Provost to secure space for the College Advising Center in the Student Services building. Soon after her arrival on campus, Dean Claiborne began a campaign to find new and/or additional space for the Center. Not only were the offices in the Advising Center too small to meet the needs of the College’s approximate 6,000 majors, but students often
had to wait outside for appointments. The College was fortunate that space in the Student Services building became available in 2008-2009 and that the Provost approved a move of the College Advising Center to this location. This space proved will meet a number of the needs of the Advising Center, including the Dean’s requirement that the Center be in close proximity to the University College Advisors and to other student service offices, thus providing an opportunity for enhanced cooperation between units. The College will work to ensure that this cooperation will increase retention and graduation rates. In addition and perhaps most importantly, students will no longer have to wait outside for their appointments. The most current plans show the Advising Center will be moved to the new space by early Fall, 2009.

**Improvements in College Advising Services:** The College made a number of improvements in its advising services during 2008-2009 and these are detailed in Section VII. For example, the College of Arts and Sciences Advising Center, under the leadership of its excellent Director, Stephanie Hands, increased their web-based interactions with students and enhanced the delivery of the newly-instituted seminars on “what you need to do to graduate”. These seminars are required for all students in the College who have completed 80 semester credit hours; students must attend a session before they can register for the next semester.

**Academic Program Reviews:** Ultimately, the quality of the academic programs in the College of Arts and Sciences affects student success. The quality of each of academic program in the College is evaluated through UNM’s academic program review process. One College goal was to have the Dean’s office more closely involved throughout the review process in order to ensure that quality, reporting and budgeting issues were in line
with College priorities. Dean Claiborne thus worked with the Office of the Provost to ensure that the Dean played a greater role in the selection of program reviewers and in formulating the program’s response to the reviewer’s report. In brief, the College added more exacting criteria for the selection of external reviewers and developed procedures to ensure that the Dean and the Associate Deans would be able critique the self-study and the program’s response to the reviewer’s report before they were submitted to the Provost’s office. Importantly the new process ensures that the Dean’s office is part of the development of the action plan: actions proposed and any necessary costs are in line with College programmatic and budgetary priorities. Several programs have now undergone the review process since the guidelines were modified in Fall 2008 and the procedures have been successfully implemented. The Office of the Dean is now intimately involved in all aspects of the process, giving the Dean and her staff a vested interest in ensuring that the action plans are completed as planned.

Degree-granting programs in two departments, Anthropology and Philosophy, began Academic Program Reviews in 2008-2009, including the writing of a self-study and hosting external site-review teams. A plan for each of these departments was prepared for execution in 2009-2010 in consultation with the Dean, including development of long-range hiring plans, revisions to graduate and undergraduate curricula, enhancing undergraduate and graduate student recruitment efforts, implementing programs to recognize student success (such as scholarships and honors research awards), and enhancing development efforts. On completion of these plans and with the Dean’s approval, final action plan meetings will be scheduled with the Office of the Provost.
Science and Mathematic Learning Center: The Science and Mathematics Learning Center was originally designed to house the Department of Mathematics and Statistics and classrooms and laboratory teaching spaces for freshmen courses. In the Fall of 2008, the plans for the Center were mostly complete. However, construction costs had increased tremendously between time of funding in FY06 and FY09, and, in September of 2008, the College was faced with the challenge of re-designing the building to fit within the budget. Toward this end, the Dean and the Associate Dean for Instruction and Curriculum developed several alternatives that modified the original programming for the building and obtained approval from the Provost for the needed changes. Ultimately, the College was able to retain the 200-seat auditorium but had to delete a number of needed teaching laboratories, including those for Organic Chemistry courses.

The plans were finalized by February 2009, and UNM obtained approval from the Regents and the State Board of Finance to proceed with the project. Fortunately, construction costs dropped dramatically between February and the bid submission date, allowing not only the construction to proceed as planned but saving enough funds to purchase the needed furniture and equipment, as well as allow for the construction of a small coffee shop. This latter space will foster student and faculty interactions, as intended in the original plans. The College held a ground-breaking ceremony on June 5, 2009, and construction began immediately. Plans call for the building to be complete by sometime in the fall of 2010.

**Foster Diversity within the College**

The long-term plans of the College call for fostering both student and faculty diversity. During 2008-2009, the College focused on faculty diversity. The Dean worked
with Professor Felipe Gonzales, Associate Dean for Faculty, to retain minority and women faculty and, given the budget situation, to find creative ways to hire additional minority faculty. The results of this work are detailed below in Section IV.

**Build a Leadership Team within the College**

Two of the long-term goals of Dean Claiborne are to develop a leadership team in the College of Arts and Sciences and to assist administrators, faculty and staff throughout the College develop their leadership skills. This year, the Dean focused on training and accountability of department Chairs and Associate Chairs and on developing the leadership skills of the senior staff and Associate Deans in her office. In brief, the Dean expanded the training for new Chairs and Directors at the “Chairs and Directors School” that is held in August each year and is required for all new Chairs and Directors in the College. Content was added under each section and the Dean added a section on leadership. As the year progressed, the Dean worked with the Chairs so that they could assume more responsibility for their budgets (many had left budget details to their Departmental Administrators).

The Dean also added several College Ad Hoc Committees in 2008-2009. Such committees were instituted by the Dean in 2007-2008 and are composed of Chairs and Directors. The committees are charged with conducting research and providing the Dean and the Dean’s staff with input on a variety of topics. They also provide the Chairs and Directors with opportunities to be involved in the decision-making process at the College level. One of the new Ad Hoc Committees was charged with improving the process of evaluating the performance of department Chairs. The Committee, in consultation with
all of the Chairs, developed new, more extensive evaluation guidelines and criteria. The guidelines were finalized and the Dean will make use of them in 2009-2010.

IV. Affirmative Action/Diversity

The College continued its efforts to increase the cultural and gender diversity among its faculty during the 2008-09 academic year. As in the past, and conforming to the Regents' policy and requirements of the Office of Equal Opportunity concerning the need to create diversified search committees, all departmental search committees included minority and female members and all searches disseminated their advertisements in outlets designed to reach diverse pools of potential applicants.

Of the nine tenure-track appointments resulting from searches conducted during AY 2008-09, four went to women and three to members of U.S. historically underrepresented categories, two Hispanic and one Asian. There were two additional spousal hires (Brulotte and Carr, see Table 3) that were completed as part of a process of retaining two Hispanic assistant professors. While the number of overall tenure-track hires was lower than the recent past average, the number of women and minorities in the hires represented a net increment of gender and cultural diversity of College faculty.

In other diversity activities, the College

- employed Alfred Mathewson, Professor of Law at UNM, to serve as the acting director of the Africana Studies Program;
- extended counter successful offers to American Studies Professors Gabriel Melendez and Michael Trujillo, Spanish & Portuguese Associate Professor Leila Lehnen, and Communication and Journalism Assistant Professor Tema Milstein, keeping them from accepting offers at other institutions;
• supervised the NSF-funded New Mexico-PAID project, which, under the coordination of Les McFadden, Professor of Earth & Planetary Science, (1) created a NM-PAID junior faculty mentoring program, collaborating closely with Nora Dominguez, director of UNM's Mentoring Institute, and, (2) established a UNM Faculty Diversity Alliance consisting of senior faculty members to work with Vice President for Equity and Inclusion de Leon on the inclusion of women and minorities in the STEM disciplines;

• collaborated with Vice President for Equity and Inclusion Josephine de León to leverage funds to support diversity faculty hires;

• maintained representation on the Title V HSI Educational Initiatives Faculty Committee, Associate Dean Gonzales participating in its faculty development program.

As this inventory suggests, diversity in its various manifestations has developed into an important and permanent aspect of the values, goals, and operations of the College within the context of UNM as the largest Hispanic Serving Institution in the United States.

V. Research and Scholarly Activities

Research continues to be a priority of the College of Arts and Sciences with 405 new and incremental awards (up nearly 6% over the 366 awards last year) valued at $39.2 million (down just 1/8% from the $39.9 million last fiscal year.) Referring to Table 4, and continuing a long-standing trend, nearly half of all College faculty were awarded sponsored research grants, and the faculty as a whole produced a vast array of articles,
books, chapters and edited books as well as making many presentations at professional meetings around the country and the world.

The College views continued research growth as offering many advantages to the university. First, it allows our faculty to play a larger role as leaders in their disciplines, and means they continue to provide valuable service to their professional societies by presenting their work at meetings as well as reviewing for journals. By doing so, this promotes UNM’s status as a Carnegie Very High Research University within the United States. Second, more funded research supports more graduate students and post-doctoral fellows—the next generation of researchers. By collaborating on publications with faculty students not only support faculty research, they also often teach important classes in College departments. Third, higher levels of sponsored research at UNM brings more Federal money to the state, contributing to the already large net subsidy provided by federal funding enjoyed by New Mexico.

Traditionally the natural sciences have received the bulk of the external sponsored research funding within the College of Arts and Sciences and this continued to be true in FY09, as Table 4 shows. The science departments and research centers, along with Mathematics and Statistics brought in 78 percent of the total amount. However, the fact that other researchers in the Humanities and Social Sciences, areas that do not have as much outside funding available to them, contributed 22 percent of the total College research awards is testament to the breadth and depth of the active research going on across the College. The recently appointed Associate Dean for Research, Dr Philip Ganderton, worked closely this year with College faculty, the Directors of our Research Centers, and the Dean to realize many important goals including better liaison with the
Office of the Vice President for Research and greater opportunities for training student researchers.

**Scholarly Productivity**

Research grants and awards are a very important metric of College activity but another measure of the College's scholarly productivity in 2009 is the number of peer-reviewed articles, books, and other scholarly works which continue to be very high. Currently, the College office is unable to provide an exact count of publications and creative works across the vast array of disciplines and programs included in the College of Arts and Sciences, but a new data collection program is being put in place to provide data on this important measure. Not only to faculty publish articles, chapters and books, but they are extremely active in presenting their work and results at professional meetings both nationally and internationally. Faculty researchers in the College not only teach and mentor graduate students, but provide many opportunities for them to participate in research as part of their educational experience. As a result of this, a large number of published articles were coauthored with students.

Faculty in the College have a long history of supervising undergraduate honors theses, and many hundreds of undergraduates were involved in faculty sponsored research projects last year. The College has been very successful in obtaining grants to support undergraduates, particularly under represented students, involved in research.

Many student research training projects continued during 2009 and projects that received new or incremental funding during the year include the Initiatives to Maximize Student Diversity (NIH, Maggie Werner-Washburne, PI), and the New Mexico Louis Stokes Alliance for Minority Participation – Bridge to the Doctorate (in collaboration
with New Mexico State University, Laura Crossy, PI). A number of new proposals were submitted during the year specifically aimed at providing research training for graduate students.

**Initiatives to Improve the Research Climate**

The Associate Dean for Research worked during the year to foster excellent working relations with the other Associated Deans for Research and members of the Office of the Vice President of Research (OVPR). This last year saw the continuation of the overhaul of the Office of Vice President for Research and Economic Development, with substantial and significant consequences for the College research office and researchers, including distributions of F&A to the College and its departments and researchers. The College's Grants Specialist moved to the OVPR, and the College hopes to fill that position in the near future.

At the request of the Dean, the Associate Dean for Research began a review of Research Centers and Institutes in the College, with the goal of writing new policies relating to the establishment, continued health and growth, and review of these, and any new Centers in the College. The College has at least three new initiatives seeking Center status for which new policies would be extremely helpful. This review is on-going and should be complete by the end of FY10.

The College of Arts and Sciences continues to play a major role in the university's research mission through its representation on the Executive Research Advisory Council, now in its second year of operation. The College research office works diligently to support all faculty researchers and graduate students to continue and expand their involvement in state of the art research.
VI. Curriculum, Teaching and Enrollment Management

The College of Arts and Sciences has, by far, the largest teaching mission in the University. It is responsible for the majority of the General Education instruction for all UNM students and each year graduates more students than any other college. Tables 8 and 9 summarize the total number of degrees awarded and degrees awarded by department. Over the past decade, the SCH production for the College has grown substantially. Since the total number of full time faculty have not risen accordingly, an ever-increasing fraction of the College’s teaching load is being born by part-time instructors and graduate students.

Despite general budget reductions in FY 09, the College continued its commitment to the classroom by maintaining its PTI instructional budget at its previous level (approximately $4.4M). The highly successful Interdepartmental Teaching Assistant Program has been a major component in our PTI budget. This program simultaneously benefits both undergraduate and graduate programs by allowing Arts and Sciences departments with insufficient TA budgets to serve their graduate students by referring qualified students to departments that have sufficient support but not enough graduate students to meet their instructional needs. As in 2007-08, the program funded 22 TA lines, this time in three departments (English, Spanish & Portuguese, and Foreign Languages & Literatures) and provided support for graduate students in five other programs.

Curriculum Development

The College of Arts and Sciences, working closely with its departments and programs, continued supporting ongoing and new innovations in pedagogy and
curriculum. The Writing Across Communities (WAC) initiative and the WAC Alliance have pursued their mission to “engage and help University faculty, graduate teaching instructors, administrators, and staff understand the many contexts in which students need to read and write effectively, and to provide instruction to meet those needs.” WAC and the WAC Alliance sponsored three well-attended Civil Rights Symposia (in September, October, and March) and two workshops about using writing for assessment in April. All four of these events featured distinguished speakers from across the county and were very well attended. WAC and WAC Alliance also sponsored two “Write On!” workshops for students and worked closely with the Rhetoric and Writing division in the English Department to thoroughly revamp the first-year-writing sequence (English 101 and 102). Although these WAC programs fund themselves on an ad hoc basis, they have received much attention for their innovative approaches to the Writing Across the Curriculum/Writing in the Disciplines movement.

Online and hybrid (mixed online and classroom) courses remain a focus of our efforts to develop new curricula and pedagogies. The College of Arts & Sciences worked closely with its departments and programs to once again increase the number of online and hybrid courses offered. From Summer 08 through Spring 09, 15 departments and programs offered 89 sections of online courses and 52 sections of hybrid courses were offered. The departments contributing most to these numbers were English, Psychology, Mathematics and Statistics, and Communications and Journalism.

The College of Arts & Sciences continued to support the Office of Support for Effective Teaching (OSET) through funding of the annual “Success in the Classroom” conference and through its faculty, who participate in this conference and also develop
and present faculty workshops on teaching with writing, improving assessment, and teaching with new media and technologies.

Assessment

College departments and programs made enormous progress in assessment, both in terms of mere compliance and in terms of developing a “culture of assessment.” The Higher Learning Commission (HLC) accreditation provided a strong impetus for these strides forward, and our units met the challenge. Our participation in the HLC accreditation was significant. In fact, Dean Claiborne headed the subcommittee tasked with writing the Criterion Three (“Student Learning and Effective Teaching”) portion of the University’s self-study for the Higher Learning Commission. The Criterion Three section was specifically remarked upon by HLC visiting team, who said it was most thorough and well-written portion of the self-study.

In an effort to help faculty understand the best practices of assessment, Dean Claiborne appointed Chuck Paine from English as Special Assistant to the Dean for Assessment. Working with the Dean and associate deans, this unit developed and delivered three College Assessment Review Committee (CARC) workshops (two in October, one in June), in which 20 faculty from 17 departments and programs participated. In these workshops, faculty learned how to score assessment plans and/or reports, and then proceeded to score them in teams of two. The workshops were successful not only in helping faculty understand assessment but also in changing the attitudes of some faculty about assessment in general. This model for CARC workshops has since been adopted by the Coordinator for Assessment in the Provost’s office. For the assessment of degree programs, 23 of the 24 units that offer degrees or certificates...
have completed satisfactory assessment plans for all their degrees/certificates, all of which have been scored by the A&S CARC. For the assessment of courses in the general education core curriculum, 19 of the 20 units that offer general education courses have written satisfactory plans for at least two courses and have assessed them. The College will continue to work toward 100% compliance and, more important, toward developing a culture of assessment across the College.

**New Degree Programs**

In addition to the expansion and improvement of existing academic programs, the College remains committed to creating and nurturing new interdisciplinary programs that address the increasingly diversified career interests of our students. Recently created programs in Nanoscience and Microsystems (NSMS), Sustainability Studies, and the integrated BA/MD curriculum continued to build and refine their programs. All three programs have developed new and exciting curricula that are specially designed for a focused group or major. The BA/MD and NSMS programs are joint ventures requiring close collaborations with the Schools of Medicine and Engineering, respectively. Their continuing success sets the stage for further collaborative programs in the future. The Sustainability Studies Program has already obtained significant funding from the State to enhance its innovative and timely “outreach” projects to implement practical solutions for a sustainable future for the bioregion, the Southwest, and the planet. The NSMS program was awarded a major Graduate Assistance in Areas of National Need (GAANN) grant from the Department of Education. This grant will allow the program to fund a variety of cross disciplinary activities designed to train the next generation of teachers and college faculty.
During the last academic year, the College added a new International Studies multidisciplinary program. This new program brings together faculty and courses from a variety of departments to provide students with an opportunity to focus their studies on international and global issues while pursuing concentrations in one of several content areas. The program was approved by the Faculty Senate in Fall 2008 and the Board of Regents in Spring 2009. It began enrolling majors in the Summer of 2009.

**Enrollment Management Initiatives**

In 2007-08, the College initiated an aggressive program of enrollment management to address increasing enrollment pressures in high demand courses. This year, we continued to support new intersession courses in the Fall and Spring Semesters. Thirty one were offered in the fall in 11 departments. A majority of them filled to within 90% of capacity.

**Summer Session**

A total of $847,000 was allocated to the College of Arts & Sciences to support the 2008 Summer Session, up from the previous year's $870,000. Much of the increase in funding was used to offer courses that typically prove bottlenecks to graduation (University Core and "gateway" courses). Offering them in the summer session has a positive effect on both graduation and retention rates. The College actively collaborated with the Office of the Provost on a new funding protocol to insure the availability of what have been traditionally high demand laboratory courses and unique summer programs including the German Summer School in Taos, field schools in Anthropology and Geology, and the English Department’s Summer in London program.
VII. Special Projects and Functions

Advisement Center

The advisement and academic guidance of 8000-plus majors and pre-majors is a large and important responsibility of the College's Advisement Center. The Center (under the supervision of Mark Ondrias as Associate Dean for Advisement and Student Success and Stephanie Hands, Director of Advisement) not only services the entire undergraduate population of the College; it also coordinates the advising activities of the individual academic programs. It admits undergraduate students to the College of Arts and Sciences once students are accepted into the department of their major, the Center coordinates the monitoring of their academic progress. The Center retained a complement of seven full-time advisors who advised students on general degree issues outside the guidelines of their major or minor department, and they worked with students in achieving their academic goals. The Center staff also monitored the academic progress, success, and shortcomings of all A&S students, certifying their graduation and updating their intended course of study. Approximately 1400 Arts and Sciences baccalaureate graduates were certified this past academic year.

Changes/Initiatives: The Center made a number of important improvements that reinforced the active partnership of students and advisors in formulating and achieving their academic goals. Group advising sessions continued to be important components of this partnership. These sessions were upgraded to include "best practices" advocated by the National Professional Organization for Academic Advisors (NACADA). Session formats reflected a set of learning objectives that augmented the students' understanding of their own degree and their ability to be an active participant. In concert with these
improved practices, the Center has collaborated with College academic programs in the redesign of the degree application process. Degree audits have been updated and are in the process of being simplified and a series of Graduating Planning Workshops has been fully implemented. In these sessions students learn how to read their audit and compare requirements to plan for graduation efficiently. Many students have stated that the Graduation Planning Workshop gives them vital information in a timely manner. Some students have expressed a desire to have this kind of training sooner and the center is looking into these possibilities for the upcoming year.

The Center and the departments have continued to refine the communication across the college. Last year’s move to assigning workloads based on majors has been appreciated by the departments and students alike. The flow of information has improved as well as the ability to collaborate to solve student issues. There is an issue of unequal distribution of students for the advisors. This will require further review and additional resources. It is the expectation of the administrative team this will improve with the addition of new advisement resources to be allocated this coming year.

**Traffic/Availability:** The number of students enrolled in a major of the College of Arts and Sciences during 2008-2009 was: Summer 2008 – 1968, Fall 2007 – 5752, and Spring 2008 – 5923. Most of these students have direct contact with the Advising Center at least once a year. Many of them have multiple contacts per semester. The Center operates on an appointment-based system Monday through Thursday, with Friday the walk-in day, to accommodate the students’ need to seek assistance on “deadline days”. The total number of visits to the Advisement Center during 2008-2009 was 10394 (an increase of approximately 900), which does not include out of office advisement
sessions or electronic communications. Mandatory group advisement sessions for transferring into Arts and Sciences and graduation planning now account for almost 3900 of the student visits. These seminars are offered several times a week throughout the semester but are limited due to the lack of space/time slots to conduct them.

Contact with the undergraduate population is not limited to face to face interactions. Advisement has developed and is always looking for ways to improve other modes of communication. Students appreciate the ability to contact their advisor via email. Emails to the Advising email traffic has grown from just under 700 in 05-06, 817 in 06-07, over 1500 in 07-08, and over 2000 for this academic year. This does not include emails generated by the new online appointment request form (approximately 1600) or those that have gone directly to the advisors' personal email accounts.

Interspersed in all these contacts with the student population, the center is also responsible for evaluating and completing paperwork for all students in the college. The Advisement center receives over 5500 individual paper requests each year. These requests have turnaround times that range from 24 hours to 5 business days. In an effort to streamline some of these processes, the center is requiring that the student attach the degree audit and highlight significant areas that are related to the request. This also supports the philosophy of active participation from the student population.

Collaborations: The Center maintains a wide variety of active partnerships with other Colleges and Student Services organizations. College advisors work with the College Enrichment Program, Accessibility Services and UNM Summer Bridge programs to help track and mentor their students when they enter an Arts and Sciences Program. The College Advising Center maintains a particularly productive relationship with
University College. College advising staff members have been active participants in Freshman Academic Choice classes offered through University College. Presentations or group advisement were conducted by the Director or her staff during class time and some A&S Advisors have served as instructors for taught these FAC sections. Two Arts and Sciences “Pre-major” advisors are physically housed at the University College Advising Center. They serve the College’s prospective students that need assistance in the transfer process and represent the College at many on-sites and college fairs. This increased access to timely advising greatly improves student transition to Arts and Sciences. The College continues to see increased enrollment in the college and believes this is due in part to the efforts of these employees.

Within the past few years, A&S has seen an increase in students (to over 600 in AY 2009) that do not necessarily intend to graduate with one of our degrees but are housed in the College awaiting admission into another unit. In order to better track these students in the future and offer them alternatives to true A&S advisement requirements the Center created a second major that is classified as “Undecided”. This marker indicates that they will be moving to another College in the future. The center has started designating this marker since the summer of 2007. It is the intention of the Center to start in this next year offering specific workshops to this population to assist them in a transition to an A&S degree if appropriate. Preliminary conversations with Career Services have already occurred and will serve as the base for developing this opportunity for the student body.
College Academic Committees

College of Arts and Sciences Graduate Committee

This committee represents the graduate program interests of the College and serves in an advisory capacity to the Dean of Arts & Sciences and the Office of Graduate Studies. It is comprised of the Chairs of the Graduate Programs for each of the academic programs within the College.

The Committee met each semester to consider topics relevant to the Graduate Programs of individual departments and the College’s working relationship with the Office of Graduate Studies. These include changes in instructional programs and academic advisement for graduate students. This past year, changes in administrative or academic regulations which affect graduate programs were a major topic of discussion. Ad-hoc committees were formed to address these issues especially the implementation of the new BANNER student system and the reorganization of the operations of the Office of Graduate Studies.

College of Arts and Sciences Undergraduate Committee

The Undergraduate Committee of the College of Arts and Sciences has several roles and responsibilities. In addition to its advisory capacity to the Dean, it is the functional arm of the College for activities related to curriculum change, instructional programs, academic advisement, and changes in administrative or academic regulations which affect undergraduate programs.

Each of the 20 academic departments in the College designates one faculty representative (voting faculty as defined in the Faculty Handbook) to the College of Arts and Sciences Undergraduate Committee (see Table 7). The Committee also includes
representatives from interdisciplinary degree-granting programs and staff academic
advisors within the College. Visitors to the meetings are welcome, and may be called
upon to speak to the group as necessary. The Subcommittee on Curriculum (consisting
of four members of the A&S faculty and chaired by Associate Dean Wilcox) reviews
requests from departments both within and outside the College for curricular and/or
program requirement changes that may impact one or more Arts and Sciences
departments. The Undergraduate Committee and Curriculum Subcommittee were active
participants in the College’s preparation for the Higher Learning Commission
accreditation of UNM. Members of the Committee met with representatives of the
Accreditation team on several occasions to provide valuable data on teaching resources
and practices. The College Undergraduate Committee served as a focal point for
facilitating collaborations between program level and College level advisors and
addressing difficulties encountered with student registration and transfer equivalencies by
improving data flow between advising offices.

**College of Arts and Sciences Curriculum Committee**

The College Curriculum Committee is responsible for reviewing all proposed changes
in courses and programs of study within the College. The committee is composed of 4-6
faculty members (at least one each from Natural Sciences/Math, Social Sciences and
Humanities) and is chaired by the Associate Dean for Curriculum and Instruction. They
meet regularly during the semester to review changes in individual courses or programs
and make recommendations about their acceptability to the Faculty Senate Curriculum
Committee. The past academic year was a particularly busy one for the Curriculum
Committee. Many programs adapted their program/course descriptions as a part of the on
going implementation of the BANNER system, generating an unusual volume of proposal forms to be processed.

**College Outreach Initiatives**

The College has continued its rich history of educational outreach programs. These programs (listed below) engage a wide cross section of the state community with College faculty, graduate students and departments. Most of these programs have received both extramural and UNM funding for their initiatives. In an effort to institutionalize the support for these and future important outreach programs, the College in partnership with the College of Education submitted a $500,000 proposal to the State Legislature to establish a new P-20 Center at UNM. This Center would initially concentrate on programs that strengthen P-20 Math and Science teaching across the state and serve as a focal point for coordinating and increasing external funding for teacher training and educational outreach.

**Current Initiatives**

*The Teacher's Institute*

The Teachers' Institute began in 1999 with support from DeWitt Wallace Readers' Digest Foundation as a demonstration site for the Yale-New Haven Teachers Institute. Pursuing its mission of contributing to K-12 education by improving teachers' access to knowledge, the Institute has historically offered credit-bearing seminars each summer and shorter workshops the year around in a range of liberal arts and fine arts disciplines, both on the UNM campus and at other sites that provide hands-on access to learning opportunities for teachers. The Teachers' Institute is jointly led by two faculty co-directors, Professor Wanda Martin (English) and Professor Matt Nyman (Natural Science)
with the administrative support provided by the College Office. In February 2009, the Teachers' Institute offered a one-day workshop titled “Get a Jump on College Writing” and led by Lecturer in English Kyle Fiore and former Lecturer Erin Lebacqz attracted 21 high school teachers to work on classroom strategies for helping students develop college-ready reading and writing skills. For two weeks in June, Wanda Martin led a seminar entitled “Reading Critically, Writing Analytically: What Can We Do with a Common Reading?” Ten high school teachers participated. Informed by readings from the fields of adolescent literacy and composition studies, participants worked in detail with Antonio’s Gun and Delfino’s Dream to devise strategies for teaching the skills of critical reading and analytic writing, which provide the basis for learning across the disciplines. In July, 41 teachers from around New Mexico took part in the Teachers' Institute Conference on Writing. Held at Hotel Albuquerque, the conference featured extended workshops in performance and writing led by UNM faculty members Gail Houston, Marisa P. Clark, Amy Beeder, and Jack Trujillo.

Science Education Institute of the Southwest (SEIS)

The Science Education Institute of the Southwest (SEIS) has provided programs in response to the needs of New Mexico's science teachers since 2005. SEIS is a collaboration of UNM, Sandia National Laboratories, the New Mexico Museum of Natural History and Science, National Radio Astronomy Observatory and the Albuquerque BioPark. Professor Matthew Nyman of Earth and Planetary Sciences (E&PS) is the UNM Director of SEIS and Amy Ellwein of the UNM Natural Science Program is a current and founding board member. In 2008-2009, SEIS provided year-long professional development for elementary teachers in Bernalillo Public Schools,
worked with Dr. Dinesh Loomba of Physics and Astronomy and Judy Stanley of the National Radio Astronomy Observatory to organize a three-day workshop for teachers, and offered three science courses for K-12 teachers in summer 2009. In the summer of 2009, one teacher received the SEIS Science Research Fellowship and worked on a research project with Dr. Penny King of the Institute of Meteoritics in E&PS, and five K-5 teachers participated in the SEIS Museum Teaching Fellowship Program at the New Mexico Museum of Natural History and Science and the Albuquerque BioPark. In addition, SEIS collaborated with faculty from E&PS, School of Engineering, Chemistry, and Physics and Astronomy on four NSF grants with teacher professional development components.

Institute for Medieval Studies Outreach Activities

The Institute for Medieval Studies (IMS) had several outreach initiatives organized by director Professor Timothy Graham, including co-organizing Medieval Day at the Albuquerque Academy in November 2008, offering a public lecture series in April 2009, and providing presentations to high school students throughout the school year. In summer 2009, an IMS graduate student gave a three-week short course during the Albuquerque Academy summer program which draws students from all over the Albuquerque metro area.

Ecohydrogeology in the Middle Rio Grande Environment (E-MRGE)

E-MRGE is an NSF funded project overseen by principal investigators Professor Scott Collins, Biology, and Professor Laura Crossey, Earth & Planetary Sciences (E&PS). E-MRGE pairs graduate student fellows in Biology and E&PS with middle school (6th-8th grade) science teachers in the communities of Belen, Laguna Pueblo, and
Socorro, New Mexico. The goal of E-MRGE is to facilitate a partnership that is mutually beneficial for our graduate student fellows, teachers, and schools. Graduate student fellows partner with middle school science teachers and work with middle school students both inside and outside of the classroom to develop inquiry-based and hands-on learning lessons, with themes generally (though not exclusively) centered on the ecology, hydrology, and/or geology of the Middle Rio Grande Valley, but which also cover a broad range of topics in the natural sciences (biology, chemistry, geology, physics, etc.). There were 10 graduate student fellows in 2008-2009.

**The Trail of Time at Grand Canyon—Geoscience Education in the National Parks**

The Trail of Time is an interpretive walking timeline trail that focuses on Grand Canyon vistas and rocks to guide visitors to ponder, explore, and understand the magnitude of geologic time and the stories encoded by Grand Canyon rock layers and landscapes. The Trail of Time is a paved, handicap-accessible 2 km trail scaled such that one meter corresponds to one million years of Grand Canyon’s geologic history. This five year project funded by the National Science Foundation is led by UNM researchers Dr. Karl Karstrom and Dr. Laura Crossey (E&PS), with collaborators Dr. Steve Semken at ASU, and Dr. Michael Williams at UMass. It is scheduled for completion in October of 2010.

**The Bosque Ecosystem Monitoring Program (BEMP)**

The Bosque Ecosystem Monitoring Program (BEMP) conducts long-term ecological research using volunteers (K-12 teachers and their students). BEMP monitors key indicators of structural and functional change in the Middle Rio Grande riparian forest, or “bosque.” In 1997 BEMP began as a collaboration between the Department of
Biology and Bosque School in Albuquerque with fewer than 200 participants. In the 2008-2009 school year, almost 5,000 community members (students, teachers, etc.) participated in science-related outreach activities. Students from over 40 schools from Rio Arriba, Sandoval, Bernalillo, Valencia, Socorro, and McKinley Counties were involved with BEMP. A teacher and agency representative workshop was held in January 2009, and a seminar-type student congress, in which students make presentations on their sites and projects, was held at the end of the school year. BEMP findings derived from K-12 student gathered data are used by government agencies to inform multi-million dollar river and riparian management decisions.

**UNM-PNM State-Wide Mathematics Contest**

The UNM mathematics contest has been running since 1966 and has received support from the PNM Foundation since 1997. The contest is open to all students in grades 7 - 12 as well as students in lower grades who are taking accelerated math. The goal of the contest is to promote mathematics education in New Mexico by rewarding students, teachers, and their schools for mathematics excellence. There were approximately 880 students who participated in 2008-2009 from 36 New Mexico schools. Dr. Dimiter Vassilev and Dr. Janet Vassilev of the Mathematics and Statistic Department organized the contest in the 2008-2009 school year.

**Add+Vantage Math Professional Development for Elementary School Teachers**

Add+Vantage Math is a program to help young children who are having trouble with basic number concepts to improve their mathematical understanding. In 2008-2009, Cathy Briand of the Mathematics and Statistics Department received a grant from the New Mexico Public Education Department to train elementary teacher is these methods.
Sixty-five teachers from 18 different schools in Moriarty and Albuquerque attend one of four different summer institutes in the summer of 2008. During the 2008-2009 school year she also arranged for undergraduate students from UNM who are studying to be elementary education majors to work in classrooms with teachers to implement these methods.

La Meta: Mathematics Educators Targeting Achievement

La Meta is a US Department of Education Mathematics and Science Partnership (MSP) funded project that has worked with middle-grade mathematics teachers since 2004. La Meta is a partnership between the University of New Mexico Department of Mathematics and Statistics, Central New Mexico Community College and five public school districts that serve nearly 40% of the K-12 students in New Mexico. The goal of the partnership is to improve New Mexico school children’s mathematical learning and achievement. Ninety teachers from the partner districts participated in one of the two July 2008 summer institutes and 68 participated in the June 2009 summer institute.

Teaching American History (TAH)

TAH is a joint project of Albuquerque Public Schools (APS) and the UNM History Department that provides professional learning opportunities for K-12 History teachers. Other partners include the Center for the Southwest, the American Institute of History Education, the Albuquerque Historical Society, and the Sandoval County Historical Society, the Center for Performance Assessment, and the City of Albuquerque Special Collections Library. In its third year, the project has served approximately 150 teachers from APS and three other school districts.
**Scientific Collaboration on Research in Education (SCORE)**

SCORE is a joint effort of the Mind Research Network (MRN), New Mexico Mathematics Engineering and Science Achievement (NM MESA), and the UNM Mathematics and Statistics Department that presents information about the science of the mind to teachers. Dr. Michael Weisend of MRN and Professor Kristin Umland of the Department of Mathematics and Statistics presented on the topics of “Learning Disabilities” and “Brain-based Learning: Fact and Fiction” in February and April 2009. Michael Weisend and Sarah Ewing of MRN presented on “Substance Abuse” in March 2009. Approximately 90 teachers and community members attended at least one of the presentations. The support for this series came from Toney Begay, Director of NM MESA.

**College Scholarships**

Each year, the College awards a variety of small scholarships to deserving students. In 2008-09, the College of Arts and Sciences received a record number of applications for the six available awards (see below) due, in part, to our continued efforts to expand and update the web-enabled descriptions and application procedures of the scholarship program. Applicants were reviewed by the College Scholarship Committee (Deborah Evans; Chair, Laura Crosse, Mark Ondrias, Diane Marshall, and Charlie Steen). A seventh award, the Frank O. and Sadie M. Lane Endowed Scholarship is processed in collaboration with the University Scholarship Office and has its own procedure and review committee.
This year we added the William P. and Heather W. Weber Award for Teaching Excellence. This award will honor Lecturers or Part Time Instructors who exemplify excellence in teaching of any science/math discipline within the College at the undergraduate level. Each year, one or two faculty will be awarded stipends of up to $2,000. In summary, the College awarded 11 scholarships and awards totaling over $34,000 for the 2008-09 academic year.

**The scholarship award recipients for 2008-09 are as follows:**

<table>
<thead>
<tr>
<th>Scholarship</th>
<th>Recipient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles E. Brown and Katherine M. Brown Scholarship</td>
<td>Krista Foutz</td>
</tr>
<tr>
<td>F.P. Clements Endowed Scholarship</td>
<td>Tessia Robbins</td>
</tr>
<tr>
<td>Ralph W. Douglass Memorial Scholarship</td>
<td>Gary Ferrell</td>
</tr>
<tr>
<td>Marjorie Yepsen &amp; Carleen F. Farnam Endowed Scholarship</td>
<td>Patricia Warne</td>
</tr>
<tr>
<td>George A. Kaseman Memorial Scholarship</td>
<td>Jillian Klenck</td>
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<tr>
<td>Frank O. and Sadie Lane Scholarship</td>
<td>Sarah Hoppe</td>
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<tr>
<td></td>
<td>Alice Marinic</td>
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<tr>
<td></td>
<td>Adeline Murthy</td>
</tr>
<tr>
<td>Dr. Harry Vanderpool Endowed Scholarship</td>
<td>Mark Probasco</td>
</tr>
<tr>
<td>William P. and Heather W. Weber Award for Teaching Excellence</td>
<td>Victoria Kauffman</td>
</tr>
<tr>
<td></td>
<td>Mickey Odom</td>
</tr>
</tbody>
</table>

**Dean’s List – College of Arts and Sciences Honor Roll**

The College maintains a Dean’s List to recognize our exceptional students. This list is displayed on the College homepage. The criteria for inclusion on the Dean’s List are a semester GPA of 3.75 or higher while being enrolled for 12 or more credit hours.

For AY 09 over 1200 students met achieved this honor in one or both semesters. Dean’s List students receive a notation on their transcript and an email of appreciation and congratulations signed by the Dean.
VIII. Development Efforts

In fiscal year 2008-2009, the College of Arts and Sciences Development Office raised $6,736,527 in gifts from individuals, corporations and foundation. A major estate gift was for $600,000 to increase student graduation rates. The estate will be used to fund scholarships for students that are no long eligible for the Lottery Scholarship. Another was the final distribution from the estate of Selma Greenberg, which was given in 2007-08. This distribution increased the Joseph H. and Selma Greenberg Fellowship Endowment fund to over $2,000,000.

Staff includes Bill Uher, the Senior Director of Development for the College. The College filled two Development Officer positions during the fiscal year with the addition of Jeff MacNutt and Yolanda Dominguez. Jeff will focus on securing funding for Humanities while Yolanda will focus her efforts on Social Sciences. Bill continues work on securing funding for the Sciences. Eva Lipton continues on as the part-time Program Director for the Development Office.

The University of New Mexico Foundation successfully established itself as a stand-alone organization in support of the University. This transition happened October 1, 2008. The Development Officers at the University all had a choice in staying UNM employees or becoming employees of the UNM Foundation. Bill Uher, Jeff MacNutt and Yolanda Dominguez all selected to join the UNM Foundation. Eva Lipton continues to be a UNM employee.

The comprehensive campaign is still in the silent phase. Most likely the campaign will go public in early 2010. The campaign goal currently stands at $500 million.
TABLE 1

College of Arts and Sciences

Department Chairs, 2008 – 2009

<table>
<thead>
<tr>
<th>Department</th>
<th>Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Studies</td>
<td>Alex Lubin</td>
</tr>
<tr>
<td>Anthropology</td>
<td>Michael Graves</td>
</tr>
<tr>
<td>Biology</td>
<td>Sam Loker</td>
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<tr>
<td>Chemistry</td>
<td>Martin Kirk (Interim)</td>
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<tr>
<td>Communication and Journalism</td>
<td>John Oetzel</td>
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<tr>
<td>Earth and Planetary Sciences</td>
<td>John Geissman</td>
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<tr>
<td>Economics</td>
<td>Robert Berrens</td>
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<tr>
<td>English</td>
<td>Scott Sanders</td>
</tr>
<tr>
<td>Foreign Languages and Literatures</td>
<td>Natasha Kolchevska</td>
</tr>
<tr>
<td>Geography</td>
<td>Paul Matthews</td>
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<tr>
<td>History</td>
<td>Patricia Risso</td>
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<tr>
<td>Linguistics</td>
<td>Bill Croft</td>
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<tr>
<td>Mathematics and Statistics</td>
<td>Jens Lorenz</td>
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<tr>
<td>Philosophy</td>
<td>John Taber</td>
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<tr>
<td>Physics and Astronomy</td>
<td>Bernd Bassalleck</td>
</tr>
<tr>
<td>Political Science</td>
<td>Mark Peceny</td>
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<tr>
<td>Psychology</td>
<td>Jane Smith</td>
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<tr>
<td>Sociology</td>
<td>Beverly Burris</td>
</tr>
<tr>
<td>Spanish and Portuguese</td>
<td>Richard Santos (Interim)</td>
</tr>
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</table>
### TABLE 1 (continued)

Interdisciplinary Study Programs; Research Centers and Institutes; Museums; Departmental Centers and Institutes, 2008 – 2009

#### Interdisciplinary Study Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Director</th>
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</thead>
<tbody>
<tr>
<td>Africana Studies</td>
<td>Alfred Mathewson</td>
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<tr>
<td>BA/MD Program</td>
<td>Philip Ganderton</td>
</tr>
<tr>
<td>Institute of Medieval Studies</td>
<td>Timothy Graham</td>
</tr>
<tr>
<td>International Studies Institute</td>
<td>Christine Sauer</td>
</tr>
<tr>
<td>Latin American Studies</td>
<td>Sherman Wilcox</td>
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<tr>
<td>Peace Studies</td>
<td>Carole Nagengast</td>
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<tr>
<td>Religious Studies</td>
<td>Richard Wood</td>
</tr>
<tr>
<td>Sustainability Studies</td>
<td>Bruce Milne</td>
</tr>
<tr>
<td>Women Studies</td>
<td>Janet Cramer</td>
</tr>
</tbody>
</table>

#### Research Centers & Institutes

<table>
<thead>
<tr>
<th>Center</th>
<th>Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center for Advanced Studies</td>
<td>Ivan Deutsch</td>
</tr>
<tr>
<td>Center for Quantum Information and Control</td>
<td>Carlton Caves</td>
</tr>
<tr>
<td>Center for Science, Technology and Policy</td>
<td>Andrew Ross</td>
</tr>
<tr>
<td>Center for Rapid Environmental Assessment &amp; Terrain Evolution</td>
<td>Louis Scuderi</td>
</tr>
<tr>
<td>Center for Research in Ecological Science and Technology</td>
<td>Robert Waide</td>
</tr>
<tr>
<td>Consortium of the Americas for Interdisciplinary Science</td>
<td>Nitant Kenkre</td>
</tr>
<tr>
<td>Earth Data Analysis Center</td>
<td>Karl Benedict</td>
</tr>
<tr>
<td>Feminist Research Institute</td>
<td>Anita Obermeier</td>
</tr>
<tr>
<td>Institute for American Indian Research</td>
<td>Beverly Singer</td>
</tr>
<tr>
<td>Institute for Meteoritics</td>
<td>Carl Agee</td>
</tr>
</tbody>
</table>

#### Museums

<table>
<thead>
<tr>
<th>Museum</th>
<th>Director</th>
</tr>
</thead>
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<tr>
<td>Maxwell Museum</td>
<td>James Dixon</td>
</tr>
<tr>
<td>Museum of Southwestern Biology</td>
<td>Tom Turner</td>
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</table>

#### Departmental Centers & Institutes

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Center for Evolutionary and Theoretical Immunology</td>
<td>Sam Loker</td>
</tr>
<tr>
<td>Center for the Southwest</td>
<td>Virginia Scharff</td>
</tr>
<tr>
<td>Institute for Astrophysics</td>
<td>Trish Henning</td>
</tr>
<tr>
<td>Institute for Social Research</td>
<td>Lisa Broidy</td>
</tr>
<tr>
<td>Nepal Study Center</td>
<td>Alok Bahara</td>
</tr>
<tr>
<td>New Mexico Center for Particle Physics</td>
<td>John Matthews</td>
</tr>
<tr>
<td>Office of Contract Archeology</td>
<td>Richard Chapman</td>
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<td>Ortiz Center</td>
<td>Sylvia Rodriguez</td>
</tr>
<tr>
<td>Science Impact Lab for Policy &amp; Economics</td>
<td>David Brookshire</td>
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</table>
## TABLE 2

**College of Arts and Sciences**

**Tenure and Promotion Committees**

### Senior Promotion Committee 2008-2009

- Anthony Cardenas (committee chair)
- Monica Cyrino
- Philip May
- Jan Schuetz
- Susan Tiano
- Philip Dale
- Karl Karlstrom
- Alex Buium

**Departments:**
- Spanish & Portuguese
- Foreign Languages and Literatures
- Sociology
- Communication & Journalism
- Sociology
- Speech & Hearing Sciences
- Earth & Planetary Sciences
- Mathematics & Statistics

### Junior Mid-Probationary and Promotion and Tenure Committee 2008-2009

- John Roberts (committee chair)
- Charles Cunningham
- Jesse Aleman
- Kathryn Hochstetler
- Miguel Lopez
- Jane Selverstone
- David Tierney
- Rena Torres Cacoullos
- Olaf Werder

**Departments:**
- Sociology
- Biology
- English
- Political Science
- Spanish & Portuguese
- Earth & Planetary Sciences
- Chemistry
- Spanish & Portuguese
- Communication & Journalism
TABLE 3
College of Arts and Sciences
Promotions, Tenure, Mid-Probationary Reviews,
New Appointments, Resignations and Retirements, 2008-09

<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
<th>Review Type</th>
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<tbody>
<tr>
<td>Karin Butler</td>
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<tr>
<td>Eliza Ferguson</td>
<td>History</td>
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</tr>
<tr>
<td>Adrian Johnston</td>
<td>Philosophy</td>
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<tr>
<td>Steve Koch</td>
<td>Physics &amp; Astronomy</td>
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<tr>
<td>Marcy Litvak</td>
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<td>Christopher Lyons</td>
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<tr>
<td>Martin Muller</td>
<td>Anthropology</td>
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<tr>
<td>Kathy Powers</td>
<td>Political Science</td>
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<tr>
<td>Keith Prufer</td>
<td>Anthropology</td>
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<tr>
<td>Mary Quinn</td>
<td>Spanish &amp; Portuguese</td>
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<tr>
<td>Curtis Storlie</td>
<td>Math &amp; Statistics</td>
<td>Mid-Probationary</td>
</tr>
<tr>
<td>Patricia Covarrubias</td>
<td>Communication &amp; Journalism</td>
<td>Tenure &amp; Promotion</td>
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<tr>
<td>Brent Kalar</td>
<td>Philosophy</td>
<td>Tenure &amp; Promotion</td>
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<tr>
<td>Ilia Rodriguez</td>
<td>Communication &amp; Journalism</td>
<td>Tenure &amp; Promotion</td>
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<tr>
<td>Eric Ruthruff</td>
<td>Psychology</td>
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<tr>
<td>Enrique Sanabria</td>
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<td>Tenure &amp; Promotion</td>
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<tr>
<td>Eleuterio Santiago-Diaz</td>
<td>Spanish &amp; Portuguese</td>
<td>Tenure &amp; Promotion</td>
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<tr>
<td>Rebecca Schreiber</td>
<td>American Studies</td>
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<tr>
<td>Tina Takac-Vesbach</td>
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<td>Economics</td>
<td>Tenure &amp; Promotion</td>
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<td>Kent Kiehl</td>
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</tr>
<tr>
<td>Pavel Lushnikov</td>
<td>Math &amp; Statistics</td>
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<td>Angela Bryan</td>
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<td>Barbara Hannan</td>
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<tr>
<td>Grant Meyer</td>
<td>Earth &amp; Planetary Sciences</td>
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<td>Cristina Pereyra</td>
<td>Math &amp; Statistics</td>
<td>Promotion</td>
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<tr>
<td>Julie Shigekuni</td>
<td>English</td>
<td>Promotion</td>
</tr>
<tr>
<td>Tom Turner</td>
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<td>Promotion</td>
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<tr>
<td>Name</td>
<td>Department</td>
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<td>-----------------------------</td>
<td>-------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Ronda Brulotte</td>
<td>Anthropology</td>
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<tr>
<td>Jeff Long</td>
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</tr>
<tr>
<td>Brady Horn</td>
<td>Economics</td>
<td></td>
</tr>
<tr>
<td>John Carr</td>
<td>Geography</td>
<td></td>
</tr>
<tr>
<td>Alexander Korotkevich</td>
<td>Mathematics &amp; Statistics</td>
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<tr>
<td>Guoyi Zhang</td>
<td>Mathematics &amp; Statistics</td>
<td></td>
</tr>
<tr>
<td>Jillian Medeiros*</td>
<td>Political Science</td>
<td></td>
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<tr>
<td>Juan Pablo Miccozzi</td>
<td>Political Science</td>
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</tr>
<tr>
<td>Yvonne Zylan</td>
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*Appointment to begin August 2010

Resignations, Retirements and Deceased

<table>
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<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Amanda Cobb</td>
<td>American Studies</td>
</tr>
<tr>
<td>Jake Kosek</td>
<td>American Studies</td>
</tr>
<tr>
<td>Deborah Komar</td>
<td>Anthropology</td>
</tr>
<tr>
<td>Louise Lamphere</td>
<td>Anthropology</td>
</tr>
<tr>
<td>Larry Barton</td>
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<tr>
<td>Krishna Kandath</td>
<td>Communication &amp; Journalism</td>
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<tr>
<td>Cary Morrow</td>
<td>Chemistry</td>
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<tr>
<td>Joy Harjo</td>
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<tr>
<td>Jennifer Denetdale</td>
<td>History</td>
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<tr>
<td>Nancy McLoughlin</td>
<td>History</td>
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<tr>
<td>Cynthia Radding</td>
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<tr>
<td>Jake Spidle</td>
<td>History</td>
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<tr>
<td>Thomas Sizgorich</td>
<td>Mathematics &amp; Statistics</td>
</tr>
<tr>
<td>Todd Kapitula</td>
<td>Physics &amp; Astronomy</td>
</tr>
<tr>
<td>Robert Duncan</td>
<td>Physics &amp; Astronomy</td>
</tr>
<tr>
<td>Krzysztof Wodkiewicz</td>
<td>Political Science</td>
</tr>
<tr>
<td>Eric McLaughlin</td>
<td>Sociology</td>
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<tr>
<td>Nelson Valdes</td>
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</tr>
<tr>
<td>Tim Wadsworth</td>
<td>Spanish &amp; Portuguese</td>
</tr>
<tr>
<td>Alejandra Balestra</td>
<td>Spanish &amp; Portuguese</td>
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<tr>
<td>Judy Maloof</td>
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### Table 4

**FY09 Research Awards**  
**Units in College of Arts and Sciences**

<table>
<thead>
<tr>
<th>Department, Program or Research Center</th>
<th>Number of New Awards and Increments</th>
<th>Value of New Awards and Increments</th>
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<tr>
<td>Biology</td>
<td>71</td>
<td>$10,274,798</td>
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<tr>
<td>Physics and Astronomy</td>
<td>55</td>
<td>$5,364,787</td>
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<tr>
<td>Earth and Planetary Sciences</td>
<td>30</td>
<td>$3,414,894</td>
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<tr>
<td>Center for Research in Ecological Studies and Technology</td>
<td>10</td>
<td>$3,022,827</td>
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<tr>
<td>Chemistry</td>
<td>31</td>
<td>$2,765,790</td>
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<tr>
<td>Center for Advanced Studies</td>
<td>8</td>
<td>$2,446,964</td>
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<tr>
<td>Sociology / Institute for Social Research</td>
<td>23</td>
<td>$2,232,976</td>
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<tr>
<td>Office of Contract Archeology</td>
<td>26</td>
<td>$1,612,152</td>
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<tr>
<td>Psychology</td>
<td>16</td>
<td>$1,156,997</td>
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<tr>
<td>Earth Data Analysis Center</td>
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<td>$1,115,828</td>
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<tr>
<td>Institute of Meteoritics</td>
<td>14</td>
<td>$1,079,578</td>
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<tr>
<td>Mathematics and Statistics</td>
<td>16</td>
<td>$1,028,768</td>
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<tr>
<td>All other College units</td>
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<td><strong>TOTAL</strong></td>
<td>$405</td>
<td><strong>$39,169,535</strong></td>
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TABLE 5  
College of Arts and Sciences  
Disbursements of Faculty Development Funds, 2008-2009

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>FACULTY</th>
<th>AWARDED</th>
<th>AWARD PURPOSE</th>
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<tbody>
<tr>
<td>Travel Fund</td>
<td>Feroza Jussawalla</td>
<td>$1,000</td>
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<tr>
<td>English</td>
<td>Victor Sanchez</td>
<td>$500</td>
<td>Travel</td>
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<tr>
<td>A&amp;S Student</td>
<td>HACU student sponsorship</td>
<td>$497</td>
<td>Travel</td>
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<tr>
<td>A&amp;S Student</td>
<td>Charles Paine</td>
<td>$765</td>
<td>Travel</td>
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<tr>
<td>History</td>
<td>Kim Gauderman</td>
<td>$1,035</td>
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<td>History</td>
<td>Liz Hutchison</td>
<td>$859</td>
<td>Travel</td>
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<tr>
<td>FLL</td>
<td>Walter Putnam</td>
<td>$1,000</td>
<td>Travel</td>
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<tr>
<td>Conference Fund</td>
<td>Carole Nagengast</td>
<td>$500</td>
<td>Peace Studies</td>
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<tr>
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<td></td>
<td></td>
<td>Conference honoring Professor Krzysztof</td>
</tr>
<tr>
<td>Math &amp; Stat</td>
<td>Charles Boyer</td>
<td>$2,000</td>
<td>Galicki</td>
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<tr>
<td>English</td>
<td>Anita Obermeier/Tim Graham</td>
<td>$750</td>
<td>Annual Medieval Assoc. of Pacific Conf.</td>
</tr>
<tr>
<td>Economics</td>
<td>Alok Bohara</td>
<td>$1,000</td>
<td>3rd Annual Himalayan Policy Research Conf.</td>
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<tr>
<td>Anthropology</td>
<td>Rebecca Schreiber/Alex Lubin</td>
<td>$300</td>
<td>Purchase book</td>
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<tr>
<td>American Studies</td>
<td>Warren Smith</td>
<td>$750</td>
<td>Purchase monograph</td>
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<tr>
<td>FLL</td>
<td>Barbara Reyes</td>
<td>$1,750</td>
<td>Publication subvention</td>
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<tr>
<td>History</td>
<td>Les Field</td>
<td>$300</td>
<td>Purchase article reprints</td>
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<tr>
<td>Speaker Fund</td>
<td>Harjit Ahluwalia</td>
<td>$1,000</td>
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<td>Sigma Xi</td>
<td>Elizabeth Hutchison</td>
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<td>Transnational Americas Symposium</td>
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<td>Raji Vallury</td>
<td>$600</td>
<td>Guest speaker</td>
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<tr>
<td>FLL</td>
<td>Elizabeth Hutchison/Jane</td>
<td>$600</td>
<td>Guest speaker</td>
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<td>History</td>
<td>Slaughter</td>
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<td>Geography</td>
<td>Bradley Cullen</td>
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<tr>
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<td>Helen Damico</td>
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<td>C&amp;J</td>
<td>Karen Foss</td>
<td>$500</td>
<td>Speakers, Colloquium Series</td>
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<tr>
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<td>Alex Lubin</td>
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<td>Alyosha Goldstein/Alex Lubin</td>
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<td>Guest speaker</td>
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<td>Math &amp; Stat</td>
<td>Jens Lorenz</td>
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<td>Christine Sauer</td>
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<tr>
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<td>Communication and Journalism</td>
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<td>Earth and Planetary Sciences</td>
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<td>Sustainability Studies</td>
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<tr>
<td>Women Studies</td>
<td>$3,381</td>
<td>0.40%</td>
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Total: $846,981 100.00%
### TABLE 7

**College of Arts and Sciences**

**Departmental Graduate and Undergraduate Committees, 2008-09**

**A&S Graduate Committee**

<table>
<thead>
<tr>
<th>Department</th>
<th>Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Studies</td>
<td>Vera Norwood</td>
</tr>
<tr>
<td>Anthropology</td>
<td>James Boone</td>
</tr>
<tr>
<td></td>
<td>Sylvia Rodriguez</td>
</tr>
<tr>
<td></td>
<td>Jane Lancaster</td>
</tr>
<tr>
<td>Biology</td>
<td>Sam Loker (Chair)</td>
</tr>
<tr>
<td></td>
<td>Robert Miller</td>
</tr>
<tr>
<td>Chemistry &amp; Chemical Biology</td>
<td>Richard Kemp (Chair)</td>
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<tr>
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<td>Steve Cabaniss</td>
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<tr>
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<td>Hua Guo</td>
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<td>Martin Kirk</td>
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<td></td>
<td>Patrick Mariano</td>
</tr>
<tr>
<td>Communication &amp; Journalism</td>
<td>Karen Foss (Master’s)</td>
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<tr>
<td></td>
<td>Janet Cramer (PhD)</td>
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<tr>
<td>Earth &amp; Planetary Sciences</td>
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<td>Yemane Asmerom</td>
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<td>Karl Karlstrom</td>
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<td>Lou Scuderi</td>
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<td>Robert Berrens</td>
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<td>Kristine Grimsrud</td>
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<td></td>
<td>Janie Chermak</td>
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<tr>
<td>English</td>
<td>Jesse Aleman</td>
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A&S Graduate Committee 2008-09

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# Table 8

## College of Arts and Sciences

### Degrees Awarded
1999-00 to 2008-09 Academic Years

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<th>Year</th>
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<th>% Increase over Previous Year</th>
<th>Masters</th>
<th>% Increase over Previous Year</th>
<th>Doctoral</th>
<th>% Increase over Previous Year</th>
<th>Total Advanced Degrees</th>
<th>% Increase over Previous Year</th>
<th>All Degrees Combined</th>
<th>% Increase over Previous Year</th>
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TABLE 9

College of Arts and Sciences

Degrees Awarded by Department, 2008-2009

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Data Source: College of Arts and Sciences Instructional Budget, 2008-09
### TABLE 11
College of Arts and Sciences

**Number of Tenure-Track Faculty & Lecturers in Departments**
**2008-2009**

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<td><strong>Totals</strong></td>
<td><strong>389</strong></td>
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*Primary appointments; full-time and less than full-time; excl. science profs & adjuncts*

Source: UNM Budget Working Report, 2008-09
X. Department Annual Reports
Name of Division: Africana Studies Program  
Period Covered: July 1, 2008-June 30, 2009  
Submitted by: Alfred Dennis Mathewson, Professor of Law and Acting Director

Significant Developments of the Division

Africana Studies made significant progress during the 2008-2009 academic year. Dr. Finnie Coleman, the Director, continued to serve as the Acting Dean of University College. Professor Sherri Burr, a tenured member of the law school faculty, was appointed Acting Director. When Professor Burr assumed the acting directorship, the major accounts in the Program had been frozen by the Banner System. As of June 30, 2009, all but one of the major accounts reflected moderate surpluses. The I&G account showed a slender deficit of $836. In addition, the University granted the program in deficit relief from previous Black History Month programming and Professor Burr subsequently raised over $22,000 for 2009 programming.

Curriculum. The curriculum was planned for Summer 2009, Fall 2009 and much of Spring 2010. Enrollment declines appear to have been reversed and course enrollment is increasing. The increases were due in part to the meticulous cross-listing of classes taught by professors in other departments and engaging courses taught by Visiting Lecturers pursuant to the Faculty Initiative.


Distinguished Lecture Series. Africana Studies launched two distinguished lecture series to aid in the retention of faculty and students.

Community Outreach. The Africana Studies Program is the center of intellectual programming in the African American community in Central New Mexico. The African American community depends upon and expects access to programs that reach beyond the students and faculty of the University. That access is provided through community outreach efforts, Black History Month Programs, lectures open to the public, the work of the Charlie Morrissey Research Hall and our pipeline program, the Summer Success Seminar. Outreach activities in the 2008-09 academic year included co-sponsoring and participating in the Black Expo, a program of the Office of African American Affairs, in October 2008, the People’s Inaugural Celebration on January 20, 2009 at the Sheryl Williams Stapleton African American Performing Arts Center and Exhibit Hall.

Black History Month. Africana Studies presented seven programs beginning with the Black History Month Kick-off Brunch on January 31 and concluding with the Black Women Authors, Black Womens Lives on February 28. The programs featured Civil rights Leader and Comedy Entrepreneur Dick Gregory as the Brunch speaker, lectures by Dr. Colleen Aycock, Dr. Anthony Cook, Novelist Kimberle Lawson Roby, Poet Evie Shockley and Playright Karen Jones Meadows.
Charlie Morrisey Research Hall. The Charlie Morrisey Research Hall loaned items for an exhibit, which is continuing, at the Sheryl Williams Stapleton African American Performing Arts Center. It also displayed a *Blacks in Mexico Exhibit* in the SUB.

**Summer Success Seminar.** 15 students successfully completed the Summer Success Seminar which offered instruction in English and Math and ACT practice testing and exposure to Black history topics.

**Academic Advisement.** Dr. Mohamed Ali and Dr. Charles Becknell were assigned to work out a plan for advising Africana Studies majors and minors.

**Relationship with African American Student Services.** Africana Studies improved its working relationship with African American Student Services by co-sponsoring several of their events, addressed their summer orientation sessions, African American Student Day, Winter Roots Festival and the African American honors and awards graduation event. We also helped initiate a Faculty Brown bag lunch series.

**Legislative Session.** During the legislative session, the funding for four out of five programs was targeted for elimination and the fifth (the Faculty Hiring Initiative) was targeted for substantial reduction. The majority of the funding, however, was saved in part due to substantial support from leaders in the African American community, support within the legislature and meetings with legislators and the Governor.

**Significant Plans and Recommendations for the Future**

The program will seek to foster a culture of excellence and graduation. In the 2009-10 year, our focus will be on excellence in all areas: excellence in student service (especially to students who major and minor in our curriculum), excellence in teaching, excellence in research and scholarship, excellence in faculty development, and support and excellence in community outreach.

**Curriculum.** The faculty approved a major revision of the curriculum for the major and minor about two years ago. We intend to move forward in obtaining University approval.

**Faculty.** Hiring tenure-track faculty is a substantial priority. In 2008-09, the permanent faculty consisted of the Director, an Assistant Professor who has a joint appointment with English, a full-time lecturer, and a lecturer who has a joint appointment with Foreign Languages. Only the Director, and the Assistant Professor with a joint appointment are tenured or on tenure-track. The Program heavily relied upon Part-time Instructors, several of whom have taught for several years. The absence of tenure-track faculty made it necessary to find an Acting Director from the School of Law. When Professor Burr stepped down in May 2009, it was necessary once again to find a replacement outside of the program from the School of Law.
Scholarship and Research. Africana Studies will promote and encourage scholarship and research by its faculty this year.

Academic Advisement. The Africana Studies Program will emphasize advisement and support for majors and minors. It will hold Open Houses in the fall and spring for majors and minors as well as other interested students.

Development. Africana Studies has a development plan and has launched the formation of two scholarships. The Acting Director will work with African American Student Services to develop a coordinated plan to support both units and reduce unintended competition.

40th Anniversary Programming. 2010 marks the 40th anniversary of the founding of the Africana Studies Program and African American Student Services. We will expect to have a year-long celebration beginning with the Black History Month Kick-off Brunch and culminating in an academic conference in Fall 2010.

Program Website. We have hired a graduate student to update and maintain the website. We intend to make information about the program, curriculum and faculty available to students, the University, and the community.

Appointments to Faculty/Staff

Professor Sherri Burr served as Acting Director during the 2008-09 academic year beginning on May 19, 2008. Dr. Frederick Gooding and David Hilliard were appointed as Visiting Lecturers in the Spring Semester.

Separations of Faculty/Staff

Dr. Maisha Baton retired at the end of the 2008-2009 academic year. Dr. Cortez Williams died before the Fall 2008 semester.

Publications of the Division; Publications of Individual Faculty/Staff


Outside professional activities of staff members

1. Dr. Mohammad Ali:

      Lead a field experience Study Tour to Egypt with 14 UNM students, faculty and staff. The course was a three credit course. It was a great success and is being followed by a two course study tour this December 2009/January 2010. This year’s program is lead by Professor Sherri Burr and myself.
b. June, 2009
Taught an intensive Arabic Language Course for one month, three hours a day to High School students as part of the STARTALK Federal Grant for Arabic and Chinese. This is the second year in a row that we received the grant.

c. July 19-24, 2009
STARTALK
NHLRC, National Heritage Language Resource Center, UCLA, Attended an institute on the teaching of Arabic as a foreign language to heritage students. Completed the 35 hours of the institute which included the final presentation project based on innovative curricular design that included specified learning materials and assessment tools. Awarded a certificate of completion.

d. July 5-11, 2009
Georgetown University, NCLRC, Center for Applied Linguistics, and the University of George Washington
Arabic Hands-On Institute
Attended an institute on the teaching of Arabic as a foreign language.

e. June 1-15, 2009
STARTALK
CLASROAD, Center for Languages, Art, and Societies of the Silk Road
Successfully completed 30 hours of online training and fulfilled the requirements established by the faculty for the program of Leading the Way in Content Based Arabic Instruction and attained a satisfactory level of proficiency in the methodologies and practice of teaching Arabic as a Foreign Language. Awarded Certificate of Completion on June 15, 2009.
Scored among the top 20 in the class and was invited for a full two weeks of institute at the California State University, San Bernardino between July 13-24, 2009. Accepted an institute, STARTALK, at UCLA instead.

2. Dr. Frederick Gooding:
   a. Initiated first Faculty Brown Bag Session with African American Student Services in April, 2009 facilitating an discussion on Black male/female relationships.
   b. Spoke before community youth group on topic of making wise life choices.

3. Dr. Hugh Horan:
   a. Visiting Scholar Summer 2005, Oriental Institute, University of Chicago.
   b. Frequent public speaker for OASIS (lifelong learning network underwritten by Macy's and others), occasional public speaker for Sandia Presbyterian, Newman Center, Congregation Albert.

4. Dr. Kadeshia Matthews:
   a. Presented at “Are we in a Post Racial Society?” A panel discussion with Dr. Frederick Gooding, Dr. Kadesbia Matthews, Dr. Jamal Martin, and Dr. Kathy
Powers. Africana Studies co-sponsors this event with the Title V Faculty Committee, OSET and UNM Division of Equity and Inclusion.

5. Mr. Stephon Scott:

a. Created grant proposal for Honors Program in Africana Studies Program. Proposal was successful and launched Africana Studies Honor Program which allows awards to be given to strongest essay creators.

6. Dr. Adamasu Shunkuri

a. Served on Dissertation Committees for Department of Communications and Journalism

7. Dr. Sonia Rankin: Presentations

a. AHEPA/HOUSING AND URBAN DEVELOPMENT ALBUQUERQUE, Keynote Speaker. Women of Excellence Throughout American History, April 2009
b. AFRICAN AMERICAN STUDENT SERVICES ACADEMIC AWARDS & RECOGNITION CEREMONY, Keynote Speaker. Striving for Excellence, April 2009
d. HIGHLAND HIGH SCHOOL, Guest Speaker. The Civil Rights Movement in America during the 1950s and 1960s. February 2009
e. YWCA CONFERENCE ON LEADERSHIP AND DIVERSITY, Panelist. Leadership Models and Messages, February 2009
f. Represented Africana Studies at African American Day at the State Legislature
g. UNIVERSITY OF NEW MEXICO AFRICANA STUDIES 2009 BLACK HISTORY MONTH KICK-OFF BRUNCH, Panelist. In the Age of Obama: Has the Dream Been Fulfilled?, January 2009
h. UNIVERSITY OF NEW MEXICO 2008 CIVIL RIGHTS SYMPOSIUM, Introductory Talk. The Historical and Political Status of America and Its Relation to Civic Literacy, September 2008
i. Radio Interview with Dr. Sherri Burr and Dr. Michelle Hull Kells on Civil Rights Symposium, September 2008
j. GOVERNANCE LEADERSHIP INSTITUTE ON DIVERSITY: ASSOCIATION OF COMMUNITY COLLEGE TRUSTEES: Keynote Speaker. The Lasting Legacy of Slavery and the Impact of the Civil Rights Movement, August 2008

8. Dr. Jamal Martin:

a. Presented at UNM School of Law Clinic Group on Health Care Inequities.

Outside sponsored research (include name of sponsor, amount, purpose, of grant, duration)

None
The faculty in American Studies continues to operate as a committee of the whole in setting policy and implementing its curriculum for undergraduate and graduate students. During the 2008-2009 year, Professor Alex Lubin served as Chair of the Department, Professor Vera Norwood served as Graduate Director, and Professor Rebecca Schreiber served as undergraduate Director.

I. Significant Developments

In the Fall, the department hosted the national American Studies Association Conference, held here in Albuquerque. Professors Gabriel Meléndez, Rebecca Schreiber, and Alex Lubin organized local events for the conference, including a performance by Guillermo Gómez-Peña at the National Hispanic Cultural Center, a film night featuring Native American filmmakers at the Indian Pueblo Cultural Center, and a tour for more than eighty conference participants to Acoma. In addition, the entire faculty and many graduate students were featured in the conference program.

A special highlight of the conference was the UNM American Studies reception, which featured a celebration of recent faculty publications, including Gerald Vizenor's *Father Meme* (UNM Press), Rebecca Schreiber's *Cold War Exiles in Mexico* (UP Minnesota), Laura Gómez's
Manifest Destinies (NYU Press) and Professor Alyosha Goldstein's and Alex Lubin's collection of essays on settler colonialism in a special issue of South Atlantic Quarterly.

This Fall, the department created a new endowment fund named in honor of a former alum who recently passed away. The Paula Gunn Allen Endowed Lecture Series will feature emergent Native voices and will, with assistance, become an annual event in the department

Throughout the year, the department organized a vibrant lecture series focused around the theme “Transnational America.” The series was a joint project with the UNM History department and featured American Studies faculty members, Alyosha Goldstein and Rebecca Schreiber, as well as our adjunct visiting faculty member, David Correia. The lecture series also featured a number of distinguished visiting faculty, including Julian Go from Boston University, Jocelyn Olcott from Duke, and Alicia Schmidt Camacho from Yale.

The Department continues to serve as one of the most diverse academic units on campus, and one of the most diverse American Studies graduate programs in the nation. In an incoming class of nine graduate students, seven are students of color. Native American and Hispanic graduate students decide to attend our Department because of our faculty strengths as well as our Department's participation in the Mellon foundation graduate fellowship program.

At the conclusion of AY 08-09, Professor Rebecca Schreiber was promoted to the rank of Associate Professor.

II. Significant Plans and Recommendations for the Near Future

The Department continues to work towards achieving its strategic priorities and goals, including: 1) Recruiting faculty, graduate students, and undergraduates of color; 2) Ensuring that
the undergraduate and graduate programs train students in all of the areas that are important to
the department and that we continue to build on the success of faculty excellence in research and
publishing; 3) Recruit faculty as well as students at every level of the department and increase
administrative support staff; 4) Maintain the Department’s faculty staffing levels as well as build
on our strength in the areas of Environment, Science, and Technology; 5) Build community within
the Department, across campus, and outside of the University.

We continue to work with the College to recruit new faculty, particularly in areas we see
as central to the University’s strategic goals.

III. Faculty Appointments

In 2008-2009, the Department attempted to make a targeted hire in the area of Native
American Studies. We were given approval to make an offer, but, unfortunately, the candidate
turned us down. We continue to work with the College to recruit a faculty member in this
crucial area of American Studies.

IV. Separations of Faculty

There were no separations of faculty during the 2008-2009 year.

V. Publications of the Department

Assistant Professor Alyosha Goldstein

Co-editor (with Alex Lubin), *Settler Colonialism*, a special issue of *South Atlantic Quarterly*,
September 2008. Duke UP.

Assistant Professor Rebecca Schreiber


Assistant Professor Michael Trujillo


Associate Professor Alex Lubin

Co-editor (with Alex Lubin), Settler Colonialism, a special issue of South Atlantic Quarterly, September 2008. Duke UP.

"We Are All Israelis": The Politics of Colonial Comparisons," South Atlantic Quarterly, September 2008, Duke, UP.

Professor Laura Gomez
Manifest Destinies: The *Making of the Mexican American Race* was published in paperback by New York University Press (September 2008).


Professor A. Gabriel Mélendez


Professor Vera Norwood


**Professor Gerald Vizenor**


*Native Liberty: Natural Reason and Cultural Sovereignty, selected essays*, University of Nebraska Press, 2009.


*Father Meme*, a novel, University of New Mexico, 2008.


"Mercenary Sovereignty: Casinos, Truth Games, and Native American Liberty," essay in Hybrid


VI. Outside Professor Activities of Staff Members

Assistant Professor Alyosha Goldstein

Reviewer for the journal, Political Power and Social Theory.

Assistant Professor Rebecca Schreiber

President, Rocky Mountain American Studies Association

Member, 2008 American Studies Association Site Resource Committee

Associate Professor Alex Lubin

Chair, 2008 American Studies Association Site Resource Committee

Member, 2008 American Studies Association Program Committee

Professor Laura Gomez

Invited speaker at the conference "Making History: Race, Gender and the Media in the 2008 Presidential Election" at St. John's University Law School in September 2008.

Lecturer, the Center for the Study of Race, Ethnicity and Politics in UCLA’s Political Science Department in May 2009.

2009 lecture for the University of North Texas's History Department's annual lecture commemorating the 160th Anniversary of the Treaty of Guadalupe Hidalgo.
Lecturer, "Difficult Dialogues" series at the Chapman University School of Law in Orange,

She testified before the Governor's Poverty Reduction Task Force in July 2008 in Farmington on
the subject "Debunking Seven Myths About Race and Poverty."

She has been very active in the Law and Society Association, and in November 2008 was elected
president, to serve June 2009-May 2011.

Associate editor of the Law & Society Review, and has done peer reviews this year for that
journal as well as the American Review of Sociology.

**Professor A. Gabriel Melendez**

Member, American Studies Association Site Resource Committee

Member, editorial boards, including the boards of *Aztlán: Journal of Chicano Studies,*
University of California at Los Angeles (November, 2008) and *Paso por aquí Series on New

Advisory Editor for *Confluencia, Hispanic Studies,* University of Northern Colorado (2002-) and
a contributing editor for *Greenwood Encyclopedia of Latino Literature, Greenwood Press,
Westport, CN* (2007-).

**Professor Vera Norwood**

Panel discussion: "Living and Working in Academia," Feminist Research Institute, UNM, April

Paper: "Environmental Legacies of the Vietnam War: A Reading of the Role of Native Plants in
Post-Colonial Nation Building." Meeting of the Post-Colonial Studies Association, May 6-9, Waterford, Ireland.

**Professor Gerald Vizenor**


“White Earth Reservation Constitution,” lecture and discussion, special research faculty seminar, Clare Hall, Clare College, Cambridge University, England, March 2009.


“Survivance Practices,” Seminar Lecture, University of Geneva, Switzerland, June 2008

Commencement Lecture, Division of Undergraduate and Interdisciplinary Studies, University of California, Berkeley, May 21, 2008, Greek Theater.

Narratives of Survivance and Resistance,” Keynote Lecture, Conference on Indigenous Graduates, Institute for American Indian Research, University of New Mexico, April 2008.

Principal Writer and Delegate to the Constitutional Convention, White Earth Reservation Constitutional Convention, 2008, 2009. Researched, prepared and wrote the proposed new Constitution for the White Earth Reservation. The proposed Constitution will be considered for ratification at the last Convention on April 3, 4, 2009.

Series Editor, Native Storiers, University of Nebraska Press, current.

Series Editor, Native Traces, State University of New York Press, current.

Serve on the University of New Mexico Press Faculty Committee.
## Table of Contents

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**Section X:** Journal of Anthropolological Research
Anthropology is the most inclusive discipline in the arts and sciences encompassing the breadth of interests studied in the humanities, social and natural sciences. The field is a microcosm of disciplinary diversity encompassing much of the human experience. Anthropologists do this by virtue of the long time depth (in the millions of years), geographic span (the entire planet), and variety of peoples and environments studied.

The three subfields of Archaeology, Ethnology, and Evolutionary Anthropology provide the organizational structure by which Anthropology's breadth is expressed at the University of New Mexico. UNM Anthropologists share a common goal of assessing and refining ideas about human culture and biology in view of their roles within the discipline.

Simultaneously, these subfields encompass a variety of perspectives and methods through which the lens of culture is applied to human diversity and change in the past, present and future. This diversity strengthens the discipline providing anthropologists with several different frameworks for their studies. The Department shares a tradition of empirically based field and laboratory work across Archaeology, Ethnology, and Evolutionary Anthropology that enlivens research, reinforces commitments to diversity, and provides opportunities for students to learn in realistic settings.

The Department's subfields have identified a set of theories and methods by which its faculty will prepare students to assume their duties as citizens and to pursue professional careers. These include, among others, political economy, evolutionary, historical ecology, and critical theory approaches to anthropological data. Each subfield faculty has identified core issues and topics within which they will concentrate their efforts. There are also a number of points of articulation across the subfields (and with other disciplines) where, for the purposes of student training and faculty research, the Department will seek to reinforce studies and potential collaborations. Areas of overlap include advancing public anthropology through the Alfonso Ortiz Center; describing the interactions of land use and water and resource distributions on human communities and natural environments; studying bio-cultural evolutionary outcomes involved in different economic, social, and demographic conditions; and furthering the understanding of the transmission and expression of culture through art, music, craft, tradition, and performance. Anthropology at UNM makes good use of its geographic location—in the culturally diverse American Southwest and near an international border—to concentrate on the indigenous and Hispanic cultures of the Americas and Europe, plus areas of the Pacific and Africa.
Finally, there are also points of difference and divergence within the discipline. The Department reflects those differences and recognizes they constitute a basis for continuing reflexive discussion and debate. This interaction is vital to the field and intellectual growth for anthropologists. It is also critical if faculty members are to prepare students who have the capacity for understanding others in their own terms and yet who are capable of addressing the challenging issues within their areas of specialization. Variety and breadth of approaches, focus and emphasis on key topics, a critical examination of the human condition past, present, and future, and regional strengths, define the characteristics of Anthropology at the University of New Mexico. These constitute a collective and dynamic vision that embraces diversity.

The Anthropology program completed its Academic Program Review in 2008. This consisted of a Self-Study Report prepared by Marta Weigle and Michael Graves. In November 2008 an external review committee (comprised of Tim Earle from Northwestern University, Yolanda Moses from University of California-Riverside, Richard Wrangham from Harvard University, and Melissa Axelrod from the Department of Linguistics at UNM) visited campus and met with a variety of constituencies regarding the program. The Committee issued its report in January 2009; the report emphasized the excellence of the program and made several recommendations regarding the Department's vision, long range planning and hiring, the undergraduate and graduate programs, and renovation of key facilities. The Department has responded to all of these recommendations (see Significant Activities).

The Department also completed assessment plans for both its undergraduate and graduate programs, including the subfield concentrations within each. These plans guide the efforts of the Department to regularly review its degree programs effectiveness and quality. Michael Graves, also completed a report describing and summarizing the number (281 total) and placement of PhDs in Anthropology, by subfield between 1949 and 2008.

### DEPARTMENT ACTIVITY BY SUBFIELD

#### Subfields

The Department maintains graduate and undergraduate programs in three subfields: Archaeology, Ethnology, and Evolutionary Anthropology. In the Spring 2008, the Biological Anthropology and Human Evolutionary Ecology subfield merged to form the Evolutionary Anthropology subfield. The combination of undergraduate and graduate programs has been completed. Conveners (annually elected by the subfield) call subfield meetings at least monthly.

#### Advisory Group

The subfield conveners, undergraduate director, graduate director, and the Chair meet once or twice a month during the academic year to advise the Chair on matters relating to personnel, administration, and budget; make recommendations about related planning, policy, procedures, and other issues for discussion and vote by full faculty. The Advisory
Group is a liaison between the Chair and the subfields and programs. Advisory Group members are expected to attend faculty meetings.

**Archaeology**

**Focus** Archaeology's unique contribution in Anthropology derives from its historical studies that provide greater understanding of the dynamics of past human societies. Archaeology at UNM is a national and international leader in archeological theory and practice. Archaeologists train future generations of educated, well-rounded, innovative and ethical researchers and teachers of anthropological archaeology. The faculty continues to prepare students to contribute significantly to the body of archaeological theory and knowledge, to succeed in obtaining external funding for research and training, and to obtain relevant employment in academic, government, and public sector archaeology. Archaeology's goal is to build on existing strengths, which include unusual depth and breadth of faculty, all of whom have active, funded projects involving student researchers in the Americas, Western Europe, and in the Pacific.

**Strengths** Several areas highlight the strength of Archaeology at UNM. Archaeologists contribute to the comparative study of agriculturally based societies and of the development of both early and more recent complex societies, often in fragile physical environments in both the New and Old Worlds and including consequential questions of culture contact. UNM Archaeology is known for its research on prehistoric foraging systems including colonization and subsequent cultural changes under both Pleistocene and early to late Holocene environmental conditions. All archaeologists at UNM are involved in ongoing research on human interactions with diverse environments and adaptations to change, both cultural and non-cultural. The Archaeology program includes a diversity of theoretical perspectives and a wealth of methodological expertise, including cutting edge field techniques and laboratory analyses. Students receive training in historical and evolutionary ecology; lithic and ceramic technology; archaeological unit definition and construction; interpretation of prehistoric style and identity; paleoenvironmental reconstruction; and the study of past belief systems.

**Educational Programs** Undergraduate concentrators in Archaeology are taught broadly in theory, method, and the archaeological records of various world culture areas, and are afforded the opportunity to participate in research through our field schools, laboratories, and other research sites in New Mexico and elsewhere. Baccalaureate students are prepared to make successful applications for graduate school admission and scholarships and/or to seek employment in cultural resource management, public anthropology, or as advocates for historic preservation. The graduate program provides intensive education in archaeological theory and training in the methods of field and laboratory research. Faculty members encourage students to obtain expertise in allied fields such as geology, geography, or biology. The goals are to produce students who are able to think critically and independently, to identify significant research problems, to frame them as workable, funded proposals, and to complete original research leading to the PhD or MA in Public Archaeology. This is done in the context of courses, specialized seminars and faculty field and laboratory research projects. Many students gain experience working with
collections at the Maxwell Museum or on projects through the Office of Contract Archaeology. Current research sites include Chaco Canyon (NM), Galisteo Basin (NM), Rio Grande Valley (NM), Alaska, Rocky Mountains (CO, WY), N. Spain, Portugal, Belize, N. Peru, and the Pacific (Hawai‘i, Polynesia, and Micronesia).

**Articulation** Archaeology is committed to linking its focus, strengths, and educational objectives with both Ethnology and Evolutionary Anthropology. Some points of intra-departmental articulation include contemporary and historical studies of: the political economy and challenges faced by societies and peoples of the Greater Southwest, as well as Latin America and Iberia; behavioral strategies among foraging groups and cross-disciplinary paleo-anthropology; behavioral and evolutionary ecology applications; public and community anthropology; and the material expression of cultural identity and transmission.

The Archaeology program has major areas of cross-disciplinary collaboration, including research and teaching with geologists, geospatial analysts, biologists, paleo-ecologists, soil scientists, demographers, modelers, and material scientists, at UNM and other institutions worldwide.

**Faculty**
The Archaeology faculty consists of 8 full time faculty members, the Director of the Maxwell Museum, 1 part time faculty, and 4 research faculty from the Maxwell Museum. In 2008-09 the Archaeology subfield successfully revamped its graduate (MA and PhD) requirements and it instituted the new MA in Public Archaeology. There are 62 graduate students in the program.

After a successful year conducting fieldwork in Peru, Dr. Frances Hayashida, (PhD 1995, University of Michigan) joined the Archaeology faculty. Her specializations include South American archaeology, people and the environment, food and resources.

**Southwestern Archaeology Field School, Valles Caldera**
In June and early July 2009, the UNM Southwestern Archaeology Field School collaborated with archaeologists from the Valles Caldera Trust to conduct surface survey and limited test excavations at the Valles Caldera National Preserve in the Jemez Mountains of New Mexico. The field school, directed by Adjunct Assistant Professor Ariane Pinson, investigated patterns of Archaic and Protohistoric Period high altitude land use, settlement and subsistence, focusing particularly on the record of rock shelter use in this area. This research is important because although many models of Archaic and Protohistoric Period subsistence incorporate summer use of high altitude regions, there has been little archaeological field work in these areas against which to evaluate these models.

**Chaco Stratigraphy Project, Chaco Canyon National Historic Park**
The Chaco Stratigraphy Project is a multi-disciplinary research program in the Department of Anthropology that supports archaeological field studies at Chaco Culture National Historic Park directed by Distinguished Professor Patricia L. Crown and Professor W. H. Wills. During the academic year 2008-09 researchers continued
excavation and survey in the park, including a 6 week field school in October and November of 2008 as part of the undergraduate “Chaco Research Semester” immersion experience. Published research include Professor Crown’s discovery of cacao residue in ceramic vessels, the first evidence for use of cacao in prehistoric North America, reported in the Proceedings of the National Academy of Sciences. Crown and Wills were awarded a School of American Research Advanced Seminar (to be held in March 2010) to synthesize project results, and new funding was secured through the Colorado Plateau Cooperative Ecosystem Studies Unit.

**Uxbenká Archaeological Project, Belize**
Directed by Keith Prufer with support from the National Science Foundation. This project involves senior collaborators from UNM, University of Oregon, University of California, Davis, University of South Florida, and the Swiss Federal Institute of Technology Zurich. The project is developing models of human resiliency to ecological change in the context of increasing complexity and expanding networks, and is testing these models with empirical archaeological and ethnographic data collected from Uxbenká, a 2000-year-old polity in southern Belize. In 2008-2009 the project supported and provided training for five UNM Anthropology graduate students, as well as doctoral students from Texas A&M, University of Oregon, and the University of Pennsylvania. The project also provided NSF-REU field training to two undergraduates from UNM.

**El Mirón Cave Prehistoric Project, Spain**
In summer (June-July) 2008, under the direction of Distinguished Professor Lawrence Straus and Universidad de Cantabria Professor Manuel González Morales, project team members (students from UNM and the Universidad de Cantabria) did lab work (processing, classifying & curating lithic and osseous collections) in laboratories at the Universidad de Cantabria (Santander) and in its field building in Ramales de la Victoria (Cantabria, Spain). The work was funded by grants to Straus from the National Geographic Society, the UNM Research Allocations Committee and the Fund for Stone Age Research and to González Morales from the Gobierno de Cantabria. New radiocarbon dates were obtained from the early Magdalenian levels and archeomagnetic ones from the Chalcolithic & Bronze Age ones. Considerable progress was made in the analyses of micro- and macromammalian faunas, sedimentology and palynology of the site.

The project took a hiatus from fieldwork in 2009, while the Co-Directors (Straus and González Morales) worked on analyses and publications. The first volume in the projected El Mirón Cave monograph series is currently under review. Straus organized and conducted an intensive tour in June, 2009, of Middle and Upper Paleolithic sites in northern and southern Spain, Gibraltar, Ceuta and Portugal for Jean Auel (author of *The Clan of the Cave Bear* and five other Ice Age novels) in preparation for her seventh novel, to take place in the Iberian Peninsula. Among the sites toured were caves that are hardly ever shown, even to archeologists. Straus took hundreds of photographs (both digital and film) which will be of much use in his teaching and research.
Hawaii Archaeological Research Project, Hawaii Island
For the third year the Department of Anthropology participated in a summer archaeological field training program in Hawai‘i. This program is directed by Dr. Michael Graves and Dr. Mark McCoy (Otago University, New Zealand). Eleven students from across the US compete for positions in this program; two students this year attended UNM. The program integrates field work (survey, mapping, and excavation) with basic archaeological research focused on the development of irrigated agriculture in the district of North Kohala on the Island of Hawai‘i. This program is part of a larger project funded by the National Science Foundation Human and Social Dynamics Initiative to document and understand the relationship between dry and wetland agriculture and the development of the Hawaiian state in the eighteenth century. One of the teaching assistants for this program is a graduate student at UNM, as well.

Ice Patch Archaeology, Alaska
As a result of climate change, rare archeological materials are melting from ancient glaciers and ice patches worldwide. Some of the spectacular organic artifacts that have been found include prehistoric bows and arrows, spears, hunting tools, baskets, clothing, and even human remains. These unusual discoveries have been preserved and frozen in ice for thousands of years and provide an unprecedented glimpse into the lives of ancient people and have captured public attention around the world.

Ice patches are comparatively small areas of perennial ice that occur along the margins of high plateaus and other large landforms. Caribou and sheep use these small glaciers during the summer to escape from heat and insects and to drink fresh water from the melting ice. People have hunted these animals at some ice patches for thousands of years. Many of the artifacts they left or lost on the ice became frozen and are perfectly preserved. This is important because archeologists usually only find non-perishable artifacts such as stone and pottery. These small glaciers are exceptional because they preserve examples of perishable artifacts made of bark, wood, and leather. The recovery and study of these rare artifacts provides new insights into the ecological role of small glaciers in the life-ways of ancient people in high altitude and high latitude environments.

E. James Dixon, Maxwell Museum Director and Professor of Anthropology is completing the third year of a five-year grant from the National Science Foundation Office of Polar Programs to identify ice patches most likely to contain and preserve artifacts in Alaska’s Wrangell-St. Elias National Park. With the funding from the National Science Foundation, several small glaciers are being revisited and surveyed annually by Dixon along with, Native American participants affiliated with the Ahtna Heritage Foundation and UNM graduate students Nick Jarman and Michael Grooms. This research was expanded in 2008 to include Alaska’s Lake Clark National Park and Preserve under a five-year cooperative agreement with the National Park Service. Collectively these research projects have received more than $1,150,000 in funding from both the National Science Foundation and National Park Service and will continue until 2012.
Lake Clark National Park has been at times home to one of the largest caribou herds in Alaska. In 2008, UNM and NPS archaeologists conducted aerial reconnaissance of the Park’s ice patches and small glaciers. In cooperation with NPS archeologist Jeanne Schaaf, the research team will conduct a helicopter-supported pedestrian survey of promising ice patches in 2009. These projects provide financial support and training for three UNM graduate students - Nicolas Jarman, Michael Grooms, and Kelly Monteleone.

The study of ice patches and the artifacts and biological specimens they contain, provides valuable knowledge for studying environment, climate, and culture change through time. The projects incorporate the partnership of local Athapaskan tribal groups and individuals. Native people participate in the archeological surveys and have shared their knowledge. This research expands the scope of an exciting new international research frontier incorporating both archeology and climate change, and creates new opportunities for students at the University of New Mexico.

*Gateway to the Americas, Alaska*

The Maxwell Museum received a $43,914 award, “Gateway to the Americas”, in April 2009 from the National Science Foundation’s (NSF) Office of Polar Programs. Gateway to the Americas is designed to search for submerged archeological sites on the continental shelf of Southeast Alaska dating to the last Ice Age that may be more than 14,000 years old.

Dr. James Dixon, Director of the Maxwell Museum and Professor of Anthropology at UNM, is the Principal Investigator. He will be assisted by UNM Anthropology graduate student Kelly Monteleone, and work in partnership with a team from the Norwegian University of Science and Technology, Museum of Natural History and Archaeology, Trondheim, Norway. The Norwegian team brings state of the art high latitude cold-water underwater archeological expertise to the underwater survey, which will take place in the summer of 2010. Members of the United States Forest Service’s Tongass National Forest will also participate in the project.

Native American oral histories, recent discoveries by fishermen of artifacts on the ocean floor, and refined paleoenvironmental and geological data, may make it possible to identify specific locales where ancient submerged sites may be located. In cooperation with other team members, Kelly Monteleone will develop a Geographic Information Systems (GIS) model to help guide the search for ancient underwater sites. Specific areas will be surveyed using remotely operated vehicles (ROVs), multibeam sonar, grab sampling, and hydraulic screening.

During the last Ice Age (Pleistocene) glaciers stretched from the western slopes of the Canadian Rocky Mountains in the west to the Atlantic Ocean in the east. This created an impenetrable icescape that blocked the southward movement of humans who had migrated from Asia and reached Alaska. However, archeological sites located south of North America’s continental glaciers have been accurately dated prior to the melting of
the ice. These facts have led some archeologists to explore new theories in an effort to explain how humans first reached the southern areas of North America.

The Pleistocene was a time when vast amounts of the earth’s water were trapped in glaciers. This lowered global sea level and exposed the continental shelf along the west coast of the Americas. When the massive glaciers melted, sea level rose and submerged the ancient coast. Some archeologists postulate that this ancient submerged coast may have provided a route for the very first people to enter North America. This hypothesis suggests that between 16,000 and 12,000 years ago humans using watercraft may have colonized refugia (areas that were not glaciated during the last Ice Age) and deglaciated areas of the continental shelf. If this hypothesis is correct, some of the oldest archeological sites in North America may be located underwater on the western continental shelf of the continent.

The NSF grant to the Maxwell museum provides an opportunity to begin testing this hypothesis. High-risk research projects such as this hold the potential to revolutionize traditional interpretations of North American archeology. It places the Maxwell Museum in the forefront of scientific research directed to enhancing our understanding of humans as colonizers and how, when and why the American continents were first colonized by people.

UNM Anthropology graduate student, Kelly Monteleone, at work in a Maxwell Museum research laboratory. Ms. Monteleone is developing a geographic information system model to help guide the search for ancient underwater archeological sites on the continental shelf of Southeast Alaska.

National Fellowship Awards

PhD Alumni Professional Appointments:
- McAnany, Patricia A., PhD 1986, 2008-Kenan Eminent Endowed Professor, Department of Anthropology, University of North Carolina, Chapel Hill, NC
- Petraglia, Michael D., PhD 1987, 2008-Senior Research Fellow and Co-Director, Centre for Asian Art, Archaeology and Culture, University of Oxford, Oxford, UK
- Mills, Barbara, PhD 1989, 2008-Director, School of Anthropology, University of Arizona, Tucson, AZ
- Ferguson, T.J., PhD 1993, 2008-Professor of Practice, Department of Anthropology, University of Arizona, Tucson, AZ
- Dore, Christopher, PhD 1996, 2008-CEO, Metcalf Archaeological Consultants, PO Box 2079 (Corporate Support Center) Arvada, CO
- Nakazawa, Y. PhD 2007, 2009-Archaeologist, Zao Board of Education, Miyagi, Japan
Kludt, T, PhD 2006, 2008-Geo-hydrological Research Associate, New Mexico Bureau of Geology and Mineral Resources, New Mexico Technology University, Soccorro, NM

Hamilton, Marcus, PhD 2008, 2009-Post Doctoral Fellow, Department of Biology, University of New Mexico, Albuquerque, NM

Kilby, James, PhD 2008, Assistant Professor, Department of Anthropology and Applied Archaeology, Eastern New Mexico University, Portales, NM

Schmidt, Kari, PhD 2008, Archaeologist and Operations Manager, Statistical Research Incorporated, El Paso, TX

Thompson, Ian, PhD 2008, Tribal Archaeologist and NAGPRA Coordinator, Choctaw Nation, Durant, OK

Burger, Oskar, PhD, 2009, Post-Doctoral Fellow, Department of Anthropology, Stanford University, Palo Alto, CA and Toulouse University, France

**Ethnology**

**Focus** Does change create more differences than it effaces? This fundamental question shaped the birth of anthropology and continues to frame the discipline's theoretical and empirical work. In light of this question, Ethnology at UNM focuses on cultural resurgence and globalization in the Americas, primarily the US Southwest and Latin America. Mindful that anthropology is no longer limited to a textual or written analysis of peoples in situ, ethnologists explore various forms of representation with participant communities, institutions, interest groups and individuals in regional and global contexts through an intersection of common goals.

**Strengths** The Ethnology subfield emphasizes working with participant communities. Ethnological studies include: the transformation of cultural and linguistic heritages; identities (racial, ethnic, indigenous, religious, and gendered); inequalities and the social movements that address them (indigenous rights, human rights, democracy movements, access to health and legal rights); land, water and the politics of place; narrative and memory; expressive culture and cultural poetics; and media and representation.

**Educational Programs** The training Ethnology students receive at all levels (BA through PhD) prepares them to research issues that confront local, national and international communities and governing bodies with respect to conflict, identity, inequality, development and cultural representation. Training emphasizes rigorous and theoretically diverse approaches to sociocultural phenomena, the development of strong writing skills, and the use of a broad range of research methods including interviewing, life-history, video and photographic documentation, and participant observation.

**Articulation** Ethnology's areas of specialization set the anthropological agenda for larger disciplinary conversations about ethnicity and race, health, the use of resources, systems of inequality, culture history, and the material manifestations of expressive culture. Work in the US Southwest and Latin America complements that of the Archaeology subfield,
particularly with respect to the study and analysis of material culture, ritual theory, sociocultural theory, place and space, intellectual and cultural property rights, cultural resource management, and the representation of indigenous peoples in media, museum, and public culture. Ethnology, Archaeology and Evolutionary Anthropology also share a focus on human knowledge and management of ecology and environment through history and cross-culturally as well as the dynamically changing manifestations of human diversity.

Faculty

The Ethnology faculty consists of 9 regular faculty (two of whom have one-half time appointments), and a visiting professor. Dr. Ronda Brulotte joined the Ethnology faculty as Assistant Professor in January 2009. There are 50 graduate students in the program.

The Answers Lie Within, Africa and North America

This film (55 min., 2009) by produced and directed by Beverly Singer, and was screened at an event co-hosted by Department of Anthropology (Ethnology) and American Studies, Wednesday, April 22 at 2pm Kiva Classroom, Main UNM Campus. In July 2007, The Answers Lie Within brought together over 100 Indigenous people from North America & Africa with a focus on social change and economic empowerment through art & culture. A 45-person American Indian delegation journeyed to six countries in Africa to dialogue on important topics of global Indigenous concern. The film documents the story of this amazing journey of Native Americans in Southern Africa.

Peace Fair, University of New Mexico

Peace Studies, which is housed in the Department of Anthropology, mounted its annual Peace Fair, which featured panels on the Nuclear Imagination, The Greening of New Mexico and Peaceful Alternative to Violent Conflict. UNM Anthropology faculty Sylvia Rodriguez, UNM PhD Laura McNamera, Dr. Janet Page-Reeves who often teaches in the department, and PhD candidate Patrick Staib were among those participating in the panels.

PhD Alumni Professional Appointments

- Howe, C, PhD 2003, Ethnology, 2008-Assistant Professor, Department of Anthropology, Rice University, Houston, TX
- Horton, S, PhD 2003, Ethnology, 2008-Assistant Professor, Department of Anthropology, University of Colorado-Denver, Denver, CO
- Dehaas, Jocelyn, 2006, Ethnology, 2008-Visiting Assistant Professor, Department of Geography and Anthropology, Eastern Washington University, Cheney, WA
- Getrich, Cynthia, PhD 2008, Ethnology, 2008-Post Doctoral Fellow, Department of Family Community Medicine, Health Sciences Center, University of New Mexico, Albuquerque, NM
- Lopez, Leslie A, PhD 2008, Ethnology, 2009-Visiting Lecturer, Department of Latin American and Latino Studies, University of California, Santa Cruz, CA
Evolutionary Anthropology

Focus Evolutionary Anthropology at UNM takes a broad, synthetic approach to understanding the interrelated effects of human biology and behavior in an evolutionary and cultural framework. Because of this perspective, faculty members are recognized for their research nationally and internationally and the program is highly competitive in attracting and placing graduate students. Evolutionary Anthropology faculty make use of systematic comparisons of the behavior, physiology, anatomy and genetics of great apes, human ancestors and living humans (with an emphasis on modern foragers and small scale societies) in order to understand the process of human evolution and the specific selection pressures that shaped the unique traits that characterize our species.

Educational Program Evolutionary Anthropology offers an educational experience recognized for its high quality, serving the needs of a general education curriculum, anthropology concentrators and graduate education. Faculty employ novel teaching methods and technologies to help students understand how and why anthropologists apply an evolutionary perspective to study the nature, causes and implications of human biological variation. Training prepares students for citizenship today with the ability to analyze the complex nature of global, national and local issues. It also provides knowledge of theory, data and methods in evolutionary anthropology to facilitate entry into graduate school or NGO employment in development, health, and social programs.

The Evolutionary Anthropology graduate program provides an in-depth education in the theory, methods and data used to test hypotheses about the nature, evolutionary causes, and scientific and social implications of human biological and behavioral variation. Areas of specialization include human behavioral ecology, life history theory, non-human primate behavior, paleo-anthropology, human biology and genetic anthropology. The Evolutionary Anthropology graduate program is uniquely configured with a focus on theoretical models based on evolutionary theory, testable predictions using empirical data sets, and high level training in skills. Faculty members place high priority in teaching each student a professional-level configuration of skills that is identified as most appropriate for the chosen dissertation project and career trajectory; such as analytic design and data analysis, endocrinology, or analysis of genetic, isotopic, geological or skeletal data.

Articulation Evolutionary Anthropology has a strong relationship with several archaeology faculty members whose research is informed by human behavioral ecology. These archaeologists are informally affiliated and collaborate in graduate training and
research projects. The recent establishment of the Center for Human Evolutionary Science (CHES) formalizes a collaboration that has been in place for the last decade among Evolutionary Anthropology faculty and members of Biology and Psychology on the evolution of human behavior including shared curricula and graduate students. Current activity is focused on obtaining a training grant that would support graduate students, post doctoral fellows and research initiatives of new faculty. Evolutionary Anthropology shares with Ethnology a focus on the global problems of the 21st Century: fertility and population growth, limits on energy and food supply, global epidemics and modern, aging and degenerative diseases, intergroup conflict and genocide, and environmental protection and regeneration. Such global issues are complex problems requiring multiple approaches and interdisciplinary collaborative research. Promising collaborations include evolutionary medicine, public health and medical anthropology.

Faculty
Evolutionary Anthropology is a recently established subfield in UNM's Department of Anthropology formed by joining the faculty of Biological Anthropology with Human Evolutionary Ecology. The new subfield has a total of nine participating faculty as well as two research assistant professors and 44 graduate students. New faculty members include Dr. Jeffrey Long, Professor of Anthropology, PhD University of Michigan, 1984. Dr. Long studies human genetics, population and evolutionary genetics, complex traits, statistical genetics. Dr. Melissa Emery Thompson, Research Assistant Professor, PhD Harvard University, 2005 joined the program as a Post-Doctoral Fellow. Her interests cover reproductive ecology, behavioral endocrinology, primate behavioral ecology, evolution of human behavior, and life history.

The Hominoid Reproductive Ecology Laboratory, University of New Mexico
Established in 2008 with co-directors Drs. Martin Muller and Melissa Emery Thompson, the laboratory focuses on analyses of biomarkers of stress, reproductive function, and health, and has a particular emphasis on non-invasive methods that allow comparisons across great apes. During the year, the lab was used as the basis for graduate student training in endocrinological skills via a graduate course involving 12 students and supervised independent research with 7 graduate students in the departments of psychology, biology, and anthropology. The laboratory engaged in grant preparation and collaborative research efforts on reproductive health and relationship status with Dr. Steven Gangestad in UNM Psychology and on the biodemography of aging in the Tsimane hunter-gatherer population with Dr. Hillard Kaplan. Collaborations outside UNM include research on energetic and social stress in wild chimpanzees with colleagues at Harvard, and topics related to sexual conflict, reproductive development, and reproductive ecology in orangutans with colleagues at Boston University, University of Zurich, the Great Ape Trust, and various captive primate facilities.

The Kibale Chimpanzee Project, Uganda
This project is a long-term research project focusing on the behavioral ecology and health of wild chimpanzees in the Kanyawara community of Kibale National Park, Uganda. Dr. Martin Muller is co-director. Dr. Melissa Emery Thompson is also a senior researcher with the Kibale Chimpanzee Project, and two UNM graduate students are developing
dissertation research projects that will use the site. The Kibale Chimpanzee Project continued work on the "Ecology and endocrinology of chimpanzee aggression" (NSF, co-PI Muller).

**The Primate Enrichment Program, Rio Grande Zoo, Albuquerque**

This program has been in existence since December of 2002. Initially designed to provide enrichment to all of the primates at the zoo, including ape species (Gorillas, Chimpanzees, Orangutans, and Siamangs) as well as monkey species (multiple species of Tamarins, Spider Monkeys, Capuchin Monkeys, Howler Monkeys, Wolf's Guenons, DeBrazza's Monkeys, and several species of Lorises), the program has now grown to include Cats and Carnivores, Polar Bears, and singly housed bird species (including Parrots, Cockatoos, Crows, Ravens, and Macaws). In addition to providing valuable cognitive stimulation to these species, the program has also provided quantifiable data on how the enrichment program has benefited the animals. For example, the polar bears had over 150 hours of baseline data collected before the program began providing enrichment for them. During this time stereotypical behaviors occupied more than 40% of their activity budget. The implementation of enrichment has dropped these undesirable behaviors down to less than 15% of their activity budget, while increasing investigative and play behaviors. A similar approach will took place this past summer with the seals and sea lions, with enrichment scheduled to start in the fall. Additionally, the program has led to full time employment with the zoo for four of the students that volunteered with the program.

**Tsimane Research Project, Bolivia**

Dr. Hillard Kaplan continued his research in Bolivia with a bridging grant to continue the Tsimane Research project. He also continued other grant funded projects such as The Human Life Course and the Biodemography of Aging (NIA), Grandparenting and the Evolution of Post-Menopausal Lifespan (NSF), Inflammation and Metabolic Risk and the Aging Process: Diet, Disease, and Development (NIA), Mellon Network on Collecting Biomarkers in Latin America (Mellon), and Alternative Field Methods for Collecting Biomarkers (Mellon).

**Orthodontic Web-Based Archive, United States**

Dr. Heather Edgar is Co-Principal Investigator on the National Institutes of Health Funded “Web-Based Library of Orthodontic Cases” along with Drs. Phillip Kroth, Assistant Director of Health Sciences Informatics Program Development and Edward Harris, University of Tennessee Health Sciences Center. The grant provides $413,000 to create an on-line archive of Orthodontic cases that demonstrate the range of ethnic and individual variation in tooth shapes and occlusion health professionals are likely to encounter.

**Biological Anthropology and Race**

Drs. Keith Hunley and Heather Edgar co-edited a special issue of the *American Journal of Physical Anthropology*. 

The Kibale Chimpanzee Project continued work on the "Ecology and endocrinology of chimpanzee aggression" (NSF, co-PI Muller).
ANTHROPOLOGY, July 1, 2008-June 30, 2009
Prepared by: Jennifer George, Department Administrator

National Fellowship Awards

- Louis Alvarado, National Science Foundation Research Graduate Fellowship, 2008-2011.
- Sarah Joyce, Fellowship from the Program in Interdisciplinary Biological & Biomedical Science (PIBBS), NIH and Howard Hughes Foundation funders.
- Catherine Mitchell, Fellowship from the Program in Interdisciplinary Biological & Biomedical Science (PIBBS), NIH and Howard Hughes Foundation funders.

PhD Alumni Professional Appointments:

- Klimentidis, Yann, PhD 2008, 2009-Postdoctoral Fellow, Department of Biostatistics, School of Public Health, University of Alabama, Birmingham, AL
- Benn-Torres, Jada, PhD 2006, 2008-Assistant Professor, Department of Anthropology, University of Notre Dame, Notre Dame, IN
- Hilton, Chris, PhD 1997, 2008-Assistant Professor, Department of Anthropology, Grinnell College, Grinnell, IA
- Lewis, Cecil., Jr., PhD 2004, 2008-Assistant Professor, Department of Anthropology, University of Oklahoma, Norman, OK
- Stieglitz, Jonathan, PhD 2009, Post-Doctoral Trainee, Tsimane Project, University of New Mexico, Albuquerque, NM
- Walker, Robert, PhD 2004, 2009-Assistant Professor, Department of Anthropology, University of Missouri, Columbia, MO
- Hsui-man Lin, PhD 2009-Researcher, Taiwan National Museum, Taipei, Republic of China

Department Committees

Graduate: The committee oversees all graduate student matters, including curriculum, scheduling, allocation of GA/TA/RAships and Department-wide scholarships and fellowships, outcomes assessment and nominations for various UNM scholarships and awards. The Coordinator of Graduate Program Advisement is also a committee member.

Undergraduate: The committee oversees all undergraduate matters, including curriculum, scheduling, 101, outcomes assessment and advising. The Coordinator of Undergraduate Education Support is also a committee member.

Instructional Resources: The committee meets annually in September and periodically as needed to coordinate and oversee all matters related to the instructional use of computers, media, renewable and permanent laboratory supplies, and field equipment. It maintains an inventory of current resources and reviews and makes recommendations on all equipment expenditures (laboratory, computer, field, etc.). In consultation with the Graduate and Undergraduate Committees, the Instructional Resources Committee
develops a comprehensive, visionary, long- and short-term plan for instructional programs. This plan helps inform Department grants, equipment requests, policy and future directions. The Department Administrator and the User Support Analyst II are also committee members.

**Space Committee:** Established by Chair Graves in Fall 2007 to assume responsibilities for “the allocation and use of space” from the Instructional Resources Committee, the Space Committee is chaired by a member of the Advisory Group and has representatives from each of the other subfields. The committee coordinates and oversees all matters related to the allocation and use of space. It makes recommendations on office and laboratory use and prepares proposals for minor and major capital improvements. The Department Administrator is also a committee member.

**Post-Tenure and Salary Review:** Three senior faculty members evaluate and rank each tenure-track faculty member’s calendar-year record of teaching, scholarly work and service for the Chair’s use in post-tenure reviews and salary decisions. The Department adopted a “Merit/Productivity Scoring System” in October 1994 and this has been modified at various times since. Post-tenure review was instituted in 1996-97. Before 2007 the Post Tenure Faculty Evaluation Committee was elected by the faculty. Membership now rotates with one person appointed and one dropped each year.

**Annual Review, Mid-Probationary Review, Tenure and/or Promotion Review:** These committees are appointed annually or periodically as appropriate.

**Non-Tenure-Track Faculty Review:** Three tenured faculty members conduct annual, academic-year reviews of each continuing non-tenure-track faculty member (Lecturer III, Research, Adjunct) for the Chair’s use. The Associate/Assistant Chair chairs the committee. This was a new committee in Spring 2008.

**Student Committees**

**Anthropology Graduate Student Union (AGSU):** AGSU represents the Department’s graduate students in the Department and on campus in order to promote their academic, professional and social interests. It meets monthly as needed. There is representation from AGSU at faculty meetings, on some faculty review and hiring committees, and in the University-wide Graduate and Professional Student Association (GPSA), an independent service organization established in 1969 to serve all part-time and full-time graduate students. The GPSA budget comes from student fees. It supports various campus organizations and through its Student Research Allocation Committee (SRAC) funds student research projects (thesis and dissertation) and travel to research-associate conferences.

**2009 AGSU Symposium**
The University of New Mexico’s Anthropology Graduate Student Union held its 13th annual Graduate Research Symposium February 27th-28th, 2009. The symposium was advertised across disciplines at UNM, and graduate students from American Studies,
Sociology, Biology, Psychology and Latin American Studies participated as well as students from all subfields of the Anthropology program. The symposium started Friday evening with the Folklore Award Talk, given by Miria Kano. Saturday morning began with the Frieda Butler Award Talk, presented by Sean Gantt. The symposium’s poster session followed. Four student paper sessions, with 15 presentations (a total of 60 altogether), were held in the afternoon, each with a brief discussion period following the talks. The symposium’s final event was the keynote speech, given by Dr. Steven Lansing, titled “Perfect Order: Recognizing Complexity in Bali”. Lansing is professor of anthropology at the University of Arizona, with a joint appointment in Ecology and Evolutionary Biology. He is also a Professor at the Santa Fe Institute, and director of Yayasan Somia Pretiwi, an Indonesian foundation promoting collaborative research on environmental problems in the tropics.

Undergraduate Anthropology Society (UAS): UAS is open to all students regardless of concentration. Students join by being added to the UAS e-mail list. Its purpose is to promote the study, appreciation and advancement of anthropology as the science that studies humankind in all of its aspects and to foster the use of anthropological knowledge in addressing human problems and conditions. UAS encourages a multidiscipline academic approach as well as involvement in the campus and surrounding communities.

Hibben Allocation Committee

Since 2004 the Frank C. Hibben Charitable Trust has donated $750,000 to UNM in support of Anthropology and Native American Students in the Department, the Museum and the College of Arts and Sciences. Another $140,000 will be donated in 2008-09. The Hibben Allocation Committee is chaired by the Museum Director with the Department Chair, the Dean (or designee), the Provost/Vice President for Academic Affairs (or designee) and the President (or designee) as members. The committee makes recommendations to the Trust each year on the following year’s funding level and distribution for graduate student support in Anthropology. Recipients are designated annually by the Hibben Selection Committee, the Graduate Committee and one representative from the Museum appointed by the Director. Michael Graves prepared an assessment of all of the Hibben awardees to date, summarizing the students' progress towards completion of the MA and PhD.

Joint Standing Committees

Board of Archaeologists: The Board of Archaeologists is made up of Archaeology subfield faculty, the director and associate director of the Office of Contract Archaeology, and the director and archaeological curators of the Maxwell Museum of Anthropology. Constituted by UNM President William E. Davis in 1979, the Board is authorized to represent the University in implementing and enforcing policy governing archaeological research on University lands in order to assure that University cultural resources are utilized in the most conservative and productive manner possible and to insure that information and data recovered from University cultural resources are preserved for future research. It is also charged to play a helpful role in furthering the quality of
anthropological research and to make recommendations concerning permission to conduct
archaeological research on University lands. The most prominent University-owned
archaeological properties include the Kuaua Site presently administered by New Mexico
State Monuments as the Coronado Monument, the Paa-ko Site (LA 162), and the Pottery
Mound Site (LA 416). Until recently the University also owned the 9550-acre Cañada de
Cochiti Grant, commonly known as the Jim Young Ranch tract, which contains over a
thousand prehistoric and historical archaeological sites.

Clark Field Archive & Library (CFAL) Policy Committee: In 2007 Clark Field Archive
& Library is housed in the Anthropology Building and jointly operated by the
Department, Maxwell Museum and the Maxwell Museum Association (MMA) with
oversight by the Policy Committee, which has representation from each of the three units.
Almost all of its collections of about 12,000 books and over 25 active journal titles have
been donated, with the exception of most of the journal subscriptions which are supported
by the MMA and proceeds from the annual book fair. CFAL houses a complete
collection of Department doctoral dissertations and masters’ theses, and an extensive
collection of reprints. About half of these collections are unique on the UNM campus;
the books and journals are catalogued on Libros, UNM’s computerized system. It also
serves as a repository for field notes and records that have been donated to the Museum
by faculty and associates. The main source of CFAL funding is the MMA’s annual
Albuquerque Antiquarian Book Fair, the oldest and largest such event in the state, usually
held during the first full weekend in April.

In 2008-09, workstudy employees completed the culling and cataloguing of the collection
of around 9,000 article reprints and photo copies in a database designed for CFAL. Most
of the archaeological “grey literature” (contract cultural resource management) reports
were donated to Zimmerman Library Center for Southwest Research.

Convocation

The 11th Annual Departmental Convocation took place on Saturday, May 16, 2009 in
Anthropology Lecture Hall 163 at 1:00 pm. Convocation was hosted by Dr. Michael
Graves, Chair. Our special guest speaker was Dr. Brian Hansen, Emeritus Professor of
Theater and Dance. Dr. Les Field presented the Bachelor of Arts and Bachelor of
Science degrees, while Dr. Suzanne Oakdale presented the Master of Arts, Master of
Science and Doctor of Philosophy degrees. She also presented the departmental awards.
We held a reception for graduates and their guests on the front lawn of the Department
following the convocation. Additional information regarding degrees and departmental
awards can be found under the Graduates and Student Fellowships and Awards sections
in this report.

Fundraising

Endowments

As was the case with most investments in 2008, the UNM Foundation reported reduced
endowments. Fortunately, the Foundation maintained its level of payout to the
endowment spending accounts for the year. A new fund, the Hansen Family Endowment was established in 2008 that will receive funding in the future from the estate of Brian Hansen in support of graduate human evolutionary studies at UNM.

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**Graduate Student Support Fund**
The Anthropology Graduate Support Fund was initiated during the Anthropology Department 75th Anniversary Celebrations in 2003. This endowment fund receives monies from unsolicited donations and those donations elicited from publishing the Department of Anthropology Newsletter which specifically targets our 1100+ alumni. The goal of the fund is to reach $100,000. The Department currently awards small grants to graduate students to visit field or other sites where their dissertation research will take place.

**Anthropology Centennial Fund and Department Newsletter**
The Centennial Fund (formerly 75th Anniversary Fund) was also begun during the 75th Anniversary celebrations. Its purpose is to fund the printing and distribution of the Department Newsletter. The Department of Anthropology Newsletter, a biannual production since 2005, is issued at commencement (May) and in late Fall (November). The Newsletter has grown from its original 8-page format dedicated to news of the Anthropology Department and Maxwell Museum, to a 12-page format that encompasses the Department (faculty and student awards, research, publications, travels), Maxwell Museum news, Alfonso Ortiz Center, Chaco Culture National Historical Park, fundraising for both graduate and undergraduate research, and special events. The Newsletter also includes feedback and news items from our alumni. The Editorial Board

**Student and Faculty Support**

Other UNM Foundation funds include those to support the activities of the Department (Anthropology Fund), undergraduate scholarships and awards (John C. Campbell Research and Alfonso Ortiz Indigenous Undergraduate funds), graduate fellowships (Frank C. Hibben Trust fund), and faculty research (Stone Age Research, TIDES, and Lamphere funds).

**Clark Field Archive**

The Clark Field Archive & Library (CFAL) is jointly operated by the UNM Department of Anthropology, the Maxwell Museum, and the Maxwell Museum Association (MMA). CFAL collections encompass about 12,000 books and monographs, and over 110 journal titles. It also houses a complete collection of PhD dissertations and master’s theses from the Anthropology Department, and an extensive collection of reprints. All these materials deal with anthropological subjects and serve the entire UNM anthropology community, including the Anthropology Department, Maxwell Museum and its Association, and the Office of Contract Archaeology. Many of the materials housed in the Clark Field Archive have been donated by Department of Anthropology faculty over the years.

Almost all of CFAL's materials have been donated, with the exception of a couple dozen journal subscriptions supported by the MMA and proceeds from the annual book fair. About half the CFAL's collections are unique on the UNM campus, and many are unique in the state. CFAL collections are cataloged on LIBROS, UNM's computerized system. The catalog may be accessed at almost any computer on campus and via the Internet. This year, data base cataloguing was completed on approximately 9,000 reprints.

The MMA's annual *Albuquerque Antiquarian Book Fair* is the main source of funding for the Clark Field Archive, and is the oldest and largest such event in the state. The book fair is usually scheduled during the first full weekend in April.

**Ortiz Center for Intercultural Studies**

Sylvia Rodriguez, Professor of Anthropology, joined the Ortiz Center as Director in 2008. Kathryn Klein who had been Interim Director for several years has stayed on as Associate Director of the Center. A number of programs, many involving faculty and staff from Anthropology and the Maxwell Museum were instituted in 2008-09.

**Ortiz-Central New Mexico Community College Emeritus Academy, Albuquerque**

A three-week Emeritus Academy on Acequia History, Governance and Water Rights held at the South Valley campus of CNM. The class was collaboratively taught by a unique combination of instructors, each with his/her own area of expertise: James Maestas, Community Organizer and President of the South Valley Regional Acequia Association, Sylvia Rodriguez, and Amy Ballard, CNM Professor and Chair of the Geographic
Technology Program. Twenty South Valley residents enrolled in the class. In early March the Ortiz Center and CNM co-sponsored a public lecture presented at the South Valley campus by Kenneth Orona, Ph.D., entitled “Muddy Water: Power, Contest and Identity in Central New Mexico, 1848-1963.” The lecture was about the history of the Middle Rio Grande Conservancy District, based on Dr. Orona’s forthcoming book by the same title.

Society for Applied Anthropology Workshop, Santa Fe
The OC sponsored a workshop at the annual conference of the Society for Applied Anthropology held in Santa Fe on March 18, entitled “Moving Off Campus: Cross-subfield Student Projects in Public Anthropology.” Community participants included James Maestas, President of the South Valley Regional Acequia Association; John Shipley, Executive Director of the Rio Grande Valley Farmers Guild; and Carlos Bustos of the New Mexico Rural Water Association. Student participants included Patrick Staib, the 2008-09 Ortiz Public Policy Fellow, Scott Worman, Heather Richards, Judith van der Elst, and Sam Markwell, who have been engaged in community outreach activities.

Faculty Symposia, University of New Mexico
On the UNM campus, the OC sponsored two lively faculty symposia that focused on research proposed by Anthropology professors Keith Hunley and Heather Edgar, entitled “The Social and Scientific Implications of Biological, Cultural, and Linguistic Variation in New Mexican Hispanics.” The first symposium brought together department colleagues from different subfields (Ann Ramenofsky, Archaeology; David Dinwoodie, Les Field, and Sylvia Rodríguez, Ethnology) to discuss the proposed project. Participants in the second symposium included the New Mexico State Historian (Estevan Rael-Galvez, Ph.D.), Director of the Northern NM Family Practice Residency Program, (Mario Pacheco, M.D.), and professors from the UNM School of Law and American Studies (Laura Gomez), Spanish and Portuguese (Enrique Lamadrid), and Anthropology departments (Rodríguez). Both seminars were also attended by graduate student Meghan Healy, whose dissertation research will be based on the project. Three additional guests sat in on the second symposium: Dr. Robert Valdez, Executive Director of the UNM Robert Wood Johnson Foundation Center, Dr. Jennifer Hartley of UNMH, and Sam Markwell, an undergraduate Honors student in Anthropology.

Community Radio Series in Public Anthropology, Taos and Santa Fe
In collaboration with Cultural Energy, the OC will produce a series of radio shows based on interviews with academic, community-based, and independent scholars about their research on topics of deep and abiding interest to New Mexicans. The series is entitled “People, Culture, and Place: Conversations from the Ortiz Center.”

The Mayordomo Project, Northern New Mexico
In partnership with the New Mexico Acequia Association, the OC is participating in a research project to document the local knowledge and traditional practices of the mayordomos in various acequia communities in northern New Mexico. This project represents a new component of the well-established Governance Project sponsored by the NMACC.
New Seminar in Public Anthropology, University of New Mexico

This experimental seminar/workshop was co-designed with students and pursues public anthropology through practice, discussion, analysis, readings, Freireian pedagogy, participatory action research, and community engagement. The class is open to beginning and advanced graduate students from all subfields as well as allied disciplines. Advanced graduate students not in need of credit hours are invited to participate out of their own motivation and interest, and for official status as a program consultant to the Ortiz Center for Intercultural Studies. Students taking the course for credit will grade each other and themselves. Senior students will mentor junior students. Everyone will work on a project, individually and/or as part of a team. Some topics or projects are available through ongoing Ortiz programs (work with community groups; community radio series; special topic symposia, etc.), while other problems and topics will be generated through discussion and according to interest. Guest speaker-participants will sit in on occasion. The class will meet on Friday afternoons three times a month, sometimes in a classroom and other times off campus at opportune venues. The instructor will assign initial readings but thereafter they will be chosen also by other class members. Each participant will be responsible for periodic oral reports and a final write-up (or media presentation) and assessment of a project. The class will be offered in both Fall and Spring semesters and may be taken consecutively or in either term. Credit enrollment cap 12 per semester. Credit audit permissible.

Zuni Day School Project, New Mexico

The Maxwell Museum houses a collection of children’s drawings, photographs, and writings that originated from the Zuni Day School dating from 1920s through the 1950s. The collection was put together by the former Principal and teacher Claire Gonzales and eventually was donated to the Maxwell after she past away in the 1970s. The writings and images reveal the continuity of Zuni everyday and ceremonial life from 1920s to present day, as well as offer a reflection on the dramatic changes in Zuni life. The drawings and writings by the students represent interesting perspectives of identity and history learned through Western perspectives and education practices.

The Zuni Day School collection is being examined by the staff members of the A:shiwi A:wan Museum and Heritage Center in Zuni. This collection is being scanned at the Maxwell Museum and put into digital formats that can be used within the Zuni community to collect descriptions, narratives, comments, identifications, and biographies. Another goal of the project is to share the digital images with students at the Zuni Public Schools and create a dialog among students about their elders’ experiences while they were school aged children. This project will provide the foundation for a community inspired collaborative exhibition curated by the Director of the A:shiwi A:wan Museum, Jim Enote to be shown at Zuni and in the Ortiz Gathering Space at the Maxwell Museum.

Elements of the Earth Exhibition: Potters form Ohkay Owingeh Past and Present

The Ortiz Center Passport to People Family Program includes a pottery demonstration and talk by Guest Curator and Artist, Clarence Cruz (Ohkay Owingeh.) Family activities include pottery-making, story-time, Passport activities, and refreshments. Theses events are free and open to all. Passport to People Family Program for Forged in Iron exhibition
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was in partnership with the Natural History Museum and the Celebra la Ciencia bilingual science family initiative. October 11, 2008 and March 7, 2009

Forged in Iron: The Expressive Art of the Roof Cross Tradition in Chiapas, Mexico
Based on the book Spirit of the Chiapas: the expressive Art of the Roof Cross Tradition, by Guest Curator Virginia Ann Guess, this rare exhibition features examples of hand-crafted iron crosses, tools used by the skilled ironworkers who create them, and contemporary photographs of the region where the tradition flourishes. The exhibit of more than 20 iron crosses—spanning a period of 100 years—seeks not only to showcase these incredible examples of folk art, but also explore the stylistic changes in the iron roof cross in Chiapas, Mexico. Ortiz Center Passport to People Family programs include iron forging demonstrations, “Starlab” a portable planetarium showing the Maya sky, story telling, music, hands-on activities for families, and refreshments. June 28, 2009 and October 10, 2009 1-3.

Weaving Generations Together: Evolving Creativity in the Maya of Chiapas Mexico
An exhibition co-curated by Kathryn Klein, Patrica Greenfield (author of publication), Amy Grochowski, Curator of Education, and Ruth Burgette-Jolie, Graduate Student Assistant in Ethnology. The exhibition planning includes built-in educational family activities to enhance visitor experience by learning about the process of learning and contemporary Maya family life in Chiapas, Mexico. Public Events for the Ortiz Center Passport to People Family Program include Maya visitors from Chiapas, weaving demonstrations, and Maya theater. Opening Spring 2010.

Diné and Puebloan Intertribal Representation Meeting
A meeting to discuss a proposed exhibition to be shown at the Diné College Museum that will represent Puebloan people and culture. The exhibition is in its preliminary development and the Ortiz Center has offered to host a meeting to address some of the issues regarding the representation of people through intertribal perspectives and some of the controversial issues that may be avoided through discussion and communication. Participants include museum staff from various Pueblos and State museums. On-going

Haak‘u – A Plan to Prepare: The Sky City Cultural Center and Museum Initiative
A collaborative project with the pueblo of Acoma to support the development of permanent exhibitions for the new facility. On-going

We Evolve: A Discussion about Education Methods for Teaching in Diverse Communities
A National Science Foundation proposal is being developed by Amy Grochowski, Curator of Education at the Maxwell Museum and project PI, and Heather Edgar, Curator of Osteology at the Maxwell Museum and project co-PI. The proposal is entitled “We Evolve,” and will fund replacing the existing “Ancestors” human evolution exhibition at the Maxwell Museum as well as creating traveling exhibitions, a website and associated educational content.

The purpose of the discussion is to solicit input and critique from colleagues in public education to audiences typical of Albuquerque and New Mexico. While the scientific
content of these exhibitions is being developed, they PIs are looking for assistance tailoring the delivery of this content to the unique needs of New Mexico audiences. The discussion will consist of one three-hour meeting, to be held in the Hibben Center or Student Union Building at UNM. Participants are asked to carefully review the project description and come prepared to engage in candid, constructive, collegial conversation about culturally responsive educational methods and theories. This initial meeting may serve to form an on-going advisory committee for this program.

**Mellon Foundation Fellowships**

*Building Future Leadership for the Advancement of Native American and Latino Humanistic Social Science at the University of New Mexico*

In 2008 UNM received a $700,000 grant from the Andrew Mellon Foundation to fund a cohort-based fellowship program focused on advanced doctoral students from underrepresented or disadvantaged groups who will be earning doctoral degrees in one of six social science or humanities departments at the University of New Mexico. The program's objectives are to increase the rate at which these students complete their doctorate and enter the workforce, particularly as college and university faculty. The program began awarding fellowship for 2008-09 and will continue for four years, until 2012. UNM has backed this program with matching funds that total nearly $300,000.

During the Spring of 2008, the Professors Lamphere and Graves (the project's PIs) worked to set up an Advisory Board. The initial meeting included the Chairs of the participating departments (Anthropology, American Studies, Communications and Journalism, History, Linguistics and Sociology) as well as the graduate advisors and interested Hispanic and Native American faculty from these fields. Miguel Gandert, Professor in the Department of Communications and Journalism, agreed to Chair the Advisory Board. Eventually, the Advisory Board evolved into a working group of at least one member from each of the participating departments, all having interest in ethnography, qualitative research, and the Hispano and Native American cultures of the Southwest. Board members are:

- Miguel Gandert- Chair, Professor, Communications and Journalism: Photographer and Oral Historian of Chicano and Mexican Culture and Ritual Performance
- Gabriel Melendez- Professor and Former Chair, American Studies: Southwest Studies, Ethnic and Cultural Representation in Film, Autobiography, Ethnopoetics, Ethnocritical Theory
- Michael Trujillo- Assistant Professor, American Studies and Chicano/Hispano/Mexicano Studies: Ethnographic Representation, Chicana/o Studies, Borderland Ethnography
- Beverly Singer- Associate Professor, Anthropology and Native American Studies: Native American Film and Video
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• Louise Lamphere- Distinguished Professor, Emeritus, Anthropology: Southwest, Gender, Women and Work, Urban Anthropology
• Nancy Lopez- Associate Professor and Graduate Advisor, Sociology: Race/Ethnicity, Education, Gender, Latino Studies.
• Maria Velez- Lecturer, Sociology: Criminology, Race/Ethnicity
• Melissa Axelrod- Professor, Linguistics: Native American Languages, Sociolinguistics
• Enrique La Madrid- Professor, Spanish and Portuguese, and Director, Chicano/Hispano/Mexicano Studies: Folklore, SW Cultural Studies
• Barbara Reyes- Assistant Professor, History: Chicano History, Southwest

The Advisory Board meets several times a semester, oversees the application process, selects Mellon Fellows, plans public events emphasizing research on Hispano and Native American communities (to bring together Fellows, Mentors, and interested students and faculty across campus), and discusses and evaluates (along with mentors) the progress of Mellon Fellows towards dissertation completion.

In Spring 2008, there were 24 applications and the Board awarded six fellowships: two one-year, three two-year and one three-year awards. In addition, there was enough funding (from University sources) to award tuition scholarships to six students also in the applicant pool who were working on dissertations topics relevant to the Mellon Program.

The Fellows during the 2008-9 academic year were:

• Teresa Cordova, Ph.D. Candidate, American Studies, 2 year Fellowship Dissertation Topic: Remapping Ourselves: Re-Visioning Chicana/o and Mexicana/o Memory in the 21st Century.
• Edward Jolie, Ph.D. Candidate, Anthropology, 2 year Fellowship Dissertation Topic: Learning Networks and Social Diversity in the Chaco System, AD 860-1140: An Analysis of Basketry Technological Style
• Chalane E. Lechuga, Ph.D. Candidate, Sociology, 1 year Fellowship Dissertation Topic: They’ll Expect More Bad Things from Us: Constructing Identity in a Racialized High School in New Mexico.
• Brian Luna Lucero, Ph.D. Candidate, History, 2 year Fellowship Dissertation Topic: Invention and Contention: Memory, Place, and Identity in the American Southwest 1821-1940
• Elvira Picardo, Ph.D. Candidate, Anthropology, 3 year Fellowship Dissertation Topic: Labor Market Participation and Its Effects on Family Type: Female-Headed/Female-Supported Households in Villa Altagracia, Dominican Republic: A Test of the Embodied Capital Theory.
• Damian Vergara Wilson, Ph.D. Candidate, Spanish Linguistics, 1 year Fellowship Dissertation Topic: From “Remaining” to “Becoming”: A Usage-based Account of quedar + adjective in 7 centuries.

The Doctoral Scholars were:
- Christopher B. Brown, Ph.D Candidate, Communication and Journalism 
Dissertation Topic: Articulation and (Re)production of White Masculinity: 
An Interrogation of Discursive Constructions of Race and Gender by 
White Male Elites.
- Eric Castillo, Ph.D. Candidate, American Studies Dissertation Topic: 
Seeing and Being Seen: Borderlands Visual Theory, Expressive Culture 
and the Formation of Chican/a/o Aesthetics.
- Margarita Ochoa, Ph.D. Candidate, History Dissertation Topic: Urban 
Indian Families: Power, Identity, and Community in Late Colonial, Early 
National Mexico City, 1692-1829.
- Andrea Mays, Ph.D. Candidate, American Studies Dissertation Topic: 
Black is Not Synonymous with American: Images of Domesticity in Post 
World War I Era Visual Culture
- Patrick W. Staib, Ph.D. Candidate, Anthropology Dissertation Topic: Can 
Coffee Aid the Countryside? Small Farmers and Export Production in 
Rural Nicaragua.
- Carmen Samora, Ph.D. Candidate, American Studies Dissertation Topic: 
Los Tres: The Origin Story of the Southwest Council of La Raza.
- Melina Vizcaino-Aleman, Ph.D. Candidate, American Studies 
Dissertation Topic: Fray Angelico Chavez and the Emergence of 

At the final 2009 Spring Semester meeting, the Advisory Board and Mentors evaluated 
the progress of the six fellows. The 3 two-year Fellows are making substantial progress 
towards completing their dissertations, and the one three-year Fellow had completed her 
field research in the Dominican Republic as planned and will be returning to UNM in the 
Fall to continue participating in the Mellon Program and begin writing her dissertation. 
Chalane Lechuga and Damien Vergara Wilson who received one-year awards will both 
defend their dissertations this coming Fall Semester and graduate in December 2009. 
Both are in the final stages of dissertation writing, and the Mellon Fellowships have had 
an important impact on their professional development.

Public Programs
We introduced the Mellon Fellows to the UNM community with a reception on 
September 29, 2008 that was held in the Student Union Building. UNM President David 
Schmidly welcomed the Fellows who were introduced along with the Scholars. Sylvia 
Rodriguez, Professor of Anthropology delivered a Keynote Address, “Hometown 
Ethnography and the Politics of Research.” Professor Rodriguez, who is a nationally- 
recognized anthropologist, is known for her two books on Taos: 
The Matachines Dance: Ritual, Symbolism and Interethnic Relations in the Upper Rio Grande Valley and 
Acequia: Water Sharing, Sanctity, and Place. Her talk was a compelling analysis on her 
own personal and intellectual journey to becoming an anthropologist and university 
teacher committed to engaged research with the local community in which she was raised 
(Taos, New Mexico). Professor Rodriguez serves as a role model for the Mellon Fellows 
and Scholars and as a reflexive critic who has thought through issues of ethnicity, race,
class and gender as they have impacted her own intellectual path and the shape of her research.

After the presentation by Professor Rodriguez, the Fellows and Scholars were introduced and each gave a short description of their research. A reception followed.

During the fall semester, we planned two noon-time events that featured faculty from the Mellon Advisory Board and emphasized both faculty research and issues important to an understanding of the Southwest. The first event, Tuesday, October 28, was hosted by Enrique Lamadrid, Director of Chicano/Hispano/Mexicano studies and Miguel Gandert, chair of the Mellon Advisory Board. Their presentation on “Multi-disciplinary Collaborative Research in Southwestern Hispano Studies” focused on their collaboration (using photography, oral history, ethnography and video documentation) in studying the interconnection between farming, family ties, community and ritual in the preservation of Hispano village culture. About 20 Fellows, scholars, and Advisory Board members attended as well as several interested graduate students.

In December, Nancy Lopez and Maria Velez, both members of the Advisory Board, hosted a noon-time discussion on “Racial Stratification in the US: From the Nineteenth Century to Now.” Two recent articles on were circulated: “We are all Americans: The Latin Americanization of Race Relations in the United States (By Eduardo Bonilla-Silva and Karen S. Gover) and “Off-White in an Age of White Supremacy: Mexican Elites and the Rights of Indians and Blacks in Nineteenth-Century New Mexico” (by UNM faculty member Laura Gomez). Professors Lopez and Velez gave brief presentations and a discussion followed. Mellon Fellow Chalane Lechuga organized the session and provided the publicity. About 30 students and faculty attended.

During Spring Semester, the major Mellon Fellows event was a symposium, held Wednesday, April 29 between 2 and 8 p.m. It featured a Keynote address by Esteban Real-Galvez, Ph.D., the New Mexico State Historian speaking on “Windows to the Past: History in a Digital Age.” Real-Galvez discussed ways in which new technologies (the use of the internet, web-sites, etc) are being used to deconstruct the way history is presented so that new voices can be heard. He provided examples from the New Mexico Office the State Historian Digital History Project.

Three Mellon Fellows also gave presentations on their research. Brian Lucero emphasized the process of dissertation writing and the importance of the Mellon Fellowship in freeing up his time in his talk, “The Day-by-Day Dissertation: The Mellon Fellowship and How Not to Blow it.” Charlene Lechuga summarized her research on “Racial and Ethnic Identities of Young Latinos in a New Mexico High School,” and Damian Wilson discussed his linguistic research on “Semantic Categories of Adjectives Used with the Spanish Expression of ‘Becoming’: Past and Presence.”

Fall 2009 Fellows
In the Spring 2009, there were 15 applications for six new fellowships. From these the Advisory Board selected the following:
• Eric Castillo, PhD Candidate, American Studies, 3 year fellowship  
  Dissertation Topic: The Work of Luis Jimenez  
• Stephanie Sanchez, PhD Candidate, Anthropology, 3 year fellowship  
  Dissertation Topic: Hispano cultural Retention and Maintenance in San Rafael, New Mexico  
• Claudia Anguiano, PhD Candidate, Communications and Journalism, 2 year fellowship Dissertation Topic: The Education of Students without Immigration Status.  
• Kent Blansett, PhD Candidate, History, 1 year fellowship Dissertation Topic: Biography of Richard Oakes, American Indigenous leader and activist  
• Jacobo Baca, PhD Candidate, History, 2 year fellowship Dissertation Topic: History of New Mexico Land Grants from the Eve of Statehood up to the Eve of the Alianza Movement of the 1960’s.  
• Rebeca Jasso Aguilar, PhD Candidate, Sociology, 2 year fellowship Dissertation Topic: A Comparative Study of Social Movements in 2000 in Cochabamba, Bolivia, against the Privatization of Waste and the Social movements that Emerged in Mexico in the Summer of 2006 against the Presidential Electoral Fraud.

Gabriel Melendez (Advisory Board Member) has agreed to meet regularly with the Fellows to work on writing issues, professionalization (giving papers, preparation for the job market, constructing a C.V.)

Thus far 12 Mellon fellowships have been awarded at UNM. Two fellows will complete their doctoral requirements for graduation in December 2009. We expect four more PhDs to be awarded to Mellon Fellows in 2010, bringing the total to six, out of the 12 awarded thus far. One of the fellows, graduating in December 2009, has already been placed into a Lecturer faculty position beginning in January 2010. The second PhD will be applying for professional positions this fall 2009.

**Departmental Colloquium Series**

November 13, 2008, Dr. Daniel J. Hoffman, Assistant Professor, University of Washington and School for Advanced Research. *The Crouching Village: Youth and the Organization of Violence in Sierra Leone and Liberia*  

December 4, 2008, Dr. Wenda Travatham, Regents Professor, Department of Anthropology, New Mexico State University. *Evolutionary Obstetrics: How Evolutionary Theory and Human Evolutionary History Inform Contemporary Childbirth*  

January 21, 2009, Dr. Norman Hammond, Department of Archaeology, Boston University. *Exploring La Milpa, a Classic Maya City in Belize.*

February 19, 2009, Dr. Timothy Pauketat, Professor, Department of Anthropology, University of Illinois and School for Advanced Research. *An Archaeology of the Moon: Bundles, Astronomy and Ancient Mississippian Religion*


April 2, 2009, Dr. David Groenfeldt, Executive Director, Santa Fe Watershed Association. *Can the Santa Fe River Be Saved through Culture Therapy?*

April 9, 2009, Dr. Samuel Bowles, Santa Fe Institute. *The Nature of Wealth and the Dynamics of Inequality in Pre-modern Societies*

May 14, 2009, Dr. Dean Falk, Department of Anthropology, Florida State University and School of Advanced Research. *From Piltdown Man to Hobbit: Of Missing Links and Paleopolitics.*
This period included the second year of Professor Michael Graves term as Chair of Anthropology. Regents Professor Marta Weigle served as Associate Chair in the year. Drs. Suzanne Oakdale and Les Field continued to serve as Graduate Director and Undergraduate Director, respectively. The Advisory Group included the Associate Chair, the conveners of the three subfields (Wills, Weigle, Lancaster), and the Graduate and Undergraduate Directors.

This year saw continued change in the Department of Anthropology. We welcomed new faculty member Frances Hayashida (Archaeology), and two senior faculty retired, Distinguished Professor Louise Lamphere (Ethnology) and Professor Carole Nagengast (Ethnology) We were able to convert the temporary Lecturer position for Dr. Ronda Brulotte to a fulltime tenure track Assistant Professor position in Ethnology. We completed the recruitment of a senior evolutionary anthropologist, Dr. Jeff Long from the University of Michigan who joined the Department in August 2009. The faculty identified their priorities for faculty recruitment in the future.

In an effort to place the funding for the Department of a firmer, more predictable basis, we now have a comprehensive budgeting process that includes state funds, extramural and intramural contract and grants, and UNM Foundation payouts. The annual budget for the Department in 2007-08, including all funds, was approximately $3.5 million. The Department received approximately $1.5 million in new extramural awards this year. The State Legislature also approved an addition to the recurring appropriation to support programming at the Ortiz Center. The Department also led a successful grant proposal to the Mellon Foundation to support senior graduate fellowships to students in 6 disciplines (including Anthropology) that will total nearly $1,000,000 (with UNM commitments) over four years.

As part of the recommendation of the External Reviewers, the Department prepared a Vision Statement for the future, including the areas of emphasis for each of the subfields. An Action Plan has also been prepared and submitted to the Dean of the College of Arts and Sciences that will guide development of the Department over the next 5-10 years.
APPOINTMENTS AND SEPARATIONS

APPOINTMENTS

Faculty

Ronda Brulotte, Assistant Professor
Frances Hayashida, Associate Professor

Staff

None

SEPARATIONS

Faculty

Louise Lamphere (retirement)
Carole Nagengast (retirement)

Staff

None
Faculty members in Anthropology published 138 papers, books, articles, abstracts, and reports or developed audio or visual materials in the year reported here. This is a high level of publication, with at least 3 major books represented along with journals such as the Proceedings of the National Academy of Sciences, Current Anthropology, Proceedings of the Royal Society, Journal of the Royal Anthropological Institute, Journal of Human Biology, Evolutionary Anthropology, Journal of Human Evolution, and Antiquity, among others.


119. Singer, B. (2009) "Season of Transformation: Decolonized Education at the University of New Mexico, 24 min. video production with students at UNM. http://www.unm.edu/~nasinfo/stories.html

120. Singer, B. (2008) “Diabetes and Science Education in American Indian and Alaska Native Schools” (DETS) Round Dance Curriculum Video, The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), the Centers for Disease Control and Prevention (CDC), Indian Health Service (IHS), Tribal Colleges and Universities (TCU), and the Tribal Leaders Diabetes Committee, August.


Graduate students in Anthropology also publish their research. In 2008-09, twenty-six different students authored (or co-authored) a total of 40 articles, book chapters, and one short film. Faculty members in Anthropology are co-authors with students on many of these papers. This is a sample of those publications developed from annual reports submitted in April 2009. Only academic publications are listed here.


Faculty (including those from the Maxwell Museum) and students in Anthropology held nearly 40 active grants during the year. Most awards come from governmental organizations such as the National Science Foundation, with additional grants from the, the National Park Service, and the National Institute of Health. Awards from Private organizations include: Wenner Gren Foundation for Anthropological Research, Leakey Foundation, Andrew P. Mellon Foundation, and the National Geographic Society. Twenty-two new grant awards were received by Anthropology faculty and students in 2008-2009.

Faculty grants (total $5,064,509):


7. **New.** UNM, Research Allocation Grant, “Tracking the Prehistoric Development of Agricultural Strategies in Tropical Island Environments: A Case Study from Kohala, Hawai‘i Island,” Dr. Michael Graves, $8,000.


16. New. Andrew Mellon Foundation, "Building Future Leadership for the Advancement of Native American and Latino Humanistic Social Science at the University of New Mexico," PI: Louise Lamphere, fund 2R28Z, 01/01/08 - 07/31/13, $700,000.

17. On-Going. University of Alabama-Birmingham, National Institute of Health, "Molecular Epidemiology and Natural History of SIVcpz," PI: Martin Muller, fund 2R11G, UA primary with NIH, UNM sub award, 09/01/07 - 08/30/08, $12,594.

18. On-Going. Teacher Allocation Committee Grant, "Development of Laboratory Materials for Biological Anthropology Courses" Dr. Sherry Nelson, $4,980.


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Prepared by: Jennifer George, Department Administrator

Graduate Student Awards: (total $110,335)


Total of grants for FY09: $5,174,844
The Department of Anthropology provides baccalaureate degrees in both arts and sciences, along with masters and doctoral degrees. In 2008-09, 118 students graduated in Anthropology. This includes 85 who earned baccalaureate degrees, 21 earned Masters, and 12 earned the doctorate. Over the past seven years more than 890 students have earned degrees in Anthropology at UNM.

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<td>2009</td>
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<td>TOTALS</td>
<td>646</td>
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<td>890</td>
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</tbody>
</table>

**Bachelor of Arts and Bachelor of Science**

**Summer/Fall 08**
Alicia L. Barnes (BA)
Danielle D. Briand (BA)
Benjamin M. Brooks (BA)
Amber L. Cannon (BA)
Marissa A. Chavez (BS)
Jennifer A. Delnick (BA)
Elizabeth A. Derby (BA)
Erin L. Gaddis (BS)
Kellie A. Gilbert (BS)
James B. Griesmeyer (BA)
Gary D. Hamelstrom (BA)

**Spring/Summer 09**
Jeffrey D. Aiken (BS)
Romeo C. Alonzo (BA)
Robert J. Anton (BS)
John D. Arnold (BS)
Rachel A. August (BS)

Bo S. Johnson (BA)
Morgan N. Kekich (BA)
Maochorei Kesolei (BA)
Erin K. McCormick (BA)
Clayton R. Meredith (BS)
Robert T. Puccetti (BS)
Anna L. Rautman (BS)
Domonick Sanchez (BA)
Dustin A. Tafoya (BA)
Daniel Thompson (BA)
George W. Woods (BA)

Jean-Margaret Hurt (BA)
Andrea K. Kartchner (BA)
Harry C. Konwin (BS)
Gary J. Lawson (BA)
Destin B. Lazier (BA)
ANTHROPOLOGY, July 1, 2008–June 30, 2009
Prepared by: Jennifer George, Department Administrator

Emily S. Berthold (BA)
Lee A. Biby (BA)
Wilda M. Bien (BA)
Alesha M. Bird (BA)
Katherine L. Boles (BA)
Amanda S. Carton (BA)
Mariana S. Civale (BA)
Joann B. Clark (BA)
Rebecca J. Clark (BA)
John C. Cole (BS)
Laura H. Creech (BA)
Courtney A. Custer (BA)
Elizabeth C. Davis (BS)
Brenden E. Dix (BS)
Ashley E. Dumbrill (BA)
Stacey Fedorovich (BA)
Richard C. Gardner (BA)
Vanessa M. Gatsch (BA)
Andrea R. Greenlee (BS)
Angelina L. Grey (BA)
Lauren E. Guilmette (BS)
Rebecca E. Gunn (BA)
Adriana Yazmin Gutierrez (BS)
Nena H. Hedrick (BA)
Jamie R. Hilyard (BA)
Airth R. Locke (BS)
Erin N. Manning (BS)
Elvira Martine (BA)
Stanton W. McCandish (BS)
Diana M. McMullen (BS)
David C. Odegard (BA)
Lori Otero (BS)
Christopher R. Pine (BS)
Nathaniel E. Price (BA)
Ashley N. Sanchez (BS)
Celeste Sarvis (BA)
Aneshia C. Savino (BA)
Lisa M. Sieben (BS)
David C. Smith (BS)
Brian J. Snyder (BS)
Nicole C. Stansifer (BA)
Cassandra A. Suarez (BS)
Casey M. Walsh (BA)
Daniela N. Weiner (BS)
Darlene M. Whitehead (BA)
Melanie R. Wilkes (BS)
Talitha D. Williams (BS)
Brittany N. Willis (BA)
Chad C. Wilson (BA)
Edward J. Worden (BA)

Bachelor of Arts and Bachelor of Science with Honors

Fall 08
Sarah Dixon (BS) Archaeology
Honors Paper: Evaluating Differential Archaeological Screening Methods at Pueblo Bonito, Chaco Canyon
Mentor: Wirt Wills

Spring 09
Danielle Greigo (BA) Archaeology
Honors Paper: Anglo-Saxon Burial Displays as Ethnic and Status Markers
Mentor: James Boone

Samuel Markwell (BA) Ethnology
Honors Paper: Cultural Politics of Water in the South Valley
Mentor: Sylvia Rodriguez
Master of Arts and Master of Science

Summer/Fall 08
Elizabeth A. Albright (MA)
Bonnie N. Young (MS)
Catherine P. Brandenburg (MA)
Adam M. Byrd (MA)
Matthew A. Devitt (MA)
Margaret A. Frey (MS)
Erin N. Hegberg (MA)
Barrett H. Martin (MA)
Carmen V. Mosely (MS)
Lara Nolder (MS)
Nicole J. Schneider (MS)

Spring 09
Sandra Arazi-Coambs (MA)
Jennifer Cardinal (MA)
Brandon Drake (MS)
Olga Gitinskii (MA)
Ethan K. Kalosky (MA)
Adam J. Nazaroff (MA)
Matthew-McCun Nelson (MA)
Adam Okun (MA)
Delisa L. Phillips (MS)
Anastasia M. Theodoropoulos (MA)

Doctor of Philosophy

Summer/Fall 08
Mary J. Ahlberg
Dissertation: The Social Life of Weaving in a Contemporary Navajo Community
Suzanne Oakdale (chair)

Gabriel A. Torres
Dissertation: Of Muslim Persuasion: The Politics of Convivencia in Ceuta, Spain
Carole Nagengast (chair)

Spring 09
Abigail Adams (with distinction)
Dissertation: A Choice Ideology and the Parameters of Its Practice: Abortion Narratives Access in New Mexico
Carole Nagengast (chair)

John Anderson
Dissertation: The Human Skull: Definition by Integrationist and Modular Models
Joseph Powell (chair)

Oskar Burger (with distinction)
Dissertation: *Ecological Constraints and Life History Tradeoffs among Human Foragers and Their Prey*
James Boone (chair)

Gil Greengross
Dissertation: *In Search of Homo Humorous: Personality, Health, Humor Styles, and Humor as Mental Fitness Indicator in Stand-up Comedians and the Rest of Us*
James Boone and Kim Hill (co-chairs)

Kiara M. Hughes
Dissertation: *The Women Potters of Mata Ortiz*
Louise Lamphere (chair)

Sara R. Jamieson (with distinction)
Dissertation: *Female Initiation Rituals Among Urgan Wayuu within Hugo Chavez’s Multicultural Venezuelan Republic*
Suzanne Oakdale (chair)

Nicole C. Kellett (with distinction)
Dissertation: *Empowering Women: Microfinance, Development, and Relations of Inequality in the South Central Peruvian Highlands*
Carole Nagengast (chair)

Hsui-man Lin
Dissertation: *The Biological Evidence of the San-Pau-Chu People and their Affinities*
Osbjorn Pearson and Anne Stone (co-chairs)

John D. Rissetto
Dissertation: *Late Pleistocene Hunter-Gatherer Mobility Patterns and Lithic Exploitation in Western Cantabria (Spain)*
Lawrence Straus (chair)

William Wagner
Dissertation: *Aquí No Paso Nada: Terror, Remembrance, and Healing in a Guatemalan Green Zone*
Carole Nagengast (chair)
Undergraduate Student Awards, 2008-2009

Krisztina Kosse Memorial Scholarship
The Krisztina Kosse Memorial Scholarship is awarded annually by the Maxwell Museum of Anthropology to honor the memory of Dr. Krisztina Kosse, an archaeological scholar of the European Iron Age and for many years the Curator of Collections at the museum until her death in 1995. The scholarship is a cash award of $200 given to an outstanding senior concentrating in archaeology, preferably with a special interest in or focus on Old World complex societies.
Recipient in 2008-2009: Patricia Merewether

Barbara MacCaulley Endowment Scholarship
The Barbara MacCaulley Endowment Scholarship is awarded annually by the Department of Anthropology to honor the memory of Barbara MacCaulley, who graduated from the university in 1951 and then pursued a career in the Foreign Service until her death in 1984. The scholarship is a variable cash award between $400 and $500 given to an outstanding undergraduate with a concentration in archaeology who is a full-time student entering their senior year with high motivation to pursue a career in archaeology.
Recipients in 2008-2009: Claire Ebert and Jana Morehouse

John Campbell Undergraduate Research Scholarship
Dr. John Martin Campbell, former Chair of the Department of Anthropology, has established a research scholarship for undergraduates. The funding is designated to support research costs for students, including travel support for students who are attending and participating in professional meetings.
Recipients in 2008-2009: Claire Ebert and Patricia Merewether

Ortiz Undergraduate Indigenous Scholarships
The Indigenous Scholarships are $1500 awards to undergraduate students who are members of officially recognized indigenous groups, including Native Americans and Pacific Islanders.
Graduate Student Awards, 2008-2009

Frieda D. Butler Award
The Frieda D. Butler Award is given annually by the department of Anthropology to honor the memory of Mrs. Butler, who established an endowment in 1975, when her grandson, Dr. Richard A. Barrett, was a member of the department faculty. In 1981 Butler’s daughter Margaret A. Barrett requested that a portion of the fund’s income be used for “a small award to a promising graduate student in anthropology.” The Butler Award of $400-$450 is given to an outstanding master’s student who has not yet taken the doctoral specials examination. The recipient delivers a public lecture during the Fall semester.
Recipient in 2008-2009: Sean Gantt
Lecture: Unequal Trade: How Choctaw Land Became a Commodity

Karl H. Schwerin Graduate Fellowship in Ethnology
The Karl H. Schwerin Graduate Fellowship in Ethnology is awarded annually by the Department of Anthropology. Professor Schwerin of the department faculty endowed the fellowship, which was first awarded in 1999, for an ethnology graduate student who has not yet begun dissertation research and has not received other support. The recipient of $500 is selected on the basis of scholastic ability, research potential, and financial need.
Recipient in 2008-2009: Miria Kano

Frank J. Broilo, Harry W. and Margaret Basehart Memorial Endowment Scholarship
The Frank J. Broilo, Harry W. and Margaret Basehart Memorial Endowment Scholarship is awarded annually by the Department of Anthropology to honor the memory of Frank J. Broilo, the first director of UNM’s Office of Contract Archaeology until his death in 1979; Professor Harry W. Basehart, professor emeritus of anthropology until his death in 1988 and editor of the Department’s Journal of Anthropological Research from 1962 to 1974 and 1981 to 1982; and his wife Margaret Basehart, who died in 1992. The scholarship is a cash award of $500 given to deserving graduate students who are pursuing a course of study in archaeology and ethnology. The scholarship alternates annually between archaeology and ethnology graduate students, and this academic year has been awarded to four archaeologists.

James and Helen McCaig Spuhler Graduate Fellowship
James N. Spuhler, who died in 1992 at the age of 75, is considered by many in the field to be the founder of anthropological genetics. Spuhler was the first physical anthropologist to be rigorously trained in human genetics, and he was the one who inspired the consistent introduction of a full understanding of modern genetic analysis into anthropological teaching and research. His wife, Helen McCaig Spuhler, endowed the Spuhler Graduate Fellowship in Biological Anthropology through her will. This award is given annually to an outstanding graduate student in Biological Anthropology.
Recipients in 2008-2009: Jennifer Cabotage and Amanda Veile
Ruth E. Kennedy Award
The Ruth E. Kennedy Award is given annually by the Maxwell Museum of Anthropology to honor the memory of Ruth E. Kennedy, wife of Edwin L. Kennedy, a major donor to the museum. Initiated in 1981, the award recognizes Mrs. Kennedy’s abiding interest in public education. The Kennedy Award of $100 is given to an outstanding doctoral candidate chosen by the department faculty. The recipient delivers a public lecture during the Spring semester.
Recipient in 2008-2009: Scott Worman
Lecture: People, a Plague on the Planet? Exploring the Causes of Ecological Degradation in Islamic Portugal

New Mexico Folklore Scholar in Anthropology Award
The New Mexico Folklore Scholar in Anthropology Award is given annually by the Department of Anthropology to a graduate student involved in investigative research and writing in the area of New Mexico Folklore. The New Mexico Folklore Society, founded by UNM faculty members in 1931, established the New Mexico Folklore Scholars Endowment in order to make annual awards for a New Mexico Folklore scholar in Anthropology and a New Mexico Folklore scholar in English. The recipient of the $1,000 award delivers a public lecture during the spring semester.
Recipient in 2008-2009: Miria Kano
Lecture: We’re tzitzit...on the edge (but) still part of the fabric: Perceptions of Identity and Community in the Narrative Accounts of New Mexico’s Female Rabbis

Karl Schwerin Graduate Fellowship in Ethnology
Established in 1996, this fellowship provides $600 scholarship support to graduate students studying ethnology, cultural anthropology or social anthropology in the Department of Anthropology. The fellowship is awarded to students who have received no other support, and primary consideration is based on scholastic ability and research potential.
Recipient in 2008-2009: Miria Kano

Ortiz Public Policy Fellowship
The Alfonso Ortiz Center for Intercultural Studies awarded the first Louise Lamphere Public Policy Grant in 2006-2007. Eligible candidates for this award must be in the Ethnology Program and at the stage of writing up the dissertation, and should be conducting research that is both collaborative and relevant to a policy issues. Ideally, they will also be resident in Albuquerque. Possible policy areas include, but are not limited to health care, immigration, education, labor or workplaces issues, human rights, and the environment. The grant carries a stipend of $10,000.
Recipient in 2008-2009: Patrick Staib

The Frank Hibben Charitable Trust Fellowships
Frank Hibben first came to New Mexico in the mid-1930s on an expedition to collect small mammals and birds for the Cleveland Museum of Natural History. A 1933 Princeton University archaeology graduate, Hibben was so fascinated by the Native American cliff dwellings that he decided to attend graduate school at the University of
New Mexico and make New Mexico his home. Dr. Hibben received a master's degree in zoology with field studies of the mountain lion from the University of New Mexico in 1936. He continued his education at Harvard, receiving his PhD in archaeology in just one year, and then returned to New Mexico to begin his teaching career at UNM. In 2002, construction was completed on the Hibben Center for Archaeological Research. The Center is the home of the Hibben Trust, a $10 million endowment which furnishes annual grants to students working in the field of archaeological research.

2008-2009 Hibben Scholarships
Richard Begay, Jennifer Cabotage, and Erin Fitzgerald
1st year students: Maria Hrochich
2nd year students: Adam Okun and Adam Nazaroff

2008-2009 Hibben Junior Awards
1st year students: Valorie Aquino
2nd year students: Herman Leo Gutierrez and Valorie Aquino

2008-2009 Hibben Senior Dissertation Award
Phil Geib and Hannah Matson

2008-2009 Hibben Research Award
Dorothy Larson and Lavinia Nicolea

Graduate Dean’s Dissertation Fellowship
Provided through the Office of Graduate Studies, this $8000 award is intended to provide support to students completing their doctoral dissertations.
Recipient 2008-2009: Nicole Kellett

Field Site Development Grants
Provides financial support for graduate field work. An award of $2000 is disbursed among successful candidates.
Recipients in 2008-2009: Jara Carrington, Bonnie Young, Kelly Monteleon, and Jennifer Cardinal

Arts and Sciences Special Recruitment Award
An award of $5000 is provided to students to recruit and retain them during their doctoral coursework.
Recipients in 2008-2009: Richard Begay and Jennifer Cabotage

Higher Education Development (HED) Graduate Fellowship
The Graduate Scholarship Program was created to increase graduate enrollment at public post secondary institutions, particularly among those students who are minorities and women. The maximum award amount is $7,200 per year. This award may be renewed annually based on academic standing. Recipient must serve 10 hours per week in an
unpaid internship or assistantship. Recipient must also be provided with 10 hours per week of paid internship or assistantship, including tuition waiver and health insurance. These scholarships are intended for full-time students from groups traditionally underrepresented in their field who have financial need. Recipients in 2008-2009: Lavinia Nicolea, Kelly Sawyer, Luis Alvarado

**Graduate Student Travel Awards**
The Department provides travel funding on a competitive basis to graduate students who will attend and present at professional meetings. Awards are generally $300 each. Recipients in 2008-2009: Emira Ibrahimpasic, Cheryl Fogle, Jonathan Stieglitz, Jason King, Heather Richards, Kari Schlefer, John Rissetto, Amanda Veile, Shirley Heying, and Wesley Allen-Arave

**Interdepartmental Teaching Assistantships**
Anne Santos (Spanish), Erin Tooher (English) and Gil Greengross (Math)

**LAII Fellowship**
Kristen Adler and Shirley Heying

**Robert Wood Johnson Fellowship**
Sean Bruna and Andrea Lopez

**Arts and Sciences Regents Award**
Jara Carrington

**Mellon Foundation Fellowships**
Ed Jolie, Elvira Pichardo, and Patrick Staib (tuition only)

**3% Scholars Award**
Erin Hegberg, Sean Gantt, Helen Davis, Jennifer Cardinal

**Dave Stuart Public Anthropology Scholarship**
Matt Barbour

*Student Contract and Grant Awards are listed in Contract and Grant Section of this Report*
Anthropology Faculty Activities, Service, and Honors

Faculty members in Anthropology contribute to and participate in a number of professional activities at all levels: departmental, university, state, national, and international. A sampling of these activities is listed below:

**Brulotte, Ronda**

- Presentation: Chapulines, Gusanitos, and Cuitlacoche: The Politics of Extreme Eating in Mexico, Society for Applied Anthropology and Society for Latin American and Caribbean Anthropology, Santa Fe, NM.
- National Endowment for the Humanities, Humanities Institute Initiative planning committee, University of New Mexico.
- Chair, Instructional Resources Committee, Department of Anthropology, University of New Mexico.
- Co-Organizer, Anthropology Colloquia Series Committee, Department of Anthropology, University of New Mexico.
- Proposal Reviewer, National Science Foundation.
- Faculty Research Grant, Latin and Iberian Institute, University of New Mexico ($2000).

**Crown, Patricia**

- Promotion to Distinguished Professor, July 2008
- Outside reviewer for tenure/promotion 2008: McMaster University, Ontario, Canada; University of Colorado; University of Arizona
- Society for American Archaeology, Elected Board Member, Board of Directors (2009-2012)
- Society for American Archaeology, Chair, Committee on Award for Excellence in Archaeological Analysis (2008-2009)
- National Endowment for the Humanities, Panelist, Archaeology (2009)
- Review committee for American Philosophical Society Sabbatical Fellowships (2008)
- Invited lecture: University of New Mexico Department of Women's Studies (2008)
- Invited Lecture: University of New Mexico Foundation Lecture Series at Las Campanas (2009)
ANTHROPOLOGY, July 1, 2008-June 30, 2009
Prepared by: Jennifer George, Department Administrator

- Invited Lecture: Southwest Seminars Series (Santa Fe non-profit) (2009)
- Invited Lecture: Aztec National Monument (2009)
- Committee Member, Office of the Provost, Distinguished Professor Promotion Committee (2009)
- Presenter on Anthropology, Albuquerque Academy Career Day (2009)
- Coach, Science Olympiad Middle School Team at Albuquerque Academy (2009)

Dinwoodie, David
- Michigan State University, tenure review as requested by Robert K. Hitchcock, 5/15/08
- Reviewer: *Journal of Linguistic Anthropology*, *Journal of Anthropological Research*

Dixon, E. James
- Reviewer: *Journal of Arctic and Alpine Research*, *American Antiquity*
- Member, Board of Directors, Lamb Spring Archaeological Preserve, Douglas Co., CO.
- Proposal Reviewer: National Science Foundation.
- Joint Standing Committee: Board of Archaeologists
- Mid-Probationary Review Committee: Dr. Heather J. H. Edgar
- Mid-Probationary Review Committee: Dr. Keith M. Prufer
- Member Clark Field Library and Archive Committee
- Member, Board of Directors, Maxwell Museum Association.
- Member, Strategic Planning Committee, Maxwell Museum Association
- Member, Executive Committee, Maxwell Museum Association
- Chair, Presidents Museum Collections Management Committee, *UNM Museums and Collections Policy, October 10, 2008* a special report prepared at the request of UNM President David Schmidley to address UNM Internal Audit: *Assessment of Art Collection Management Report 2007-34.*
- Chair, Board of Directors, Ortiz Center
- Chair, Museum Studies Working Group. Curriculum Development for a graduate degree and graduate and undergraduate certificate program in Museum Studies. *Executive Summary: Proposal for a Master of Arts and Master of Science program in Museum Studies.* 2008.
ANTHROPOLOGY, July 1, 2008-June 30, 2009
Prepared by: Jennifer George, Department Administrator

- Alaska Public Radio Interview: re “Gateway to the Americas, the search for Ice Age underwater archeological sites”. June 2009
- Graduate Student Advisor: Ms. Kelley Monteleone, Anthropology; Mr. Michael Grooms, Anthropology; Mr. Nicolas Jarman, Anthropology
- Graduate (Ph.D.) Committee Member for Ms. Cheryl Fogel, Anthropology.

**Edgar, Heather**

- **Award** National Institutes of Health, National Center for Minority Health and Health Disparities Loan Repayment Program Recipient, 2008-2010.
- Research Travel Funding, University of Tennessee Forensic Anthropology Center, “The use of dental morphology in forensic estimation of ancestry.” 2009, $2,000.
- Supplemental funding for travel, National Library of Medicine, 2008, $2,000
- Invited Lecture: “Forensic...Or not?!?” Presented as in-service education to staff of the Office of the Medical Investigator, New Mexico, 2009.
- Mercyhurst Archaeological Institute #MC08-109, PA, 2009, case consultation/Albuquerque West Mesa serial murder investigation, NM, 2009, excavation/media contact
- Dental Anthropology Association Executive Officer 2009-2012
ANTHROPOLOGY, July 1, 2008-June 30, 2009
Prepared by: Jennifer George, Department Administrator

• Study Group: Robert Wood Johnson Center for Health Policy Institute for the Study of “Race” and Social Justice

Emery Thompson, Melissa
• Member, Department of Anthropology Colloquium Committee
• Member, Scientific advisory committee to Maxwell Museum of Anthropology proposed human evolution exhibit
• Co-Director: Hominoid Reproductive Ecology Laboratory, University of New Mexico
• Recipient: American Association of Physical Anthropologists Professional Development Award/Grant
• Conference paper: MN Muller, M Emery Thompson, SM Kahlenberg, RW Wrangham. “Male coercion and female choice in wild chimpanzees,” American Association of Physical Anthropologists 78th annual meeting, April 1-4, 2009, Chicago, IL.
• Proposal Reviewer: Graduate Women in Science Fellowships
• Proposal Reviewer: National Science Foundation
• Proposal Reviewer: L.S.B. Leakey Foundation grants
• Web development, Kibale Chimpanzee Project (http://www.fas.harvard.edu/~kibale)
• Web development, Gunung Palung Orangutan Project (http://www.fas.harvard.edu/~gporang)
• Web development, Yayasan Palung: Gunung Palung Orangutan Conservation Project (http://www.saveGPorangutans.org)

Feld, Steven
• Art/Musical Performance in USA, Ghana, Italy
• Video Screenings in USA, Ghana, Norway
• Invited lectures, workshops, and professional presentations in USA at: UC Berkeley (Anthropology), Columbia University (Music), Stanford University (Music), University of Oregon (Music and Anthropology); in Europe/Asia at
University of Oslo (Music), University of Copenhagen (Music), STUK Arts Centre (Belgium), University of Hong Kong (Music),

- Honk Horn Music and the Sounds of Modernity in Accra, Distinguished Lecture, University of Alberta Centenary, Edmonton, Canada.
- Sound Recording and Cultural Advocacy in a New Guinea Rainforest, Thirty Three Years On, Distinguished Centenary Lecture, Canadian Centre for Ethnomusicology and Dept. of Anthropology, University of Alberta, Canada.
- Jazz Cosmopolitanism in Accra: The Bloch Lectures in Music, Department of Music, University of California, Berkeley, March-May, six lectures, to be published by University of California Press.
- Six months research in Accra, Ghana conducting research on Jazz and Cosmopolitanism
- Work toward completion of Bosavi Digital Archive (a digital archive of photographs, films, audio, and texts from 40 years research in Bosavi, Papua New Guinea, in collaboration with E.L. Schieffelin (University College, London) and B.B. Schieffelin (NYU); funded by the Tides Foundation.
- Ernest Bloch Visiting Professor of Music, University of California, Berkeley (1 semester)
- Robert Trotter Distinguished Visiting Professor of Music, University of Oregon (1 week)
- Visiting Distinguished Professor, Department of Music, University of Hong Kong and Artist in Residence Hong Kong Soundscape Project (1 week)
- Professor II, Institute of Musicology, University of Oslo, Norway, (20% term appointment for 2007-2012)

Field, Les

- Snead-Wertheim Endowed Lectureship in Anthropology and History (Public presentation April 2009)
- Fulbright Research/Lecturing Fellowship 2008-2009
- Presentation: “Like Looking Through a Glass Onion: Learning Anthropology with Carol Smith,” Annual Meetings of the American Anthropological Association (San Francisco, CA) 2008
- Chair, Undergraduate Committee, Department of Anthropology 2008-present
- President, Executive Committee, Latin American and Iberian Institute 2008-2009
- Reviewer: Journal of Anthropological Research, Collaborative Anthropologies

Graves, Michael

- Chair, Department of Anthropology
- Member, Chairs Council, College of Arts and Sciences
• Member, Allocations Committee, Frank Hibben Trust
• Chair, Advisory Group, Department of Anthropology
• Member, Editorial Board, Anthropology Newsletter
• Member, Ad Hoc Committee on Faculty Diversity, College of Arts and Sciences
• External Assessor, Review of Application for Promotion to Full Professor by Mohd Mokhtar Saidin, Centre for Archaeological Research, Universiti Sains Malaysia, Penang, Malaysia.
• Outside Reviewer, B. A. Davies MA thesis, Department of Anthropology, University of Auckland, Auckland, New Zealand
• Reviewer, Thomas F. and Kate Miller Jeffress Memorial Trust, Commonwealth of Virginia
• Research Associate, Department of Anthropology, Bernice P. Bishop Museum, Honolulu, HI, 1990-2009.
• Editorial Board, Asian Perspectives, University of Hawaii Press, Honolulu, HI, 2000-2009
• Department of Education, State of Hawai‘i—Consultant for 6th grade 10 part series on the Geography, History, and Archaeology of the Pacific, as seen through Pohnpei Island in Micronesia for 7th grade public schools in Hawai‘i. Air date: October 2008
• Department of Education, State of Hawai‘i—Consultant and Host for 10 part series on the Archaeology of Hawaii and Polynesia for 7th grade public schools in Hawai‘i with 10 minute segments featuring faculty and students from the University of Hawai‘i at Mānoa. Air date: October 2008

Hayashida, Frances
• Presentation: The Proyecto Ynalche: late prehispanic political economy on the north coast of Peru. Paper presented at the 73rd Annual Meeting of the Society for American Archaeology, Atlanta, Georgia.
• Director, Ynalche Archaeological Project, Peru
• Fieldwork and analysis in Peru
• Proposal reviewer: National Science Foundation
• Member, Committee on the Americas, Society for American Archaeology, 2005 – present
• Doctoral committee for one student at the University of Missouri, one student at Arizona State University, and four students at Southern Illinois University
• Supervised a total of 14 American and Peruvian students in the field during the 2008 and 2009 seasons.

Huckell, Bruce
• Member, Departmental newsletter committee
• Member of the University of New Mexico Press Committee
• Secretary for Phi Beta Kappa, Alpha of New Mexico chapter
• Presentation: To the Torrance County Archaeological Society (Impacts? Clovis and Folsom Archaeology of the Southwestern United States)
• Presentation: Ancestors Lecture for the Maxwell Museum of Anthropology (Coping with Change and Uncertainty at the End of the Pleistocene: A Clovis Cache in North Dakota)
• Presentation: To the Albuquerque Archaeological Society (Early Paleoindians in the Middle Rio Grande Valley)

Hunley, Keith
• Sarah Joyce, 2nd year graduate student received a PIBBS fellowship
• PIBBS Advisory counsel
• Undergraduate committee
• Human Biology Association. Local coordinator for annual meetings in Albuquerque, NM
• Maxwell Museums Publication Committee, Department of Anthropology, UNM
• Maxwell Museum Human Evolution Exhibit Committee
• Presentation: “Darwin Day Symposium: There are no races, there are only nested hierarchies.” University of New Mexico
• Presentation: “Population Genetic Structure and Admixture in New Mexican Hispanics.” Division of Epidemiology and Biostatistics, University of New Mexico.

Kaplan, Hillard
• On-going research on health and aging with Tsimane Horticulturalists funded by National Institute on Aging and National Science Foundation
• Editorial Board: Human Nature, Biodemography and Social Biology, Advances in Life Course Research

Lancaster, Jane
• Convener, Human Evolutionary Ecology
• Chair, Annual Review Committee for Keith Hunley
• Member, Departmental Annual Salary Committee
• Member, Departmental Chair's Advisory Group
• Member, Post-Tenure Review Committee
• Associated Faculty, PIBBS (Program in Interdisciplinary Biological and Biomedical Science), UNM.
• Mentor, Sherry Nelson, Assistant Professor of Anthropology
• Mentor, Melinda Benson, Assistant Professor of Geography, STEM (UNM Faculty Mentoring Program)
• Scientific Editor, Human Nature, a quarterly journal published by Springer Science.
• Member, Publications Committee, Human Behavior and Evolution Society
• Member, Lifetime Career Contribution Awards Committee for HBES Annual meetings, 2009
• Review for Early Promotion to Full Professor, Richard Bribiescas, Yale University, 2009
• Review for Promotion to Associate Professor, Peter Gray, University of Las Vegas, 2009
• National Science Foundation Dissertation Improvement Grant, 2009, $15,000 Feeding Ecology and Life History Strategies of White-faced Capuchin Monkeys, Jane B. Lancaster and Elizabeth Eadie
• Secretary, National Alliance on Mental Illness, Albuquerque NM Chapter, 2008-present
• Faculty Sponsor, Primate Enrichment Program, Rio Grande Zoo, Albuquerque 2002-present

Muller, Martin
• Presentation: University of New Mexico. Program in Interdisciplinary Biological and Biomedical Sciences. Symposium on the Legacy of Charles Darwin. (February 2009) “Chimpanzees as models for the last common ancestor of apes and humans”
• Reviewer: Animal Behaviour, American Journal of Primatology, Advances in the Study of Behavior, Evolutionary Anthropology, Human Nature, Current Biology, PNAS
• Proposal Reviewer: US National Science Foundation, L.S.B. Leakey Foundation
• Anthropology graduate student committee
• Ethnology hire, search committee
• Maxwell Museum: Ancestors Exhibit (consultant)

Nelson, Sherry
• Presentation: “Sivapithecus: Reconstructing the life of a Miocene ape.” Summer Science Program, Socorro, New Mexico.
Oakdale, Suzanne


• Co-chaired dissertation committee: “Superar no Movimento: Etnografia de Performances de Pirrâias em Recife e mais Além,” Rita de Cácia Oenning da Silva (Department of Anthropology, Universidade Federal de Santa Catarina, Brazil), Ph.D. 2008.


• Advised undergraduate Honors Paper: “The Carguero as Public Spectacle,” Alex Woody.

• Reviewer: Current Anthropology, American Ethnologist, Tipiti: Journal of the Society for the Anthropology of Lowland South America

• Reviewed book manuscripts for the University of Nebraska Press

• Member of a four-person group functioning as the book review editor for the Journal of Anthropological Research

• Member of Advisory Board for Tipiti: Journal of the Society for the Anthropology of Lowland South America

• Member of the ICLAS Committee at the Latin American and Iberian Institute, UNM

• Member of Committee to Review Non-Tenure Track Faculty, Department of Anthropology

• Graduate Director and Graduate Advisor in Ethnology, Department of Anthropology

• Member of the Anthropology Department Advisor Group

• Member of the Committee to select the Snead-Wertheim Lecture Recipient

Pearson, Oshjorn

• International Referee, Journal of Anthropological Sciences (Rivista di Antropologia)

• Assistant Editor, Journal of Human Evolution.

• Editorial Associate, Human Nature.


- Proposal Reviewer: Leakey Foundation, National Science Foundation

Prufer, Keith

- UNM Public MA in Archaeology Committee
- UNM Press Committee
- UNM Anthropology Instructional Resources Committee
- UNM Anthropology Colloquia Committee
- Presentation: Modeling Complex Human Behavioral Responses to Climate Change in the Eastern Periphery of the Maya Lowlands. Keith Prufer, Brendan Culleton, Bruce Winterhalder, Jaime Awe and Douglas Kennett (74th annual meeting of the Society for American Archaeology, Atlanta GA), 2009
- Presentation: Examining the Validity of PXRF for Obsidian Sourcing in the Maya Lowlands. Adam Nazaroff, B. Lee Drake, and Keith Prufer. (74th annual meeting of the Society for American Archaeology, Atlanta GA), 2009
- Discussant: What is New in Mesoamerican Cave Archaeology: The Implications of New Field Discoveries for Method and Theory, Part II. (74th annual meeting of the Society for American Archaeology, Atlanta GA), 2009

Ramenofsky, Ann

• Reviewer: American Antiquity
• National Science Foundation proposal Review
• Chair, Snead-Wertheim Selection Committee
• Program Revisions, Public Archaeology Undergraduate Committee, Archaeology
• Annual Reviews: Frances Hayashida and Keith Hunley

Rodriguez, Sylvia
• 2009 Richard W. Etulain Lectureship in History, UNM Center for the Southwest.
• Presentation: Pueblo Matachines, Indian Pueblo Cultural Center, July 7, 2008.
• Presentation: Water Issues in New Mexico, UNM Peace Studies Fair, September 17, 2008.
• Presentation: The Politics of Culture in New Mexico, panelist for visiting Harvard Loeb Fellows, Misión Convento, Española, NM, October 11, 2008.
• Presentation: Human Settlement and Culture in New Mexico, Conference on Traditional Resilience to Climate Change: Pueblo and Acequia Approaches, Ghost Ranch, Santa Fe, November 21, 2008.
• Presentation: Acequias and the Moral Economy of Water, Keynote address, Ninth Annual Congreso de las Acequias, Santa Fe, December 5, 2008.
• Presentation: Acequia Communities and the Struggle for Water, SAR Local Speakers Series for the Society for Applied Anthropology annual meeting, March 17, 2009.
• Guest Lecturer: Acequias and the Moral Economy of Water, to David Groenfeldt’s class on the Anthropology of Water, October 9, 2008.
• Invited Consultant for City of Las Vegas Museum Interpretive Planning Workshop, January 18-20, 2009.
• Sponsor & faculty organizer for “Moving off Campus: Cross Subfield Student Projects in Public Anthropology,” workshop at Society for Applied Anthropology annual meeting, March 20, 2009.
• Weekly Radio Spot on KTAO program Breakfast with Nancy
• Advisory Board for Lama Foundation Oral History Project.
• Editorial Board, Journal of the Southwest
ANTHROPOLOGY, July 1, 2008-June 30, 2009  
Prepared by: Jennifer George, Department Administrator

**Singer, Beverly**
- Director, Institute for American Indian Research
- Invited Lecture, "Dirt Roads of Consciousness" as part of Revisioning the Americas through Indigenous Cinema Conference and First People's Film Festival, Interdisciplinary Research Group on the Americas (GIRA), University of Quebec, Montréal, June 2009
- Mellon Fellowship Mentor for Ed Jolie, University of New Mexico, 2008-2009

**Straus, Lawrence**
- Editor-in-Chief, *Journal of Anthropological Research*
- Member, US National Committee for INQUA (International Union for Quaternary Research), appointed by the National Academy of Sciences.
- Member, INQUA Commission on Humans & the Biosphere.
- Associate Member, Instituto Internacional de Investigaciones Prehistóricas, Universidad de Cantabria, Santander, Spain.
- Member, Editorial Boards of six European archeology/prehistory journals and of two monograph series.
- Invited Participant, Santa Fe Institute Workshop on the Human Impact of the Last Glacial Maximum. Presentation: Human communities during and after the Last Glacial Maximum in Western Europe.
- Reviewed ca. 30 grant proposals for US and foreign agencies/institutions and manuscripts for other journals and publishers.
- Informal adviser for several Universidad de Cantabria (Spain) graduate students, notably Igor Gutierrez and David Cuenca.
- Translation and/or editing of manuscripts for Spanish colleagues as a professional courtesy.
- Two tenure/promotion reviews for other universities.
- Convener, Archeology Faculty.
- Member, Anthropology Dept. Advisory Council.
- Member, Board of Archeologists.
- Chair, Clark Field Archive & Library Policy Committee.
- Library Liaison for Anthropology.
- Chair, Mid-Probationary Review Committee for Asst. Prof. K.Prufer.
- Member, Faculty Evaluation ("Salary") Committee.
- French & Spanish Language Examiner for Anthropology.
- Chair/co-chair or member of numerous Ph.D. dissertation committees.
- Member, European Studies Faculty.
- Member, Academic Freedom & Tenure Committee.
ANTHROPOLOGY, July 1, 2008-June 30, 2009
Prepared by: Jennifer George, Department Administrator

- Organized two JAR Distinguished Lectures: E.Paul Durrenberger and Paola Villa.
- Public talks: Conferencias de Prehistoria (Puente Viesgo, Cantabria, Spain); Civitan Club (Albuquerque).
- Interviews: UNM Live (webcast); New Scientist (2) and Scientific American (1) websites.

Wills, Wirt
- Directed excavations at Pueblo Bonito, Chaco Canyon, May and June 2008
- Directed the Chaco Research Semester field school at Chaco Canyon, October and November, 2008
- Directed archaeological survey at Chaco Canyon, June 2009
- Ongoing analysis of data from Chaco Stratigraphy project, on-campus, 2008-2009
- Invited Presentation: Current Research in Chaco Canyon. National Geographic Society Committee on Research and Exploration, April 2009
- Invited Presentation: University of New Mexico Research in Chaco Canyon. Southwest Seminar, Santa Fe.

Graduate Student Presentations and Papers

Anthropology graduate students presented more than 50 research and training papers in 2008-2009 at a variety of UNM, New Mexico, national, and in some cases, international conferences and meetings. A partial listing of these papers is included here:

- **Bruna, S.** 2008 “The Challenges and Impacts of Teaching Community Based Research Courses as a Graduate Student.” Panel: Participatory Research in Education. Annual meeting of the Society for Applied Anthropology. Memphis, TN.

• Gaughen, S. 2008 University of Nevada, Las Vegas LeaderShape Conference Featured speaker and leadership panel member, 2008 Warner Springs Ranch, CA

• Healy M.E., Gomez GI, Harmony HR, Smith JM, Hunley KL. 2009 Demographic Characteristics of the CEPH Panel of Populations. Poster presented at University of New Mexico Annual Anthropology Graduate Research Symposium, Albuquerque, NM, February 27-28, 2009


• Hooper, P.L. 2009 “The ecology of human political organization.” Invited lecture, Program in Interdisciplinary Biological and Biomedical Sciences, UNM. April 8, 2009.


• Miller, G.F. and P.L. Hooper 2008 “Mutual mate choice can drive the evolution of costly fitness indicators in both sexes, even under perfect monogamy, as long as mutations keep arising.” Behavior Genetics Association annual meeting, Louisville, KY. June 25-28, 2008.

• James, P., 2008 Applying anthropology beyond the classroom. Festival of Scholarship. Bellingham, WA. With Heather Nicolas, Kelly Rutherford, Forest Stone, Anthony Thach, James Hundley and Krisanne Post (students).


presented at the 73rd annual meetings of the Society for American Archaeology, Vancouver, British Columbia, Canada.


- **Kano, M.,** 2009 “We’re tita...on the edge [but] still part of the fabric:” Identity and community in the narrative accounts of New Mexico’s women rabbis.” Presentation for the New Mexico Folklore Scholars Endowment, March 2009.

- **Kellett, L.** 2008 *High Altitude Settlement-Subsistence Dynamics of the Chanka Heartland (Andahuaylas, Peru).* 73rd Annual Meeting of the Society for American Archaeology, Vancouver, Canada.


- **King, J.L.** 2009 “Relatedness and Temporal Variability in Woodland Period Cemeteries in the Lower Illinois Valley.” Poster presented at the 78th annual meetings of the American Association of Physical Anthropologists, Chicago, IL


- **Larson, D.L.** 2008 Social Ties: Interaction in the Albuquerque Area during the Late Developmental-Coalition Period Transition. Poster presented at the Southwest Symposium, Tempe


- **Nelson, M.** 2008 Navajo Area Indian Health Service: Renal Failure and the future of Navajo health. Paper presented at the 6th Annual Hawaii International Conference on Arts and Humanities.
• Nelson, M. 2008 Chronic Renal Failure in the Navajo Area Indian Health Service. Paper presented at the 29th Annual Meeting of the Southwest/Texas PCA/ACA.
• Nicolae, L. 2008 “Presenting the Normal “Gay Family:” Same-Sex Marriage Activism and the Acceptable Queer Family in New Mexico” delivered at the American Anthropological Association annual meeting in San Francisco, CA.
• Powers, R. 2008 Farming with Special Rocks. Talk for Southwest Seminar’s Ancient Sites and Ancient Stories series, Santa Fe.
• Sanchez, S., 2008 “The Atrisco Land Grant and Community Activism.” Panel presentation, Community Activism, Peace and Justice Center, Albuquerque, N.M., October 2.
• Saul, G., 2009 “The Roots of a Community: Navajo women’s narratives about living and working in Ft. Defiance in the Twentieth Century” Navajo Studies Conference Shiprock, NM March 2009
• Sparacello, V. 2009 78th Annual Meeting of the American Association of Physical Anthropologists (Chicago, IL) with a poster “Relationships among skeletal dimensions correlated with body mass”.
• Sparacello, V. 2009 78th Annual Meeting of the American Association of Physical Anthropologists (Chicago, IL) with a poster “Cross-sectional geometry of a warlike Samnite sample from the Alfedena necropolis (Iron Age, Italy)”.


• **Worman, S.** 2009 *Moving off Campus: cross-subfield student projects in public Anthropology*. Workshop given at the 69th annual meeting of the Society for Applied Anthropology in Santa Fe, New Mexico. Co-organizers were Dr. Sylvia Rodriguez, Patrick Staib, Heather Richards, and Judith van der Elst.

• **Worman, S.** 2009 *People, a Plague on the Planet? exploring the causes of ecological degradation in Islamic Portugal*. Ruth Kennedy Memorial Lecture, presented as part of the Anthropology Colloquium Series, Department of Anthropology, University of New Mexico, Albuquerque.

• **Worman, S.** 2009 *The Strange Career of “The Ecological Indian”: assumptions, myths and environmental archaeology*. Paper presented at the 13th annual Anthropology Graduate Student Union Spring Symposium, University of New Mexico, Albuquerque.

• **Worman, S.** 2009 *Architecture and Archaeology: Chaco Canyon and the Ancestral Puebloan Southwest* by F. Scott Worman and Erin J. Hudson. Invited lecture presented in World Architecture II: History of the built environment from 1400 to the present, Professor Dr. Eleni Bastéa, School of Architecture and Planning, University of New Mexico.

• **Young, B.** 2009 University of New Mexico College of Pharmacy Research Retreat Albuquerque, NM “Lack of Inquiry about Safety of Medications among Latinas: SMART Study Results.” January (Poster)

• **Young, B.** January 2009 UNM Health Sciences Signature Program in Child Health Research Symposium Albuquerque, NM “Disparity in Patient-Provider Communication among Pregnant Latinas.” January

• **Young, B.** 2009 American Association of Physical Anthropologists Chicago, IL “Cross-cultural variation in fluctuating asymmetry and implications for measuring early-life stress.” April (Poster)

• **Young, B.** 2009 Teratology Society Annual Meeting Rio Grande, Puerto Rico “Knowledge and Attitudes towards Medication Use in Pregnancy among Pregnant Women Recruited into the SMART Study in New Mexico.” June (Poster)
During the 2008-2009 publication year, Human Nature received a total of 67 submissions of which: 29 were rejected, 21 accepted, and 15 are still in the review process or under revision. This gives an acceptance rate of 31%. The acceptance numbers are 10% higher than the previous year.

Altogether SpringerScience published 454 pages of Human Nature in four issues, for a total of 25 articles distributed in two general issues and in two special issues: Cultural Dimensions of Kin Investment edited by Donna Leonetti and Gendered Inequalities in Evolutionary Perspective edited by Monique Borgerhoff Mulder and Rebecca Bliege Bird. Special issues forthcoming are: Evolutionary Studies of Cooperation edited by John Patton and Middle Childhood in Comparative Perspective edited by Benjamin Campbell.

Circulation of the journal continues to grow. In 2008 Human Nature was included in 109 online agreements (consortia, multi-site licenses, and site licenses). In total, as the result of these 109 online deals, 3,539 institutions have exposure to Human Nature according to the following demographic breakdown:

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of Agreements</th>
<th>Institutional Exposure Type</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>3</td>
<td>Institutions with exposure via online deals</td>
<td>8</td>
</tr>
<tr>
<td>Australasia</td>
<td>30</td>
<td>Institutions with exposure via online deals</td>
<td>698</td>
</tr>
<tr>
<td>Americas</td>
<td>57</td>
<td>Institutions with exposure via online deals</td>
<td>670</td>
</tr>
<tr>
<td>Europe</td>
<td>19</td>
<td>Institutions with exposure via online deals</td>
<td>2163</td>
</tr>
<tr>
<td>Grand Total</td>
<td>109</td>
<td></td>
<td>3539</td>
</tr>
</tbody>
</table>

The Scimago Journal Rank for Human Nature in 2007 is 11 out of 352 Social Science (miscellaneous) journals. Its SJR rating is 0.106. SJR is a measure of the journal’s relative impact on its field, based on the number of citations and number of articles per publication year as well as the ranking of the citing journals. The Journal Citation Reports ranking for 2008 is 11 out of 61 Anthropology journals and 9 out of 29 Social Science/Biomedical journals with an Impact Factor of 1.408.
In calendar year 2008, JAR received and reviewed 85 manuscripts. Each manuscript was read by the editor and two to four specialists. 31 manuscripts were received between January and June 2009. We have continued to note an increase in submissions from foreign authors. This fact requires additional effort by the Editor, Copy Editor, and Compositor, but helps bring JAR (and UNM) increased international exposure.

JAR has maintained its subscription base with c. 1000 paying subscribers from all 50 states, Washington D.C., Puerto Rico, and Guam, plus 55 foreign countries on five continents. Free subscriptions are provided to UNM Anthropology Faculty, JAR Editorial Board, Dean of Arts & Sciences, President, Zimmerman Library, Clark Field Archive, as well as indexing agencies both in the U.S. and abroad.

Volume 64, 2008 contained 604 printed pages: 20 articles, a review essay, plus editorials, obituaries, 116 book reviews, and index.

Volume 65, 2009, nos. 1, 2 and 3 have been published and no.4 is in production. Volume 65, no. 2 was a special issue on The Pleistocene-Holocene Transition in Iberia with guest editors Steven Schmich (ASU) and Sarah B. McClure (U. of Oregon).

JAR already has assigned articles for Volume 66, nos.1 and 2, 2010.

As in past years, JAR has donated books to various UNM libraries: Zimmerman (24) Tireman Library (1), Clark Field Archive (15). Linguistics Library (3), Latin American and Iberian Institute (7), Business & Economics Library (3), Africana Studies (2), Religious Studies Library (1), MMA/Clark Field Book Fair (19), Women’s Studies Library (1), Charles Morissey Res Hall (1), History Library (2).

Subscribership to JAR On-Line continued to increase from an initial 63 subscribers in 2006, to 150 currently. A pay-per-download feature for non-subscribers will be added to our electronic access beginning in August 2009.

**JAR Distinguished Lectures 2009**

Dr. Paola Villa (University of Colorado Museum).

**Stone Tools for the Hunt: Hunting Weapons of Neandertals and Early Modern Humans.** March 26, 2009

**Editor:**

Lawrence G. Straus, Distinguished Professor
ANTHROPOLOGY, July 1, 2008-June 30, 2009
Prepared by: Jennifer George, Department Administrator

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Philip K. Bock, Patricia Crown, Steven Feld, Les Field, Louise Lamphere, Carole Nagengast, and David Stuart, together with Lawrence G. Straus, now make up the Board.

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ANNUAL REPORT
of the
DEPARTMENT of BIOLOGY

FY 2008–09
Annual Report
by:

Richard M. Cripps, Chair
Department of Biology
The University of New Mexico
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THE UNIVERSITY OF NEW MEXICO  
DEPARTMENT OF BIOLOGY  

FY 2008–2009  
EXECUTIVE SUMMARY

There never seems to be a quiet year at UNM, and the 2008–09 academic year was no exception. Born for the year under a cloud of budget insecurity, departments had to weather the darkening skies of a global recession, and the ultimate storms of budget rescissions, hiring pauses and dissatisfaction with the upper administration.

In contrast to the chaos outside, the Biology Department functioned effectively with only one major issue arising (the Anatomy and Physiology laboratory debacle). Our enrollments and graduation numbers were up once again; the number of graduate degrees awarded was up; and while the overall research portfolio dipped slightly, the level of new funding showed some resurgence.

All of this was achieved with relatively little assistance from outside sources, once again no increase in faculty numbers, and a net loss of I&G staff. Indeed, our most recent faculty appointment was President David Schmidly, and before that it was Dean Brenda Claiborne. We hope that in the near future we will be able to address some of these serious issues in order for us to function as effectively as possible.

This year also saw the appointment of a new Department Administrator, Ms. Heather Paulsen, and the election of a new Chairman for the Biology Department, Dr. Richard Cripps.

2008–09 AT A GLANCE

Undergraduate Students:
1. Number of declared Biology majors .................. 1,448
2. Number of graduated majors .................. 311
3. Number of students enrolled in non-majors classes ........ 1,714
4. Total SCH production .................. 27,441
5. Number of undergraduates performing research ........ 182

Graduate Students:
6. Number of graduate students .................. 106
7. Number of graduate degrees awarded .................. 32

Faculty:
8. Number of faculty .................. 44
   Number of retirements .................. 0
   Number of new hires .................. 0
   Number of vacancies .................. 4
9. Number and amount of new grants generated .................. $6,676,782
10. Number and total amount of grants active .......................... 175
           .......................................................... $54,806,304
11. Number of research papers generated by faculty .............. 90

Staff:
12. Number of I&G permanent staff in Biology .................... 26
    Number of separations this year .......................... 1
    Number of hires this year ............................... 0
    Number of vacancies ..................................... 3
13. Number of total staff employed by Biology .................. 121
    Number of separations this year ....................... 25
    Number of hires this year ............................. 28

STUDENTS

Undergraduate Program

Overall Demand on Biology Courses and Programs: The overall demand upon Biology courses continues to increase. Our total SCH production for the year increased again (see Table 2), and we will be responsible for 30,000 SCH/year in the next year or so if the current trend continues. The number of declared Biology majors also hit yet another record high, which is significant for a number of reasons. First, these increases reflect a combination of the unprecedented interest in Biology careers among the general student body, with ever-increasing interest in biological research and in the health sciences. Second, our increased number of majors also positively impacts a number of other departments on campus upon whom we rely for service courses: Chemistry, Math & Statistics, and Physics. A typical Biology major takes at least 16 credit hours of chemistry, 8 credit hours of physics, and 8 credit hours of math. Thus, Biology is doing its part to make not only itself and its College look good, it is also propping up other programs who have significantly fewer numbers of majors.

We note that the number of State-line instructors in the Department has not increased over the last year to accommodate this student increase. Moreover, the number of faculty and of I&G TA lines has not increased commensurate with the large influx of Biology majors that has been observed over the last 10 years or so. In addition, no net increase in the Materials and Service budget has taken place to enable us to support the increased numbers of students and sections. We have been able to continue to cover these courses thanks to the initiation of course fees, which has permitted us a small amount of money that we can then put directly back into the courses that generate the funds.

Nevertheless, our instructional budgets are basically at breaking point and we envision a time in the near future when we will not be able to add additional sections of classes, even if asked to by the administration. Such a situation would be a major disappointment, since it is our wish to instruct effectively as many students as we can reasonably accommodate.
Table 1: Number of Students With a Declared Major in Biology

<table>
<thead>
<tr>
<th>Major</th>
<th>Fall 2005</th>
<th>Spring 2006</th>
<th>Fall 2006</th>
<th>Spring 2007</th>
<th>Fall 2007</th>
<th>Spring 2008</th>
<th>Fall 2008</th>
<th>Spring 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A&amp;S</td>
<td>821</td>
<td>865</td>
<td>856</td>
<td>867</td>
<td>889</td>
<td>971</td>
<td>1050</td>
<td>905</td>
</tr>
<tr>
<td>University College</td>
<td>423</td>
<td>346</td>
<td>397</td>
<td>383</td>
<td>436</td>
<td>389</td>
<td>551</td>
<td>368</td>
</tr>
<tr>
<td>Second Major</td>
<td>23</td>
<td>18</td>
<td>9</td>
<td>21</td>
<td>15</td>
<td>20</td>
<td>15</td>
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<tr>
<td>Total:</td>
<td>1,267</td>
<td>1,229</td>
<td>1,252</td>
<td>1,271</td>
<td>1,340</td>
<td>1,380</td>
<td>1,616</td>
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<td>Graduate:</td>
<td>101</td>
<td>97</td>
<td>93</td>
<td>97</td>
<td>101</td>
<td>98</td>
<td>106</td>
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Table 2: Total Student Credit Hours (SCH)

<table>
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<th>Year</th>
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<td>1989-90</td>
<td>17,527</td>
<td>1999-00</td>
<td>21,882</td>
<td>2004-05</td>
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<td>1993-94</td>
<td>22,135</td>
<td>2001-02</td>
<td>21,459</td>
<td>2006-07</td>
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<td>1995-96</td>
<td>23,360</td>
<td>2002-03</td>
<td>21,832</td>
<td>2007-08</td>
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<td>1997-98</td>
<td>21,627</td>
<td>2003-04</td>
<td>22,883</td>
<td>2008-09</td>
<td>27,441</td>
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Table 3: Student Credit Hours by Semester

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<tr>
<td>Summer</td>
<td>1,109</td>
<td>1,379</td>
<td>1,359</td>
<td>1,330</td>
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<tr>
<td>Fall</td>
<td>11,200</td>
<td>11,001</td>
<td>11,502</td>
<td>11,316</td>
<td>12,399</td>
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<tr>
<td>Spring</td>
<td>10,574</td>
<td>10,890</td>
<td>11,294</td>
<td>12,077</td>
<td>13,058</td>
<td>13,122</td>
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<tr>
<td>Total</td>
<td>22,883</td>
<td>23,270</td>
<td>24,155</td>
<td>24,723</td>
<td>26,787</td>
<td>27,441</td>
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Table 4: Number of Students Registered in Core Courses, Fall 2005–Spring 2009

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall 2005</th>
<th>Spg. 2006</th>
<th>Fall 2006</th>
<th>Spg. 2007</th>
<th>Fall 2007</th>
<th>Spg. 2008</th>
<th>Fall 2008</th>
<th>Spg. 2009</th>
<th>Total</th>
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<tbody>
<tr>
<td>201</td>
<td>266</td>
<td>320</td>
<td>313</td>
<td>375</td>
<td>390</td>
<td>360</td>
<td>341</td>
<td>338</td>
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<td>202</td>
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<td>196</td>
<td>223</td>
<td>241</td>
<td>254</td>
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<td>259</td>
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<td>203</td>
<td>73</td>
<td>96</td>
<td>136</td>
<td>143</td>
<td>175</td>
<td>144</td>
<td>213</td>
<td>193</td>
<td>1,173</td>
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</table>
Non-Majors Service Courses: We also are seeing continuing increases in the number of students partaking in our non-majors service courses. We have five lecturers who shoulder the bulk of the student demand in the lecture component of these courses (two sections of Biol. 110; five sections of Biol. 123; two [technically] sections of Biol. 239; and two sections each of Biol. 237 and 238). The ability of these lecturers to interact regularly with massive number of students per semester is most impressive. Also impressive is their ability to achieve this with nary a complaint from the student body. We are most grateful and fortunate to have such exceptional lecturers. Currently, one section of Biol. 123 per semester is offered either as an overload or as a course instructed by PTI, which seems sufficient to accommodate the capacity at the moment.

In parallel with the large number of students taking these lecture courses, we also have laboratories associated with each of the lectures: 112L, 124L, 239L, 247L and 248L. These classes also are popular (and are required as part of 239/239L). The increase in the number of sections that we are offering has been beneficial in increasing the number of graduate students who can be supported, since the graduate students act as TA Specials for these courses. There are also drawbacks to this mechanism (see Graduate student section).

Re-organization of Anatomy & Physiology Courses: This year, we have been dealt a major blow to our undergraduate curriculum and to our ability to train the best pre-professional students. We have been informed by the Medical School and the Dean's office that we are no longer able to use the Medical School facilities to teach our cadaver laboratories associated with Biol. 247L and 248L. The implications of this are significant. The two classes in question support our own Biology majors, as well as form one of the first hands-on introductions to medical biology that any student in any program receives. Many student are either turned on to medical sciences—or tuned off from medical sciences—as a result of these laboratories. In addition, the laboratory courses and their associated lectures net approximately 4,500 student credit hours per year for Biology and the College. The success of these courses has been phenomenal, and the efforts of the instructor for these classes, Dr. James Swan, have been singular in enabling us to offer the classes as such a level of volume and of quality.
The action caused considerable anger, frustration and consternation, in particular in regard to its high-handed nature, and lack of discussion, reason or consultation. Despite efforts at several levels, no headway was made on this problem: a Biology faculty petition to the Dean was ignored; and a student-initiated petition including more than 1,000 (one thousand) signatures was similarly ignored at all levels (Dean, President, Dean of the Medical School). Negative press also appeared in The Daily Lobo.

Moving forward, we have been able to identify space in the Biology building to offer a light version of the Biol. 247L and 248L labs. This under-equipped and aging laboratory will be supplied with models (plastic ones, not Don Schrader), and will also utilize some animal samples for understanding organs and organ systems. We hope that in the future we will be able to identify suitable space and renovate it, in order to once again offer this most popular and successful of courses complete with cadavers.

**Actions to Improve Our Undergraduate Program:** It has been a difficult year to enact significant change in our undergraduate curriculum, and in fact the major change has been the negative one associated with the ousting of Anatomy & Physiology from the Medical School campus. We have been awarded equipment funds to support purchasing and installation of audiovisual equipment in some of our older classrooms, which has improved our instructional abilities in those rooms. Nevertheless, our enrollments continue to increase and the value of our Materials and Services budget, to support the classes in which these students are enrolled, continues to decrease.

Given the current budget situation, it is unlikely that we shall receive significant support for equipment and materials in the near future, and we hope that we can hang on in the short term through using our course fees. In the future, if we are required to add extra sections and extra courses, we probably will also be required to request supply money for those courses.

**Undergraduate Research:** This year, for the first time, we have begun to track the numbers and successes of the undergraduate students who are conducting research under the auspices of the Biology Department. We find that there were 182 undergraduates gainfully employed in research during the last year. This translates to almost five per tenured/tenure-track faculty member, although we note that several students are mentored by research faculty and research staff. We are pleased by this number, as it indicates significant impact of our research program upon the UNM student body. We note that, in some instances, these jobs (particularly those that are largely technical) provide employment and stipends for individuals to support their education, and this, in itself, is a laudable effect. We also note that in many more instances the undergraduates working in the research laboratories will be going on to graduate schools, or taking technical positions in science and technology. The experience and training that they receive from our faculty during this time is priceless.

We also are very pleased to note that nine papers published by Biology faculty in CY 2008 included undergraduate students as co-authors. As we move forward, it will be interesting to determine how we can further develop these numbers—since this is the first year of record-keeping, we have yet to get a feel for how these number might vary over the years. Nevertheless, these numbers indicate tangible outcomes for some of our most gifted and ambitious students.
Degrees: We list 311 Bachelor's degrees awarded over the last year. This is up from the 265 that were awarded last year, and is a continuing reflection of the ever-increasing popularity of the Biology program. We acknowledge that a significant proportion of our graduates, and a notable fraction of our declared majors, are pre-professional students. Nevertheless, the interest in biological research has never been higher, and a great deal of this credit must go to our instructors, in both majors and non-majors courses, in extolling the fabulous world of Biology. In addition, the several undergraduate and postgraduate training programs that we have perform an outstanding job in exposing undergraduates to research opportunities. Thus, a real strength of our program is the ability to provide our students with new options once they complete their undergraduate degrees.

Table 6: Degrees Awarded in Biology (unofficial count obtained for Spring graduation; graduate degree numbers reflect those who attended the Spring departmental convocation ceremony)

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</thead>
<tbody>
<tr>
<td>B.S.</td>
<td>207</td>
<td>186</td>
<td>213</td>
<td>132</td>
<td>229</td>
<td>227</td>
<td>268</td>
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<tr>
<td>B.A.</td>
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<td>37</td>
<td>21</td>
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</tr>
<tr>
<td>M.S.</td>
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<td>6</td>
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<td>4</td>
<td>5</td>
<td>5</td>
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<tr>
<td>Ph.D.</td>
<td>16</td>
<td>14</td>
<td>11</td>
<td>14</td>
<td>21</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

Graduate Program

The graduate program continues to do well in Biology. We still list more than 100 graduate students, a large majority of them supported either through Teaching Assistantships or their own research funding. More than 30 graduate students received their higher degrees last year, and many have gone on to high-profile professional and academic positions.

The total number of graduate school applicants has dropped significantly over the last few years, yet there are two encouraging signs: first, the number of applicants increased slightly this year, by about 5%. We expect this trend to continue if not only because of the state of the economy. Second, the quality of the core applicants to graduate school has remained high: we were certainly able to fill all of our slots from the existing applicants. Clearly, a component of the reduction in graduate school applicants has been a reduction in the number of incomplete applications.

Nevertheless, we are still not satisfied with our graduate student pool: we would like to have more applicants overall; and in particular, we would like to increase the numbers of minority applicants to the program: in 2009, we had an extremely small number of Hispanic and Native American applicants, which will severely and negatively impact the breadth of our graduate program. To address these issues, in AY 2009-10 we will initiate some recruiting efforts to promote our program and in particular to encourage minority student applications.

As we had done for the undergraduates, we have begun to monitor research productivity for our graduate population. We find that current and former Biology graduate students appeared 70 times on papers in CY 2008, for work that they performed at UNM. We also note that 20 research
awards were made to current Biology graduate students during CY 2008. The latter number could certainly be increased, nevertheless we are enthused about the application and success of our students. Clearly, grant success in graduate school provides significant training to generate grant success for the individual as their career proceeds. We also note in particular that every student receiving full financial support for a year through grant sources generates a new slot for graduate students to be accepted into the program.

We note that graduate student stipends are still low relative to our peer institutions. The President recently increased these stipends for graduate students, although the recent budget issues have prevented any further actions from being pursued. Nevertheless, we note positively that tuition and health benefits are available for our students (but see the following paragraph).

A disturbing and yet continuing trend at the graduate level is the regular increase in the number of students supported by the Part Time Instruction budget. One the one hand, this is a boon, since it permits us to admit more than 20 new graduate students per year (more than would be allowed simply from our I&G TA budget). On the other hand, the TA Specials that are funded by the PTI budget do not cover the costs of tuition nor of healthcare. The Department is left in the awkward situation of having to determine if we will cover the costs of these benefits ourselves, or if we will leave it up to the students to cover those costs. To date, the Department has chosen wisely and done the Right Thing, even though this can cost us up to $45,000 per year. Ironically, therefore, this indication of our popularity and success at the undergraduate level translates into potential hardship for the graduate students and into excessive benefits costs that the Department has to cover. As a Department we have attempted to address this issue by supporting senior graduate students (who do not have an high tuition load) from the PTI, which has saved us some money. However, this is difficult to monitor on a real-time basis: many of the senior students are technically not TA-ing the courses that are added on the PTI budget, and there is no way to retroactively alter the budget source of our TAs and their benefits. It would make a significant, positive difference to the Department if a component of the PTI budget were instead moved to the I&G lines. I cannot see how this would negatively impact the College.

FACULTY

Composition

The composition of our faculty has not altered since last year. While we were on the cusp of making a Cell/Molecular Biology hire at the end of the 2007-08 academic year, the vacant line was removed from our Department in the Spring of 2008 as an early component of the budget shortfall. Efforts to hire our second choice candidate, an Hispanic male, were unsuccessful, despite appeals directed at several different levels in the University. With the retirement of Professor Larry Barton in the Spring of 2008, the continued absence of Associate Professor Andreas Wagner, and the earlier retirements of Professors Kathryn Vogel and Scott Altenbach, the Department is seriously under-staffed in key undergraduate courses, including Cell Biology (201), Microbiology (351) and General Vertebrate Zoology (386). Each of these courses are in high demand by our majors.
Biology was involved in one important faculty negotiation this year, that being the development of a Memorandum of Understanding with Arizona State University. The MOU allows Professor Scott Collins to spend the Spring semesters at ASU, while in the Fall both he and his partner, Professor Nancy Grimm, participate at UNM in teaching. Each professor keeps their primary appointments at their home institutions, but have the opportunity to carry out research and mentor students at either location. This innovative solution to a spousal issue is unique at UNM as far as I am aware, and stands as a model arrangement for any similar situations that might arise in the future. UNM is to be lauded for its efforts and attainment in this venture.

We note that we did not lose any faculty to other institutions during the year. We are aware of at least one invitation to a faculty member to apply for a position elsewhere, although, fortunately, this invitation was retracted once the true depth of the recession was felt. Nevertheless, it will be important to guard against this type of thing happening in the future, and the Chair and Dean will need to work hard to find ways to prevent the occurrence of itchy feet.

The Biology Department was largely successful this year in terms of awards and promotions for its faculty. Margaret Werner-Washburne received the award of Regents' Professor; Richard Cripps and Thomas Turner were promoted to Full Professor; Cristina Takacs-Vesbach received tenure and promotion to Associate Professor; and Marcy Litvak successfully negotiated the mid-tenure review process.

Issues Related to Lecturers

In the Fall of 2008, the Biology faculty strongly supported the development of a career plan for Lecturers. Accordingly, a document was prepared by our Lecturers and was forwarded to the higher administration for further review. We are pleased to note that some (albeit slow) movement has occurred on this front; the document now has been amended by a campus-wide committee, and it will be reviewed by a Faculty Senate committee sometime during this academic year. Central to this document is the notion of pay raises as part of promotion steps for Lecturers, and it is hoped that this document can provide a mechanism for this to be instigated.

Faculty Accomplishments

Our faculty continue to excel in their jobs. Dr. Werner-Washburne was awarded the UNM Regents’ Professor rank in the Spring of 2009; several of our faculty gave invited plenary talks at professional meetings (Brown, Dahm, Lowrey, Stricker, Witt); our faculty appeared 98 times in published research papers (90 papers total, since some papers featured more than one faculty member), including the prestigious journals *Molecular & Cellular Biology, Nature Biotechnology, PNAS, Genetics, Science* (2), *American Naturalist, Journal of Parasitology, Ecology, PLoS One, Nature, Applied & Environmental Microbiology, Journal of Ecology, Proceedings of the Royal Society of London, Bioinformatics, and The Southwestern Naturalist*. We have significant representation on editorial boards for journals, and many of our faculty participate in national and international review panels for granting agencies.

Research paper productivity was up from CY 2007 (78 papers).
Sponsored Research

Biology faculty were responsible for bringing in $6.6 million of new funding in 2008-09. This represents a slight increase from 2007-08 ($5.1 million), although it does not yet approach the high water mark of 2005-06. It is anticipated that an influx of Recovery Act funds will make 2009-10 look more impressive, although it is hoped that longer-term funding will increase. We note that the total grant portfolio for the year being reported is $58 million, down from the $66 million of last year. Clearly, we have work to do in terms of increasing our grant portfolio, and this will be a goal of the next year.

We also note that, combined with the slight reduction in overall funding, the proportion of overhead that is returned to the Department and to the PI has been reduced significantly on account of the increased cut going to the Vice Provost for Research's budget. While we acknowledge that additional funds would benefit that office, it has not been made clear to the Department nor to the College—nor to the PIs—how we are to accommodate significant reductions in our budget. If we have broken equipment, do we now appeal to the VPR's Office for replacement or repair, rather than the practice of earlier years of the Department covering the cost? Until it can be ascertained that the VPR can handle their budget without creating a shortfall, there will be concerns at many levels how the increased funding to the VPR will be spent in the long term.

Five-year Hiring Plan

In the Spring of 2009, a five-year hiring plan was requested of Biology from the College. We anticipated the following hires needing to be made through regular I&G mechanisms: two cell/molecular biologists; three senior ecologists, to replace impending retirements among our most senior and highly-recognized professors; and a comparative immunologist. We also note that the recently funded CETI grant supports two faculty hires, which will support the CETI program, but will not support the needed lines listed above.

At the time of writing this document, it is unlikely that the first year of the hiring plan (the Cell/Molecular hire) will be supported, since the corresponding line was not released by the Provost to the College. Thus, the five-year plan appears already to be out of date. This is beginning to create a level of frustration at the Department levels due to a lot of effort being put into hiring plans, only for those hiring plans to be dismissed or un-met.

It cannot be emphasized strongly enough that long-term plans for our Department and others must be put into place and must be honored by the institution. There are critical areas within the Department that need shoring up, and there are additional research focuses that are beginning to generate a great deal of interest. Some investment in these areas (such as plant physiological ecology and evolutionary genomics) would place significant national and international focus upon our university, would enable us to develop internationally recognized programs, and would enable us to attract the very best of the available faculty to our institution.
STAFF

Staff Raise Issue

The biggest concern for staff during FY 2008-09 was the economy related to job security and raises. During the budgetary planning time (March 2009), the state legislature approved no raises to the University of New Mexico. This decision caused many questions to be asked about state line jobs and their security. Because of rumors related to cut-backs, downsizing, and lay-offs, the Provost made the decision as a matter of policy to deny raises not only to state-funded staff positions, but also to soft-money staff. Staff in this department feels that this policy is neither fair nor in the best interests of the University and its research and teaching mission.

By the terms of their contracts, staff funded from grants and contracts are treated differently than staff funded by the state. Their appointments are term-limited, which means that their jobs are less secure than state-funded positions. Moreover, in those circumstances where the state is able to provide raises to staff, soft-money employees only receive those raises if funds are available under the grants supporting them. These fundamental differences in the treatment of soft-money staff make them a different class of employee. The present University policy ignores this reality, and thus creates a situation where soft-money staff work under inferior conditions to state-funded staff. This policy has led to discontentment among employees funded from contracts and grants. Moreover, this distinction is recognized already by the University with regard to Research Faculty and Tenured/Tenure-Track Faculty, since soft-money research faculty have been allowed to be compensated.

Successful grantsmanship is based on previous performance, which is influenced strongly by the quality of technical staff and the continuity of their employment. In these difficult economic times, staff are likely to value job security over all else. Hence, by not allowing principal investigators to award raises to staff, even if they are specified in a grant, the present University policy increases the likelihood of loss of staff to other institutions or to other positions in the University that offer more job security. This University policy removes the only tool by which grant holders can retain staff critical to their research.

Staff Pause and Hold and Reorganization

In October 2008, the University "Pause and Hold" strategy was implemented in an attempt to respond to economic demands. Due to this "pause and hold" policy, the Biology Department has had three vacant I&G staff positions and has delayed many additional positions. While the intent of the "pause and hold" strategy was to conserve money, staff have had more demands placed on them with diminishing resources.

The Department of Biology still has three vacant positions (Branch/Div. Human Resources Representative, Grants Coordinator, Event Planner). While numerous attempts to request hires have been made, the department has not been allowed to make a hire. All of these positions are absolutely critical for the Department in directly supporting the instructional and contract and grant mission of the University of New Mexico. Two years ago, the Biology Department was active in reorganizing positions and restructuring the Department so that more positions were available to help with the changing needs of the University and the Department. At that time, the Chair and Associate Chairs met with members of Human Resources and Compensation to help with the
reorganization, which needed to go in a certain order and with a staff member retiring to help redistribute salary for new positions. All of this was completed, but when the Department was set to make hires, the hiring pause began.

The Branch/Div Human Resources Representative was a joint venture with Human Resources to develop a person with the ability to handle delegation of authority. The Department was extremely excited to have this position and opportunity; however, the selected candidate was not the ideal person. Because this position has not been vacant until recently, the job duties have been assigned to the Department Administrator III. Because of UNMJobs and the size of the department, these tasks require the Department Administrator to work at least an additional 20 hours a week and to dedicate at least three full days to processing all HR paperwork for faculty, staff and students. With the position still vacant, the Department Administrator still continues to process this increasing workload. The Department has more than 350 individuals who need to be serviced on a routine basis. Payroll processing takes more than two days every other week. We continually have more than 30 active postings that require attention to detail. UNMJobs has created so much work in the Department that there is a need for a full-time hire.

The Grants Coordinator position would be a newly created position for Biology. Because of ARRA money and the economy, more PIs are turning in record amounts of proposals. The Department has more than $15 million in grant money each year, so it is not an easy task to manage. Because the enterprise continues to increase, we are in need of an individual who is able to assist PIs with pre-award. We have found that with new policies such as the five-day memo, our PIs are not able to comply with deadlines; this position was created to facilitate the grant proposal process more efficiently and effectively. The University is placing more and more demands on reporting as well; this position is vital to complying with all international, federal, state, local and University regulations. Additionally, the grants coordinator helps the Department find sources of funding for which our PIs can apply. Currently, this position is occupied by an individual via temporary services.

The Event Planner oversees the integrated logistical and administrative support needs of the Biology Department and its multiple, complex and widely distributed events and conferences. The travel involved is quite extensive and often complicated. This person not only needs to understand the intricacies of the University to include travel insurance and liabilities for faculty and students, but also must understand the complex nature of travel associated with federal, state and local funding agencies' policies and procedures. Additionally, this person is responsible for fleet vehicle maintenance schedules, fuel card allocations and reconciliations.

The hiring pause is forcing the Department to maintain employees via temp services and pay extreme overhead fees that only diminish the valuable, yet meager resources available. Additionally, the University is not taking care of staff employees, especially those who have been Temporary employees who might be hired competitively. Temporary employees receive no benefits and the Department pays an extremely high surcharge with no benefit. These jobs still need to be completed on a daily basis—the work is not going away, it is actually growing, and we must be allowed to hire a permanent qualified individual to contribute to the overall success of the program.
Finally, because the Department has been on a hiring pause in its positions, two additional vital employees have been asked by other University entities to apply for jobs that offer more money. One of these employees was in the process of receiving a career ladder and the other has been offered significantly more money. How is the Department to compete with other offers when promotions and career ladders are frozen? The Department is not going to be able to maintain its high productivity if we continue to lose critical employees.

PROGRAMS AND FACILITIES

The Biology Annex Analytical Laboratories

The Biology Annex Analytical Labs began in the mid-1970s when (now retired) Biology Professor Jim Gosz was beginning his career at UNM. Since that time, we have evolved into a state-of-the-art laboratory, providing water, soil and plant tissue analyses for ecosystem nutrient-cycling studies to researchers at UNM, across the country, and around the world. We also provide general research support services to UNM researchers and their collaborators. Our primary users in the Biology Department include the Sevilleta Long Term Ecological Research program (Drs. Scott Collins, William Pockman, Marcy Litvak et al.), Dr. Cliff Dahm's Hydrogeoecology group, and Dr. Diana Northup's Geomicrobiology group, as well as the departments of Biology, Earth & Planetary Sciences, Civil Engineering, and Chemistry.

On July 1, 2008, our lab director, Biology Professor Cliff Dahm, began a two-year appointment as the Science Director for the CALFED Bay Delta Program in Sacramento, California. Due to the California budget crisis, this has proved to be a very challenging undertaking that is making excellent use of his extraordinary problem-solving skills.

During the past year, students involved with Biology Annex programs have won awards at the American Academy of Arts and Sciences regional meeting, the UNM Undergraduate Research and Creativity Conference, the UNM Water Symposium, and the National Speleological Society Annual Meeting.

The design for the Castetter Phase II B addition, which will house our new laboratories, is almost complete. Throughout the past year, there were numerous design committee meetings. We are all looking forward to moving into these new and improved facilities.

The upcoming year looks to be full of challenges as well. Hopefully, we will see the start of construction on the new addition to Castetter Hall. We will be initiating a new Experimental Program to Stimulate Competitive Research (EPSCoR) project looking at water quality in the Valles Caldera Nature Preserve. Our Bosque ET (Evapotranspiration) research program will be in transition as Research Professor James Cleverly leaves for a new position at the University of Technology in Sydney, Australia.

For more information, please visit our website, http://bioannexlabs.unm.edu.
The Bosque Ecosystem Monitoring Program

The Bosque Ecosystem Monitoring Program (BEMP) conducts long-term ecological research with K-12 teachers and their students as volunteers; they monitor key indicators of structural and functional change in the Middle Rio Grande riparian forest, or “bosque.” In 1997, BEMP began as a collaboration between the Department of Biology and Bosque School in Albuquerque, with fewer than 200 participants. Last year, almost 5,000 community members (students, teachers, etc.) participated in science-related outreach activities. Of these people, 2,193 were actually in the field collecting long-term data about ecosystem variables and the ecological drivers of flood, fire, river flow, climate and management. The experiences of these community members support science education reform efforts and help to increase each person’s understanding and appreciation of science in general and the Rio Grande riparian ecosystem in particular. BEMP findings derived from K-12 student-gathered data are used by government agencies to inform multi-million dollar river and riparian management decisions.

BEMP increased involvement to 4,985 this year, from a high of about 4,000 community members in FY 2007-08. Students from more than 40 schools from Rio Arriba, Sandoval, Bernalillo, Valencia, Socorro, and McKinley counties were involved with BEMP. BEMP involves traditional public, charter, parochial, private, alternative and home school students. A teacher and agency representative workshop was held in January 2009, and a seminar-type student congress, in which students make presentations on their sites and projects, was held at the end of the school year.

Since 2006, BEMP has been a research partner in the Urban Flood Development Program (UFDP) sponsored by the U.S. Army Corps of Engineers at UNM. In collaboration with faculty and graduate students in the Department of Civil Engineering, they are investigating groundwater/surface water interactions and their riparian effects at BEMP sites bracketing the Albuquerque Drinking Water Diversion Dam and at the Albuquerque BioPark.

In 2009, BEMP added its 25th site, located south of Belen, NM, and named it after Dr. Cliff Crawford, professor emeritus of the UNM Department of Biology and the founder of BEMP. Research at this site is funded by a Collaborative Forest Restoration Program grant, which is a collaborative effort among BEMP, the Middle Rio Grande Conservation District, Natural Heritage New Mexico, Hawks Aloft and the New Mexico Interstate Steam Commission.

Funding is always a challenge, as grants are applied for on an annual basis. BEMP works with a variety of local, state, federal, and private funders (http://www.bosqueschool.org/bemp.funding_partners.htm). They are working towards more stable, multi-year funding to ensure retention of their small staff and eventually to recruit a Ph.D.-level ecohydrologist.

The Center for Evolutionary and Theoretical Immunology Program

The Center for Evolutionary and Theoretical Immunology (CETI), a University Level I Center in the Biology Department, was established in September 2003, when former Biology Department chair, Dr. Eric “Sam” Loker, was awarded a $10.4M Center for Biomedical Research Excellence (COBRE) grant from the National Center for Research Resources (NCRR) at the National Institutes of Health (NIH). CETI brings together researchers from across New Mexico who are...
conducting innovative and cutting-edge research on evolutionary and theoretical immunobiology. CETI provides a collaborative environment where they can share ideas, listen to lectures from leading scientists in their field, and benefit from using CETI's core laboratory facilities that house state-of-the-art equipment.

This past August, due to CETI's numerous successes, NCRR awarded CETI an additional $10.7M as a continuation of the original COBRE award. Since CETI's inception, Center investigators have brought in more than $24M in grant support to the University as well as publishing more than 450 articles in peer-reviewed journals. The Center also has been able to leverage funding to expand and improve its research capacity. Recently, construction of an addition to Castetter Hall was completed with a second floor devoted to CETI use. A second phase of construction will begin this fall that will include additional space dedicated to CETI activities.

For more information on CETI or on upcoming lectures and events, please visit CETI's Web site, http://biology.unm.edu/ceti.

The FlyBase Program

The FlyBase Drosophila Genome Annotation Program at UNM has two components. First, Dr. Harriet Platero will work with FlyBase in whole-genome annotation of related Drosophila species, which involves the use of a variety of programs and incorporates information from a variety of sources. The work, done both at Harvard University and remotely, will be overseen by Dr. William Gelbart (Harvard University) and Dr. Margaret Werner-Washburne (UNM). Second, this work will have two educational activities. The first, for Spring 2009 and Spring 2011, consists of an eight-week course in Genomics and Bioinformatics taught by Model Organism Databases (MOD) scientists from Stanford University, CalTech, Harvard University, and University of Indiana. UNM has eight-week courses for which students receive credit. Students are recruited for this course at UNM and nearby schools, e.g., NM Tech in Socorro (a one-hour drive) and Southwest Indian Poly Technical Institute (SIPI) in Albuquerque. The interaction of students with these faculty members is aimed at identifying students with a strong interest and aptitude in bioinformatics for both summer and graduate programs at the MOD institutions. The second activity, to be carried out during the summers of 2010 and 2012, is a two-week workshop for students from around the Southwest on the topic of Genomics and Bioinformatics. Students from New Mexico (Highlands, NMSU, Dine College, SIPI, etc.) and neighboring states (UTEP, Fort Lewis College, Northern Arizona University) are invited; the course involves the students in bioinformatics and allows them to meet representatives from the MOD institutions. It is anticipated that this effort will lead to increased dialogue among the students and faculty at these universities, thus, increasing the visibility of the MOD institutions and bioinformatics in general. The goal of this activity is to identify students who would be interested in summer and/or graduate programs at the MOD institutions.

Initiatives to Maximize Student Diversity

In the final year of the four-year Initiatives to Maximize Student Diversity (IMSD) project, additional support to complete and expand the evaluation begun is needed. The budget did not have enough funds to complete what has been realized as a very important and broad-ranging
evaluation that already has been of exceptional benefit to IMSD and the participating departments. A request has been made for support for additional evaluation time and staff support. In addition, in this grant period, it was recognized that our students are having difficulty with cognitive reasoning and scientific imagination. Thus, IMSD supported the development of “Biology: Discovery and Innovation,” a course aimed at increasing scientific innovation and creativity by exposing students, who get credit for participating in discussions and asking questions, for 2.5 hour periods to a wide range of researchers. The class also involves reading two scientific publications a week and writing a paper each week that includes four questions not asked during the discussion/presentation and where the student would take the research next. This course was rated very highly and several students said it was the best class they’d had at UNM; however, we have no good assessment tools for identifying whether we are really leading to broad changes in how the students think about research and academics. Thus, a funding request has been made for initial collaboration to develop assessment tools for the new IMSD Discovery and Innovation courses.

Long Term Ecological Research Network Office

The present report, found in Appendix J, covers the accomplishments of the Long Term Ecological Research (LTER) Network Office (LNO) during FY 2008-09, covering the period from June 30, 2008 to June 30, 2009. We organize major activities of the LNO during this period into four areas: “Synthesis,” Cyberinfrastructure,” “Core Services” and “Development and Outreach.” The report includes brief descriptions of the 14 most important accomplishment of the LNO under our four categories of activities.

Minority Access to Research Careers

The long-term goal of NIH-funded UNM Minority Access to Research Careers (MARC) U*STAR program is to increase the number of under-represented minority honor students obtaining the doctorate and entering careers in biomedical research. The immediate goal is to increase the competitiveness of our best minority students for graduate programs. The heart of this program is the opportunity for 10 talented minority undergraduates in Biochemistry, Biology and Chemistry to receive intense research training in their junior and senior years with a faculty mentor in some area of biomedical sciences. About half of the MARC scholars work with professors on Main Campus, and half in various departments at the UNM School of Medicine. A pre-MARC Student Development component addresses problems that present major obstacles to the success of UNM students, including poor curriculum planning and inability to participate effectively in an electronic world. The emphasis on academic and career guidance is continued as MARC students move through the program. During the first summer, the MARC scholars begin a research project and participate in many group-learning activities, capped by an end-of-summer student Research Symposium, at which all present their work. During the subsequent two academic years, the students continue their research projects 15 hours a week, participate in regular MARC meetings, and present their projects at a local and a regional or national meeting. It is expected that most will becomes co-authors on a scientific publication. In their first year as MARC scholars, the students take a three-credit class entitled “Research Ethics” and a GRE preparation class. During their second year, students take a small class that focuses on identifying an appropriate graduate program and developing a competi-
tive application, and then apply to graduate school. As an added feature of the program, the students spend one summer at another institution (typically their second summer), where they carry out collaborative research that is related to their project.

A strong independent evaluation component has been implemented so that the efficacy of the program can be demonstrated. These goals have not changed since submission of the original proposal. Specifically, the UNM MARC U*STAR goals are (1) to increase the academic performance and research experience of Biology, Chemistry and Biochemistry majors (B/CIBC); (2) to recruit five under-represented students per year as MARC U*STAR scholars, and prepare them for two years for post-baccalaureate study and research careers; (3) to increase the number of under-represented students as MARC scholars who are entering biomedical research careers; and (4) to identify effective strategies that can be implemented at UNM to encourage under-represented students to enter graduate research degree programs. After graduation, most MARC scholars go on to graduate school in the biomedical sciences.

The current U*STAR Program, “Undergraduate Biomedical Research Training,” is funded from June 1, 2006 to May 31, 2011, and Dr. Mary Anne Nelson serves as its Program Director. The program receives approximately $320,000 in direct costs and $25,000 for indirect costs (8% F&A) per year. In October 2008, 10 MARC scholars attended the Society for the Advancement of Chicanos/Latinos and Native Americans in the Sciences (SACNAS) national meeting in Salt Lake City, Utah with more than 2,500 other students and attendees from around the country. At this meeting, three MARC scholars were awarded “Best Poster Presentation” within their respective fields of study (mentors in parentheses): Nick Santistevan (Xinyu Zhao), Alex Washburne (Helen Wearing and Eric Toolson), and Antonio Abeyta (Jac Nickoloff). Their topics ranged from mathematical models of virus infection to molecular mechanisms for maintaining eukaryotic genome stability. The MARC Program requires students to study one summer at another research institute, known as the “Summer Research Experience”; in 2009, they studied across the U.S., from Oregon to New York City.

Molecular Biology Facility

The Molecular Biology Facility (MBF) provides three principal areas of support. First, it is a common equipment facility for faculty and students who routinely use the tools of molecular biology in their research. Second, it is a support facility for faculty and students who do not have laboratory space of their own suitable for conducting research that utilizes molecular biology techniques. Third, the MBF provides support for several classes with teaching equipment, student training, and outreach to non-UNM organizations. All three roles are equally important and interdependent. Faculty and students from other A&S Departments, including Anthropology, Earth & Planetary Sciences, and Chemistry, and from the Schools of Medicine and Engineering, also utilize the MBF for both research and training.

Based on data from the Office of Research Services, there were 45 grants active this year that utilized or depended on the MBF. These grants amounted to more than $23M in total awards.

Based on a search of the ISI Web of Knowledge database, there were 35 MBF-related peer-reviewed manuscripts published in FY 2008–09.
More than 56,000 sequence, microsatellite, and amplified fragment length polymorphism (AFLP) samples were run on the MBF's two ABI 3130xl Genetic Analyzers this year.

The MBF purchased two large pieces of equipment: A Kodak Gel Logic 2200 Digital Imaging System for gel documentation and a NanoDrop ND-2000c spectrophotometer for DNA, RNA, and protein quantification.

The remodeling of Castetter Hall 233 will start early in the fall semester of 2009, supported by a Stimulus Package Supplement grant awarded to the MARC program.

**Museum of Southwestern Biology**

Dr. Thomas Turner was promoted in August 2009 to full Professor and continued his work as the Director of the Museum of Southwestern Biology. Also in August, Dr. Kelly Miller was awarded his National Science Foundation Collections Improvement Grant (Reinvest American funds).

Drs. Joseph Cook and Steven MacDonald published their latest book: MacDonald, S.O. and J.A. Cook. 2009. *Recent Mammals of Alaska.* University of Alaska Press. Hardbound: 387 pages. Price: $55.00 U.S. This authoritative reference is the first comprehensive accounting of the 116 mammal species (extinct and extant) that have inhabited Alaska and adjacent waters during the last ten thousand years (the Holocene). The book has three primary sections: introduction and overview, individual species accounts, and appendices. Each species account includes taxonomy, common names, systematics, distribution, habitat, status, fossils and range maps. The book is generously illustrated with line drawings by W.D. Berry and others. Appendices summarize information on distribution, specimens, conservation status, introductions and translocations, island faunas, and provide an overview of the pre-Holocene fauna based on the fossil record. *Recent Mammals of Alaska* is the first accessible reference on this topic for scholars, wildlife managers, students, and amateur naturalists.

Chris Frazier and co-authors John Wall (Royal Botanic Gardens, Kew) and Sharon Grant (The Natural History Museum, London) had published in June 2009 *Initiating a Collection Digitisation Project.* This document is designed to give the reader the confidence to get started and to make the right decisions when planning a natural history collection digitization project. The authors have years of experience working with collections and they have instilled this expertise into this paper so one can more efficiently ask the right questions and make the appropriate plans prior to committing any resources to the task. Published by Global Biodiversity Information Facility http://www.gbif.org.

The MSB participated in the Annual Meeting of the American Fisheries Society-Western Division held at the Albuquerque Convention Center May 3-7, 2009. The theme of the meeting was “Evolution of the Western Landscape: Balancing Habitat, Land, and Water Management for Fish.” There are a number of special symposia that focus on the management and conservation of New Mexico's fisheries. In addition, senior personnel from the MSB Division of Fishes and Department of Biology will host a workshop entitled “Genetics and Fish Management” More information can be found at http://www.aznmfishsoup.org/wdafis09/index.htm.
Jolene Rearick received in April 2009 a new award from the National Science Foundation on her Graduate Research Fellowship Grant. This is a three-year fellowship beginning the summer of 2009.

Gino Nearns and Traci Gryzmala attended the Annual Meeting of Southwestern Branch of the Entomological Society of America (SWBESA) in Stillwater, OK (on the Oklahoma State University campus), February 23-26, 2009. They both won awards for their presentations: “On the Longhorned Beetles of the World: A Phylogeny Based on Molecular Data” (Gino Nearns) and “Preliminary Morphological Analysis for Systematic Revision of the Longhorned Beetle Genus Elytroleptus Dugès (Coleoptera: Cerambycidae: Cerambycinae: Trachyderini)” (Traci Gryzmala).

For 32 years, the Tucson-Pima County Public Library has presented “Southwest Books of the Year”; in 2009, the UNM Press celebrates *A Field Guide to the Plants and Animals of the Middle Rio Grande Bosque*, Jean-Luc E. Cartron, David C. Lightfoot, Jane E. Mygatt, Sandra L. Brantley, and Timothy K. Lowrey. Available from the University of New Mexico Press (http://unmpress.unm.edu/), it is one of three books chosen as top picks of 35 panelists.


Dr. Jerry Dragoo, Research Assistant Professor of Biology and Research Associate of the MSB, was featured on NATURE on January 25, 2009 on KNME, Albuquerque’s local PBS station, in the show, “Is that Skunk?” Jerry is an expert on skunks and frequently is called upon when kits are endangered or a stray has been picked up. He rehabs them at his home and when they are sufficiently ready, he releases them back to the wild. Go to: http://www.pbs.org/wnet/nature/episodes/is-that-skunk/introduction/4514/ for information about the show.

Division of Amphibians and Reptiles Curator Dr. Howard Snell described a pink iguana in the Galápagos in a paper published in the Proceedings of the National Academy of Sciences USA (http://www.pnas.org/content/106/2/507). Professor Snell is part of a team of researchers that described a spectacular new iguana species from Isabela island in the Galápagos Islands off the coast of Ecuador. You can hear the NPR interview with Dr. Snell at https://www.npr.org/templates/story/story.php?storyId=99211626.

Natural Heritage New Mexico

Since 1991, Natural Heritage New Mexico (NHNM) has provided current scientific information, research and education on biodiversity conservation and sustainable natural resource management for the state. In FY 2008–09, we continued to expand our conservation science activities and build our conservation information dissemination capacity.

The zoology group conducted research on water needs of the endangered Southwestern Willow Flycatchers, remote sensing surveys for Gunnison’s prairie dogs, and surveys for endangered raptors and riparian birds. Our botanist continued work on a multi-year study of the endangered Sacramen-to Prickly Poppy, and he developed monitoring protocols and conducted surveys of the endangered Holy Ghost Ipomopsis. The ecology group is developing a tool for evaluating wetlands for conser-
vation, restoration and management, and helped to establish monitoring of riparian restoration in the Middle Rio Grande. They continued doing vegetation classification and maps for national parks. The data management group improved the NM Biodiversity Collections Consortium Web site (http://nmbiodiversity.org), which has data from all the state's natural history museums. They added or updated more than 3,000 records to program databases, responded to custom information requests, and provided more than 24,000 information downloads from the Web site.

One of the program's main challenges is to let New Mexicans know about the services offered in support of biodiversity conservation in New Mexico. For more information, see http://nhnm.unm.edu.

Postbaccalaureate Research and Education Program

The UNM Postbaccalaureate Research and Education Program (UNM PREP) is a biomedical research training program focused upon minorities and socioeconomically under-represented individuals who plan to enter a Ph.D. program. Through a series of defined objectives, the program recruits high-quality, under-represented scholars; develops and realizes individualized training plans to provide laboratory research experience and academic training so as to improve the skill set of these scholars; provide additional training modules to develop the professional skills of these scholars; provide support and training in the successful application of these scholars to Ph.D. programs; investigate the parameters affecting graduate school retention; and use these data to improve graduate training at UNM. It is anticipated that the results of this training will be to increase the numbers of under-represented individuals in the sciences, and to increase research focus and awareness upon reducing health disparities.

The Program in Interdisciplinary Biological and Biomedical Science

The Program in Interdisciplinary Biological and Biomedical Science (PiBBS), funded by the Howard Hughes Medical Institute and begun in Fall 2006, is a collaboration among the departments of Anthropology, Biology, Computer Science, Electrical and Electrical and Computer Engineering, Physics, Math and Statistics at UNM, Los Alamos National Laboratory, and the Santa Fe Institute. The impetus for PiBBS was the recognition that continued progress in fundamental problems in biology and biomedical science requires the input of new ideas, methodologies, and investigative strategies from the physical sciences, engineering, and mathematics, yet few scientists are trained or possess the necessary skills to conduct effective interdisciplinary work.

In September 2008, PiBBS experienced a program transition as the then-program-coordinator Shannon McCoy-Hayes became the new Biology Department Undergraduate Advisor. This loss left a hole almost impossible to fill, as Shannon had been with PiBBS since its inception. Program directors Drs. James Brown and Felisa Smith quickly began the search for a new program manager, having submitted a grant proposal to NIH for continuation funding for Phase II of the program. In February 2009, Fornessa Randal, a 10-year veteran of UNM's North Campus, joined the PiBBS staff as program manager, and in March 2009, PiBBS received Phase II funding from NIH for $970,000 over five years.
In addition to the program leadership changes, PiBBs has received approvals for all core PiBBs fellowship courses to be added to the UNM catalog. An institutional breakthrough!

PiBBs recently named its new Fellows for the 2009–10 academic year: Eduardo Castro, ECE; Christian Gunning, Sarah Joyce and Shawn Whiteman, Biology; Drew Levin, Computer Science; Catherine Mitchell, Anthropology; Glenn Stark, Math & Statistics; and Kathrin Spendier, Physics. The PiBBs curriculum plan is to develop a Ph.D. Minor in Integrative Biology to further institutionalize the program. As of the last academic year, this will be the second Ph.D. minor program on the UNM campus.

PiBBs will move into its new home in the newly constructed first floor of the Castetter Hall addition in November, 2010.

Sevilleta Long Term Ecological Research Program

The Sevilleta Long Term Ecological Research (LTER) Program addresses ecological concepts and theory through a comprehensive and interdisciplinary research program in desert grassland, shrubland, forest and riparian habitats in central New Mexico. Its focal sites are the 100,000-ha Sevilleta National Wildlife Refuge (SNWR) located about 80 kilometers south of Albuquerque (managed by the U.S. Department of the Interior, Fish and Wildlife Service) and the Middle Rio Grande (MRG) bosque between Cochiti Dam and Elephant Butte Reservoir. Since its inception in 1988, the Sevilleta LTER Program has conducted research at multiple ecological levels and a variety of spatial and temporal scales. Its studies are linked by an overarching theme that considers how abiotic drivers and constraints affect dynamics and stability in aridland populations, communities and ecosystems.

The Sevilleta LTER Program is a long-term, comprehensive, integrated, interdisciplinary research program addressing key hypotheses on pattern and process in aridland ecosystems. Its LTER research in central New Mexico is concentrated on studies in desert grassland and shrubland communities and pifion-juniper and riparian (“bosque”) woodlands emphasizing transitions in space and time. Each landscape component is governed by key abiotic and biotic drivers, especially climate variability, fire, hydrologic variability, nutrient dynamics, and herbivory. The rates and intensities of these drivers are changing over time. Given the emerging research interest in ecohydrology of aridlands, its focus on the effects of biotic and abiotic drivers on spatial and temporal dynamics of these aridland ecosystems allows long-term research to be conducted that addresses important basic ecological questions and yet has significant relevance to state, regional, national, and international priorities.

See Appendix I for The Sevilleta LTER’s annual report.

The Sustainability Studies Program

The UNM Sustainability Studies Program (SSP) had another banner year in terms of student enrollment and project development and completion. Dr. Bruce Milne, Director of SSP, who taught SUST 434 (Synthesis of Sustainability Perspectives) during the Spring 2009 semester, worked with a group of students who researched and wrote the preliminary report for the Carbon-
Neutral Plan for campus. At the end of the semester the students presented their report to a group of interested parties, including the Carbon-Neutral Task Force members. The report was well-received and had input from task force members and other interested business and community members.

Maggie Seeley, an instructor for SUST 134 (Introduction to Sustainability) had her students at several local farms learning about soil preparation, planting, watering, weeding and harvesting. Students also were exposed to the basics of permaculture design, water catchment systems, measuring and monitoring their carbon footprint, and other sustainable practices.

Enrollment in the SSP continues to grow, including the number of students who have now claimed Sustainability as their minor. Additionally, another section of SUST 134 has been added for the Fall 2009 semester to include students who could not sign up because this class, in particular, fills up quickly. With this addition, we anticipate our capacity will continue to grow at a constant rate.

With the additional capacity comes the increasing demand for funding, which for this program has been meager at best since FY 2007. It continues to seek funding, yet receives only enough to maintain the status quo. That is, this program requires funding that allows the program to grow at an exponentially sustainable rate.

The SSP continues to work with business and community members to evolve its main outreach program—FoodPrintNM. During Fall 2008, the name was changed from the Alliance for a Carbon-Neutral Foodshed. FoodPrintNM includes major stakeholders such as the Mid-Region Council of Governments (MRCOG), La Montanita Coop, and the UNM Sustainability Studies Program.

The SSP mission is to create a thriving New Mexico food-supply system while contributing to a balanced carbon budget. Through research, education, and hands-on activities, it engages food producers, processors, distributors, consumers and policymakers to create social networks, innovative systems, and the supporting infrastructure.

The SSP major goals are to (1) promote the development of a carbon-neutral infrastructure for food production, distribution & storage; (2) educate producers and consumers; and (3) conduct an analysis of economic options, environmental health, and public land and labor policies.

For more information about the Sustainability Studies Program, please visit http://sust.unm.edu.

Undergraduate Research and Mentoring Undergraduate Nurturing Opportunities Program

The Undergraduate Research and Mentoring (URM) Undergraduate Nurturing Opportunities (UNO) program integrates research and education through the seminars and participants' laboratory experiences. The specific goal of this five-year program is to recruit and prepare at least 20 undergraduate students (four cohorts of five students [10 students per year when the cohorts overlap]) for graduate study and research careers. All students will have one to three years of preparation and concentrated research with faculty mentors based in the Museum of Southwestern Biology.
(MSB), Sevilleta Long Term Ecological Research (LTER), UNM Department of Biology, and UNM's University Honors Program. Sophomores are recruited, targeting under-represented students who qualify and are interested in biology, from UNM, Dine (Navajo) College, Central New Mexico Community College (CNM), Southwestern Indian Polytechnic Institute (SIPI) and other institutions in the Southwest U.S. The applicant pool of 29,499 students at these institutions includes 4,048 American Indian, 635 Asian/Pacific Islanders, 786 Black, 12,305 Hispanic, 2,100 Other Ethnicities, and 9,625 Anglo students. We use a multi-level mentoring approach, involving students at various academic stages, so UNO participants choose successful paths to graduate school. In addition to Faculty Mentors, the program includes a rotating Graduate Mentor, a Peer Mentor from the Honor's Program, and each student is assigned a Graduate Mentor to help navigate course work and research demands.

The URM UNO project directly increases the diversity and level of participation by under-represented students in advanced graduate training and research careers. The project indirectly influences more students from under-represented groups—friends of those who are selected, and others who apply to the program (and possibly selected for another program)—to seek graduate-level training. Already, it has strengthened UNM partnerships with SIPI and CNM for future recruitment and programs. Furthermore, from the first day in their experience, UNO participants include their families (members of the public), thereby receiving their support and interest in the research they are conducting. Overall, it is an experience that they will take with them their entire lives.

For more information, please visit http://www.msb.unm.edu/mammals/URMUNO.html.

BUILDING ISSUES

For the most part, this has been a good year for new building initiatives in Biology. The Phase I building was completed, including build-out of the second floor and members of the Loker group have populated that space.

The first floor of the Phase I building received support from the President's office to the tune of $420,000. This money, being used to create space for the prestigious PiBBS group, should be completed in 2009.

Biology also has some funding for Phase II projects. The first of these, the creation of new greenhouse space on the roof of the Phase I shell, currently is being constructed and is scheduled for completion later in 2009.

The next step in the Phase II construction is the construction of a three-floor research building immediately to the east of the Phase I building; this is due to commence in early 2010. While one floor of this building will be finished out with the existing money, Biology is hoping that a remaining $3.7 million request in the next GO bond ballot will support the completion of this space.

Although these very positive events have occurred, it must be pointed out that the remainder of Castetter Hall is in serious need of renovation and upgrading. Several parts of the 1950s part of the building are still being used for instruction and are in desperate need of support. In addition, moves
into the new building generate useful back-fill space, but which is in need of renovation before providing it for new or existing faculty members’ laboratories.

DONOR RELATIONS

2008-09 Scholarship Winners

➢ Melinda Bealmer Memorial Scholarship (awarded to graduate students to attend and present at conferences): SUSAN MIRABAL
➢ Cocalina Memorial Scholarship (assists undergraduate women students in their pursuit of science): DIANE PATER
➢ Crawford Rio Grande Scholarship (assists graduate students conducting research related to the Rio Grande Bosque): TREVOR KRABBENHOFT
➢ Rosalie Doolittle Scholarship (funds undergraduates pursuing studies in botany): DIANE PATER
➢ Thelma Evans Trust Scholarship (provides support for those pursuing a career in veterinary medicine): LIA HULSBSOS, STACEY REAL, JENNIFER RODRIGUEZ, HAGIT SALAMON, MELISSA SMITH and PATRICIA WARNE
➢ Joseph Alvin Gaudin Jr. Scholarship (awarded to students studying mammals, in particular members of the cat family [Felidae]): IVY BROWN, ANDREW EDELMAN, JACOB GREENBURG and WENYUN ZUO
➢ Alvin R. & Caroline Grove Scholarship (awarded to graduate students who show scholastic and academic achievement in their primary research field): William Dunn
➢ Alvin R. & Caroline Grove Summer Scholarship: KATHLEEN CHUCHRA-ZBYTNIUK, JENNIFER HATHAWAY, ANDREW HOPE, SALLY KOERNER, JOLENE REARICK and MASON RYAN
➢ Alvin R. & Caroline Grove Research Scholarship: BRITTANY BARKER, TRACI GRZYMALA, ANGELA HUNG, JORDAN ORIE and RHIANNON WEST
➢ Dr. Lynn Hertel Graduate Research Award (supports the research program of graduate students completing their thesis or dissertation): TREVOR KRABBENHOFT
➢ Maurice Hughes Scholarship: WILLIAM EDELMAN
➢ Dr. Harry Wayne Springfield Scholarship (provides funds to conduct research in plant ecology): KATHLEEN CHUCHRA-ZBYTNIUK

UNM Foundation Summary

FY 2008-09 brought many changes to the department’s Foundation Account. The Department started the year with:

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During this time, many of the endowments were re-engineered to bring maximum return for the department and divisions. For example, the Natural Heritage New Mexico Program converted its non-endowed spending account to a quasi-endowment so that it could yield additional interests and funds. While the economy played a major role in the dollar value of contributions, the Department noticed an increase in overall contributions this year. Additionally, three new endowments were established by large contributions from donors. Furthermore, the Department was able to make a significant contribution back to its endowment ($35,000). The Department also was able to make record-high awards in the area of student scholarships, thus many students benefitted from scholarships this year. The fiscal year ended with the following results:

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The department intends to continue working closely with the A&S Development team, primarily Bill Uher, to increase donor relations.

Richard M. Cripps
Professor and Chairman
October 2, 2009
APPENDICES

FY 2008–09

ANNUAL REPORT

UNM DEPARTMENT

OF BIOLOGY
APPENDIX A

FACULTY LIST
UNM DEPARTMENT OF BIOLOGY
Faculty 2008-09

Distinguished Professors

James H. Brown
Eric L. Charnov
A. Randy Thornhill

Professors

Brenda J. Claiborne
Scott L. Collins
Joseph A. Cook
Richard M. Cripps
Clifford N. Dahm
Astrid Kodric-Brown
Eric S. Loker
Timothy K. Lowrey
Diane L. Marshall
Robert D. Miller
Bruce T. Milne

Donald O. Natvig
Mary Anne Nelson
David J. Schmidly
Robert L. Sinsabaugh
Howard L. Snell
Steven A. Stricker
Eric C. Toolson
Thomas E. Turner
Robert B. Waide
Margaret Werner-Washburne

Associate Professors

Charles Cunningham
David T. Hanson
William T. Pockman
Steven Poe

Felisa A. Smith
Cristina D. Takacs-Vesbach
Andreas Wagner (on Leave of Absence)
Blair O. Wolf

Assistant Professors

Ulfar Berghorson
Vaishali Katju
Marcy E. Litvak
Kelly B. Miller

Helen J. Wearing (joint appointment with Math & Statistics)
Christopher C. Witt

Lecturers

Coenraad Adema
Lee Couch
Cara Lea Council-Garcia
Paul Farnsworth
Christina O. Fridrick

Bruce V. Hofkin
Kelly A. Howe
Marieken G. Shaner
James Swan
APPENDIX B

STAFF LISTS
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### UNM DEPARTMENT OF BIOLOGY STAFF 2008-09

#### HIRES

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#### PROMOTIONS

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### SEPARATIONS

1. Adamson, Tierney
2. Arzate, Jamin
3. Brunner, Sylvia
4. Candelaria-Ley, Roxanne
5. Charkroff, Aleksandr
6. Cordova, Gloria
7. Gauntt, Jana
8. Gauntt, Jana
9. Gomez, Celina
10. Hall, Justine
11. Hathaway, Jennifer
12. Hawk, Andrew
13. Hicks, Sarah
14. Kennedy, Amanda
15. Lovato, Leanne
16. Nag, Kamalika
17. Reyes, Janna
18. Ruby, Maria
19. Sacher, Sandy
20. Sais, Reyes
21. Sanchez, Lilliana
22. Sledge, David
23. Soole, Abby
24. Thomey, Michell
25. Trueitt, Bradley
26. Young, Eric
APPENDIX C

DEPARTMENTAL COMMITTEES
Faculty Committee
Assignments - 2008/2009

Chairman
Eric (Sam) Loker

Associate Chairs
Rich Cripps
Steve Stricker

Director, Museum of SW Biology
Tom Turner

Graduate Student Selection
Felisa Smith, Chair
Dave Hanson
Vaishali Kaqu
Cheryl Martin
Bruce Milne
Don Natvig
Steve Poe
BGSA, Ian Murray

Cell Biology Search?

Tenure and Promotion
Mary Anne Nelson, Chair
Jim Brown
Scott Collins
Tim Lowrey
Diane Marshall

Honors Program
Shannon McCoy-Hayes

Undergraduate Policy
Committee
Charlie Cunningham, Chair
Shannon McCoy-Hayes
Steve Stricker
Jim Swann
BGSA—Casey Gilman

Depl Review / Outcomes
Christina Fridrick

Graduate Policy
Astrid Kodric-Brown, Chair
Randy Thornhill
Chris Witt
Cheryl Martin
BGSA, Mason Ryan

Space/Buildings
Steve Stricker, Chair
John Cox
Cheryl Martin
Roy Ricci
George Rosenberg

10/21/08

BGSA, Angela England

Seminars
Dave Hanson
Lorenzo Garcia

Graduate Advisors
Ric Charnov
Don Natvig

Computers
Eric Toolson, Co-Chr
Nancy Davis, Co-Chr
Anne Rice
George Rosenberg
BGSA, Osario Meirelles

Greenhouses
Diane Marshall, Chair
David Hanson
Jane Mygall
Joy Avritt
BGSA, Nate Abrahamson

Research Day
Kelly Howe, Chair
Coen Adema
Ulfar Bergthorsson
Bruce Hofkin
Kelly Miller
Will Pockmann
Anne Rice
Tina Vesbach
BGSA, Angela England
BGSA, Brittany Barker
BGSA, Dolly Crawford

Graduation
Paul Farnsworth, Co-Chr
Christina Fridrick, Co-Chr
Kelly Howe
Anne Rice
Cheryl Martin
Jim Swan

Biology Graduate Student Association
BGSA, Sally Koerner,
Jason Malaney
Scott Collins, Fac sponsor

Curators
Joe Cook, Mammals
Tim Lowrey, Herbarium
Kelly Miller, Arthropods
Howard Snell,
Amphibians/Reptiles
Tom Turner, Fishes
Chris Witt, Birds

Joe Cook, Genomic Resources
Sam Loker, Parasites

Museum SW Biology Exec Committee
Tom Turner, Chair
Curators, and Mike Bogan, Steve Stricker

Scholarships
Steve Stricker, Chair
Cheryl Martin
Shannon McCoy-Hayes
Diana Northup
Heather Paulsen
BGSA, Brittany Barker

Undergraduate Academic Advising
Shannon McCoy-Hayes
Mariellen Shaner
Roxanne Candelaria-Ley
Cara-Lea C-G
Kelly Miller
Eric Toolson

Pre-Vet Advising
Bruce Hofkin

Department Publicity
Lee Couch

Field Programs and Vehicles
Bob Sinsabaugh
Blair Wolf

Mol. Biology Facility
Rob Miller

Microscopy Facility
Steve Stricker

Library Liaison
Maggie WW

LTER Director
Scott Collins

LTER Network Office Director
Bob Waide

Sevilleta Field Station Director
Don Natvig

IMSD Director
Maggie Werner-Washburne
CETI Director
Eric (Sam) Loker

BGSA Computer Pod
BGSA, TBA

Website Re-design
Eric Toolson
Nancy Davis

Animal Care and Use
Blair Wolf

New Grad Student Orientation
Vaishali Katju (2009-10)
Helen Wearing (2009-10)

Glass Case Displays
Lee Couch

Salary Committee
Joe Cook
Rob Miller
Bob Sinsabaugh

Univ. & College Committees
A&S Senior Promotion
TBD by A&S

A&S Tenure and Promotion
TBD by A&S

A&S Undergrad Representative

Center for Research in Ecol Sci and Tech

Consortium for the Americas
Bruce Milne

Faculty Senate
Howard Snell

RAC Committee
Bob Waide

UNM Biosafety
Coen Adema

UNM Radiation Control Committee
Ulfar Berghorsson

University Scholarship and Awards Committee
Howard Snell

Executive Research Advisory Committee (ERAC)
Scott Collins

UNM Sustainability Studies Program, Director
Bruce Milne

UNM Freedom/Tenure
Tim Lowrey

UNM Admissions and Registration

BA/MD Program Liaison
Helen Wearing

PIBBS Director
Jim Brown
Felisa Smith

MARC Director
Mary Anne Nelson

SEEDS Chapter
Scott Collins

BGSA Computer Pod
Osario Meirelles

Biology/Chemistry Exploratory Committee
Rich Cripps
Charlie Cunningham
Maggie W-W

UNM Freedom/Tenure
Tim Lowrey

UNM Admissions and Registration

BA/MD Program Liaison
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MARC Director
Mary Anne Nelson

SEEDS Chapter
Scott Collins

BGSA Computer Pod
Osario Meirelles

Biology/Chemistry Exploratory Committee
Rich Cripps
Charlie Cunningham
Maggie W-W
APPENDIX D

GRADUATE

DEGREES AWARDED
UNM Department of Biology
Graduate Degrees Awarded by Semester, 2008–09

SUMMER 2008

M.S.

Calabrese, Laura B., “Effects of Fire, Grazing, and Topographic Variation on Vegetation Dynamics in Tallgrass Prairie.” (B.O. Wolf)

Frances, Jose, “Spatial Genetic Structure and Population History of the Wolverine in Western Northern America with Emphasis on Peripheral Population.” (J.A. Cook)

Hulebak, Erik, “Species Limits in Panamanian Anolis limifrons.” (S. Poe)

Imani-Shikhabadi, Reza, “Gene Expression Analysis of Stress Challenged Schistosoma mansoni Worms.” (E.S. Loker & C. Cunningham)

Lipinski, Kendra, “Genome Adaptation During Recovery from Mutation Accumulation in Obligate Outcrossing Populations of Caenorhabditis elegans.” With Distinction. (Bergthorsson, U.)

Melman, Sandra D., “Reduced Susceptibility of Kenyan Schistosoma mansoni to Praziquantel Following Repeated Exposures: Origin, Measurement and Likelihood of Persistence.” (E.S. Loker)

Ph.D.

Boyer, Alison, “Evolution and Ecological Correlates of Body Size, with Special Emphasis on Pacific Island Birds.” (J.H. Brown)

Fincher, Corey, “Infectious Disease, the Ecology of Human Values, and Cross-national Variation in Human Life History.” (R.Thornhill)


Newberry, Teresa, “Multi-scale Temporal Variability of Water Relations in Piñon Pine (Pinus edulis).” (W.T. Packman)


Ryan, Kathryn, “The Homeotic Selector Genes and the NK Homeodomain Transcription Factor Tinman Together Control Cardiac Seven-up Expression in the Drosophila Dorsal Vessel.” (R.M. Cripps)

Zeglin, Lydia, “Microbial Diversity and Function at Aquatic-Terrestrial Interfaces in Desert Ecosystems.” (C.N. Dahm)
FALL 2008

M.S.

Powers, Heath H., “Dynamic Soil Chamber System Coupled with a Tunable Diode Laser for Online Measurements of delta-13-C, delta 18-O, and Efflux Rate of Soil Respired Carbon Dioxide.” (W.T. Packman and D.T. Hanson)

Tichy, Jennifer L., “A Comparison of Stream Metabolism Models in the Valles Caldera National Preserve, NM.” (C.N. Dahm)

White, Sue A., “Vegetation and Environmental Controls on Soil Respiration in a Piñon-Juniper Woodland.” (W.T. Packman)

Ph.D.


Dichosa, Armand E.K., “Biogenicity and Microbial Community Composition of Desert Varnish and Cave Ferromanganese Deposits.” (L.L. Barton and D.E. Northup)

Martinet, Maceo C., “Hydrological and Biogeochemical Characteristics of the Río Grande of New Mexico along the Albuquerque Reach.” (C.N. Dahm)


SPRING 2009

M.S.


Archuleta, Michelle, M.S. Plan II (C. Cunningham)

Ph.D.

Delong, John P., “Population and Community Energetics in Protists.” (D.T. Hanson)


Wilson, Wade D., ” Salmonid Evolution Illuminated: Geographical Genetics, Immunity and Parasitism.” (T.E. Turner)
M.S.
Cleavall, Lauren, “The Description of *Thermonectus nigrofasciatus* and *Rhantus binotatus* (Coleoptera: Dytiscidae) Mating Behavior.” (K.B. Miller)
Green, Laura E., “Transient De-coupling of Photosynthesis and Stomatal Conductance in Response to Leaf Primary Vein Cut in *Helianthus annus*.” (W.T. Pockman)

Ph.D.
Bickford, Christopher P., “Environmental Regulation of Carbon Isotope Discrimination and Internal Conductance in C₃ Leaves.” (D.T. Hanson)
APPENDIX E

GRADUATE STUDENTS
& FACULTY ADVISORS
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APPENDIX F

COURSE FEE SUMMARY
UNM DEPARTMENT OF BIOLOGY
Course Fees Review

Overall FY 2004/05–2008/09
The Course Fees Account was established to help departments recuperate costs associated with expensive teaching classes. Unfortunately, because funding from the Legislature is inadequate to support fully the teaching mission, the Course Fees Account passes to all students some or all of the costs associated with teaching. In FY 2006–07, when the Biology Department faced extreme deficits in the I&G account, as well as providing state-of-the-art equipment for a new basement renovation that teaches the core undergraduate laboratory classes, the decision was made to charge the following course fees:

- $5.00 for all lecture classes;
- $10.00 for all discussion classes;
- $30.00 for all lab classes;
- $75.00 for all field trip and anatomy and physiology classes.

This account must be spent on course-related supplies and is reconciled after every semester. This account also is subject to the Banner and Regent's taxes. The Biology Dept. was able to contribute $57,000 to finish lab renovations in the new teaching classrooms/labs, which is important in showcasing the programs that the department offers. The following table shows the revenue received for each fiscal year from course fees.

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<tr>
<td>Revenue</td>
<td>$71,260.00</td>
<td>$83,674.30</td>
<td>$136,079.20</td>
<td>$177,293.48</td>
<td>$192,590.00</td>
</tr>
<tr>
<td>Banner Tax</td>
<td>$712.60</td>
<td>$836.74</td>
<td>$1,360.79</td>
<td>$1,772.93</td>
<td>$1,925.90</td>
</tr>
<tr>
<td>Total Revenue</td>
<td>$70,547.40</td>
<td>$82,837.56</td>
<td>$134,718.41</td>
<td>$175,520.55</td>
<td>$190,644.10</td>
</tr>
</tbody>
</table>

Because course demands and expenses have increased continuously, the total revenue has increased significantly over the past five years. The following table shows the percentage increase by fiscal year.

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<tbody>
<tr>
<td>Total Revenue</td>
<td>$70,547.40</td>
<td>$82,837.56</td>
<td>$134,718.41</td>
<td>$175,520.55</td>
<td>$190,664.10</td>
</tr>
<tr>
<td>Percentage Increase</td>
<td>11.58%</td>
<td>14.80%</td>
<td>38.51%</td>
<td>23.24%</td>
<td>8.63%</td>
</tr>
</tbody>
</table>
The major expenses in the Course Fee Account are laboratory supplies. On average, 95.4% of all expenditures incurred in this account are related directly to lab supplies needed to teach classes. The other expenses are related to copying and general administrative costs.

The following chart shows how much money was available to spend on each student based on student data enrollment with respect to the Total Revenue from the table directly above.

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<tbody>
<tr>
<td>Total Revenue</td>
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<td>$82,837.56</td>
<td>$134,718.41</td>
<td>$175,520.55</td>
<td>$190,664.10</td>
</tr>
<tr>
<td>No. of Students</td>
<td>9,668</td>
<td>10,325</td>
<td>10,028</td>
<td>11,511</td>
<td>11,811</td>
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<tr>
<td>No. of Credit Hours</td>
<td>23,250</td>
<td>23,820</td>
<td>23,393</td>
<td>26,842</td>
<td>27,441</td>
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<td>Student Allotment</td>
<td>$7.30</td>
<td>$8.02</td>
<td>$13.43</td>
<td>$15.25</td>
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<tr>
<td>Credit Allotment</td>
<td>$3.03</td>
<td>$3.48</td>
<td>$5.76</td>
<td>$6.54</td>
<td>$6.95</td>
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</table>

Note: Notice that student enrollment continues to increase every year, as well as the number of credit hours being offered. The average student allotment support over the past five years is $12.03, and the average credit allotment support is $5.15. While this money still does not cover all of the costs associated with teaching laboratory classes, it does help to support the teaching mission. This year was the first fiscal year of implementation of the course fees. The department expects to generate approximately $210,000 in revenue to help support the teaching mission, because enrollment continues to increase. Unfortunately, because I&G needs keep increasing and the University rescinds more and more I&G funding, the Department relies more and more on the revenue from course fees. Because the fees are nominal, the Department does not experience a decline in enrollment.
APPENDIX G

MOLECULAR BIOLOGY

FACILITY ANNUAL REPORT
MOLECULAR BIOLOGY FACILITY
Department of Biology
Fiscal Year 2008-2009
Annual Report
Robert D. Miller

The Molecular Biology Facility (MBF) at the UNM Department of Biology provides three principal areas of support. First, it is a common equipment facility for faculty and students who routinely use the tools of molecular biology in their research. Second, it is a support facility for faculty and students who do not have laboratory space of their own suitable for conducting research that utilizes molecular biology techniques. Third, the MBF provides support for several classes with teaching equipment, student training, and outreach to non-UNM organizations. All three roles are equally important and interdependent. Faculty and students from other A&S Departments, including Anthropology, Earth & Planetary Sciences, and Chemistry, and from the Schools of Medicine and Engineering, also utilize the MBF for both research and training. Based on the data contained in this report, the MBF is arguably among the most heavily utilized support units within the Biology Department.

The MBF’s role in education and training in the Department and the community continued this fiscal year. Four courses taught within Biology (Bioi. 352, 425, 446, 478) used the facility. The most critical role in training which the MBF plays, however, remains direct, hands-on research experience for graduate students and undergraduates working on independent projects with faculty mentors.

Highlights for the 2008-2009 fiscal year include:

1. Based on data from the Office of Research Services, there were 40 grants active this fiscal year that utilized or depended upon the MBF. These grants amounted to more than $23 million in total awards.

2. Based on a search of the ISI Web of Knowledge there were 35 MBF-related peer-reviewed manuscripts published in fiscal year 2008-2009.

3. More than 56000 sequence, microsatellite, amplified fragment length polymorphism (AFLP), and terminal restriction fragment length polymorphism (T-RFLP) samples were run on the MBF’s two ABI 3130xl Genetic Analyzers.
MOLECULAR BIOLOGY FACILITY AT THE UNM DEPARTMENT OF BIOLOGY

STAFF

Director: Robert D. Miller

Research Scientist/Manager: George H. Rosenberg

Teaching Assistants:
Roxanne Candelaria (Fall 2008) and Euginio Nearns (Spring 2009 and Summer 2009)

MAJOR NEW EQUIPMENT ACQUISITIONS

Kodak Gel Logic 2200 Digital Imaging System for gel documentation
NanoDrop ND-2000C spectrophotometer for DNA, RNA, and protein quantification.
/Users: 2008-2009

Faculty (28):

Adema, Barton, Bergthorsson, Brown, Cook, Cripps, Cunningham, Gangestad (Psychology), Hanson, Hunley (Anthropology), Kodric-Brown, Loker, Lowrey, Marshall, Miller, R, Miller K, Natvig, Nelson, Pockman, Poe, Sinsabaugh, Smith, Stricker, Takacs-Vesbach, Thronhill, Turner, Werner-Washburne, Witt

Adjunct or Part-time Faculty (7):

Michelle Baker, Sara Brant, Jerry Dragoo, Bruce Hofkin, Jeff Nekola, Diana Northup, Si-Ming Zhang

Postdoctoral Fellows (14):

Anthony Aragon, Anton Bryantsev, Ayesha Burdett, Maria Chechenova, Ben Hanelt, Patrick Hanington, Larissa Harding, Matt Kirk, Zi Li, Hong Nian, Megan Osbourne, Kathryn Ryan, Michelle Steinauer, Fernando Torres-Perez

Graduate Students (29):

Britney Barker, Melanie Barnes, Dolly Crawford, Armand Dichosa, Traci Grzymala, Jennifer Hathaway, Andrew Hope, Erik Hulebak, John Kavanaugh, Trevor Krabbenhoft, Elisa LaBeau, Kendra Lipinski, Jason Maleney, Juliana Mederos, Kendra Mitchel, Ginny Morris, Eugnio Nears, Zuly Parra, Andrea Porras-Alfaro, Joline Rearick, Joanna Redfern, Meghan Rogahn, Yadeeh Sawyer, Heather Simpson, Jessica Snyder, Jason Thomas, Dave Van Horn, Xin Xin Wang, Wade Wilson

Undergraduates (58):

Keith Adams, Rene Aguilera, Devaraj Aran, Vani Aran, Aurora Auwen, Mathew Bergsten, Joseph Campbell, Carmela Carrasco, Josh Castillo, Dan Colman, Tracy Diver, Ben Ediger, William Edelman, Matt Garcia, Jana Gauntt, Catherine Geisik, Julie Glaser, Jake Greenberg, Julie Glaser, Brita Hakkila, Justine Hall, Jarrett Hines, Alicia Hodson, Miriam Hutchinson, Carmalta Jaramillo, Alex Jenks, Thai Lee, Katie Liberatore, Lindsay Livingstone, Monica Lucero, Grace Mason, Kevin Mitchell, Ashley Montoya, Stephanie Moquin, Monica Moya, Cloyce Nelson, Sierra Netz, Phong Nguyen, Amaka Nwagbologu, Vance Oas, Justin Pichardo, Ashton Pick, Hallie Rane, Gina Ryan, Charles Sanchez, Alana Sharp, Jessica Smith, Kelly Spear, Savannah Stansbury, April Tafoya, Ashley Talbot, Phillip Tapia, Nicole Telles, Bradley Tonnessen, Amanda Watson, Doug Whalen, Melissa Wilson, Andrew Young

Research Staff (17):

Melanie Adams, Erica Baca, Yvonne Bishop, Swagata Chakraborty, Pauline Cupit, Michele Denton, John Dunnum, Michele Forys, Jennifer Hathaway, Elizabeth Hatton, Jessica Jakubanis, Mary Ann Jaramillo, Candice Lovata, Tyanna Lovato, Bonnie Lun, George Rosenberg, Brad Truett
Visiting Scientists Using the Facility (11):

Dulce Arango working with Pat Dolan (Sandia Labs)
Megan Friggins (Northern Arizona University) working with Dr. Yates/Parmenter
Jennifer Hernandez Gifford (New Mexico Highlands University)
Jose Herrera (Truman State University) working with Dr. Sinsbaugh and Dr. Natvig
Eric Lelo (KEMRI, Kenya) working with Dr. Loker
Carol Linder and Lisa Bentson (New Mexico Highlands University)
Wael Lotfy (Medical Research Institute Alexandria, Egypt) working with Dr. Loker
Bryce Ricken working with Amy Powell (Sandia Labs)
Mary Ann Shaw (New Mexico Highlands University)
Arjun Thapa (Chemical Engineering/UNM Lopez Lab)
Hong Zhao (Chemistry/Dunaway-Mariano Lab)

INSTRUCTION AND TRAINING

Formal Courses that used the MBF

Biol 352 General Microbiology Lab
Biol 425 Molecular Genetics
Biol 446/546 Molecular Methods
Biol 478 Plant Physiology

Undergraduate Training Programs whose students or Fellows used the MBF

1. IMSD
2. MARC
3. UNO
SPONSORED PROJECTS USING THE MBF

Principal Investigator(s): Adema, C
Sponsor: DHHS
Amount: $1,617,430
Title: Anti-Pathogen Responses in Biomphalaria Glabrata
Project Period: 04/01/03-05/31/10

Principal Investigator(s): Barton, L
Sponsor: NM Env Dept
Amount: $20,000
Title: Assessing Nutrient Impairment of Streams and Aid in the Development of Nutrient Criteria
Project Period: 03/23/06-09/30/09

Principal Investigator(s): Cook, J
Sponsor: Forest Service
Amount: $49,983
Title: Mammal Inventory of the Tongass National Forest
Project Period: 07/19/05-07/31/10

Principal Investigator(s): Cook, J
Sponsor: National Securities Technology
Amount: $15,000
Title: Hanta Virus Study-Nevada Samples
Project Period: 06/01/07-10/01/09

Principal Investigator(s): Cook, J
Sponsor: NSF
Amount: $624,060
Title: URM: Undergraduate Nuturing Opportunities in the Biological Sciences in the Southwestern U.S.
Project Period: 09/01/07-08/31/10

Principal Investigator(s): Cook, J
Sponsor: NSF
Amount: $259,285
Title: Collaborative Proposal - Curation, Data Basing and Integration of the Orphaned Illinois Mammal Collection
Project Period: 04/01/08-03/31/10

Principal Investigator(s): Cook, J
Sponsor: Forest Service
Amount: $100,000
Title: ISLES - Tongass
Project Period: 08/12/08-09/30/12

Principal Investigator(s): Cook, J
Sponsor: Forest Service
Amount: $7,750
Title: ISLES - Tongass
Project Period: 08/12/08-09/30/12
Principal Investigator(s): Cook, J
Sponsor: NM Game & Fish
Amount: $6,000
Title: Zapus Genetics
Project Period: 03/30/09-06/30/10

Principal Investigator(s): Cripps, R
Sponsor: NIGMS
Amount: $2,132,177
Title: Genetic Regulation of Muscle Fiber Diversity
Project Period: 05/01/01-04/30/10

Principal Investigator(s): Cripps, R
Sponsor: DHHS
Amount: $51,756
Title: Genetic Regulation Of Muscle Fiber Diversity
Project Period: 05/01/04-04/30/10

Principal Investigator(s): Cripps, R
Sponsor: NIH
Amount: $1,278,475
Title: Genetic Regulation of Cell Fate in the Drosophila Heart
Project Period: 04/01/05-03/31/10

Principal Investigator(s): Cripps, R
Sponsor: AHA
Amount: $198,000
Title: Genetic Control of Muscle Remodeling in Drosophila
Project Period: 01/01/08-12/31/10

Principal Investigator(s): Cripps, R
Sponsor: March of Dimes
Amount: $246,713
Title: Specification and Function of the Cardiac Pacemaker
Project Period: 06/01/08-05/31/11

Principal Investigator(s): Cripps, R
Sponsor: NIGMS
Amount: $346,054
Title: UNM PREP (Post-Baccalaureate Research Education Programs)
Project Period: 09/30/05-02/28/10

Principal Investigator(s): Hanson, D
Sponsor: NSF
Amount: $360,000
Title: Light Enhanced 13C Enrichment of Dark Respired C02: Implications for Leaf Internal C02 Conductance and Respiration in the Light
Project Period: 07/01/07-07/31/10

Principal Investigator(s): Loker, S
Sponsor: DHHS
Amount: $10,300,000
Title: COBRE Center for Evolutionary and Theoretical Immunology
Project Period: 09/30/03-11/13/09
Principal Investigator(s): Loker, S  
Sponsor: Dept of Agriculture  
Amount: $16,768  
Title: MR-Collaboration: Praziquantel Resistance in Egypt: Testing and Use of an In-Vitro Assay  
Project Period: 09/01/05-08/31/09

Principal Investigator(s): Loker, S  
Sponsor: NIH  
Amount: $1,276,037  
Title: Biology of Trematode-Snail Associations  
Project Period: 03/01/06-2/29/10

Principal Investigator(s): Loker, S  
Sponsor: NIAID  
Amount: $1,389,147  
Title: Evo-epidemiology of Schistosoma mansoni in Western Kenya  
Project Period: 04/01/04-04/30/10

Principal Investigator(s): Loker, S  
Sponsor: NIH  
Amount: $40,752  
Title: Evo-epidemiology of Schistosoma Mansoni in Children in Kenya  
Project Period: 08/01/08-04/30/11

Principal Investigator(s): Lowrey, T  
Sponsor: NMDEMNR  
Amount: $125,000  
Title: New Mexico Biodiversity Collections Consortium  
Project Period: 07/01/08-12/31/09

Principal Investigator(s): Miller, K  
Sponsor: NSF  
Amount: $166,524  
Title: Collaborative Research: Phylogeny, Behavior and Silk Evolution of Webspinners (Embioptera), A Little-known Insect Order  
Project Period: 02/15/07-08/31/09

Principal Investigator(s): Miller, K  
Sponsor: NSF  
Amount: $19,810  
Title: Collaborative Research: Phylogeny, Behavior and Silk Evolution of Webspinners (Embioptera), A Little-known Insect Order  
Project Period: 02/15/07-08/31/09

Principal Investigator(s): Miller, K  
Sponsor: NSF  
Amount: $134,929  
Title: CAREER:Phylogenetic Revisions of South American Water Beetles(Coleoptera:Adephaga:Hydradephaga):A Model for Teach  
Project Period: 03/15/09-02/28/10
Principal Investigator(s): Miller, R
Sponsor: NSF
Amount: $600,000
Title: Marupial Immunobiology
Project Period: 05/01/07-04/30/11

Principal Investigator(s): Miller, R
Sponsor: NSF
Amount: $6,000
Title: Marupial Immunobiology
Project Period: 05/01/07-04/30/11

Principal Investigator(s): Natvig, D
Sponsor: Forest Service
Amount: $27,500
Title: Does Drought Exacerbate Damage Caused by Bark-Beetle-Associated Fungi in Pinyon-Juniper Woodland Ecosystems?
Project Period: 05/05/06-08/15/09

Principal Investigator(s): Natvig, D
Sponsor: Forest Service
Amount: $6,785
Title: Does Drought Exacerbate Damage Caused by Bark-Beetle-Associated Fungi in Pinyon-Juniper Woodland Ecosystems?
Project Period: 05/05/06-08/15/09

Principal Investigator(s): Nekola, J
Sponsor: NSF
Amount: $33,346
Title: Collaborative Research: Radiocarbon Dating of North American Gastropod Shells
Project Period: 08/15/06-07/31/09

Principal Investigator(s): Northup, D
Sponsor: NSF
Amount: $112,982
Title: Collaborative Research: Biogenic Cave Carbonates: Identifying Surface Carbon Inputs to Subsurface Ecosystems
Project Period: 09/01/07-08/31/10

Principal Investigator(s): Northup, D
Sponsor: SWRNS
Amount: $375
Title: Nutrient Analysis of Microbial Energy Sources in Three New Mexico Lava Tubes
Project Period: 12/01/08-12/01/09

Principal Investigator(s): Turner, T
Sponsor: Bureau of Reclamation
Amount: $305,967
Title: Assessment and Monitoring of Rio Grande Silvery Minnow Genetics
Project Period: 07/15/07-09/30/12
Principal Investigator(s): Turner, T  
Sponsor: NSF  
Amount: $222,709  
Title: Community Responses to River Drying in an Arid-Land Ecosystem: a Field and Experimental Study  
Project Period: 08/15/07-07/31/09

Principal Investigator(s): Turner, T  
Sponsor: NSF  
Amount: $21,000  
Title: Community Responses to River Drying in an Arid-Land Ecosystem: a Field and Experimental Study  
Project Period: 08/15/07-07/31/09

Principal Investigator(s): Turner, T  
Sponsor: TetraTech  
Amount: $33,769  
Title: Survey of Aquatic Community Structure and Food Web Constituents at the Bosque del Apache NWR  
Project Period: 07/01/08-12/31/09

Principal Investigator(s): Werner-Washburne,M  
Sponsor: SNL  
Amount: $25,000  
Title: Use of GFP-Fusion Protein Library for Biosensors  
Project Period: 05/04/09-09/30/09

Principal Investigator(s): Werner-Washburne,M  
Sponsor: NSF  
Amount: $590,947  
Title: The Biogenesis and Survival of Vegetative, Quiescent Yeast Cells  
Project Period: 01/22/07-03/31/10

Principal Investigator(s): Werner-Washburne,M  
Sponsor: NIGMS  
Amount: $604,351  
Title: UNM Initiative to Maximize Student Diversity (IMSD)  
Project Period: 03/01/00-02/28/13

Principal Investigator(s): Zhang, S  
Sponsor: NIAID  
Amount: $742,875  
Title: Molecular Studies of Immuno-Parasitology in Snails  
Project Period: 07/01/07-06/30/10
PEER REVIEWED PUBLICATIONS WHICH UTILIZED THE FACILITY


APPENDIX H

MUSEUM OF SOUTHWESTERN BIOLOGY
SUMMARY
MSB Director’s Summary – Thomas F. Turner, MSB Director

The Museum of Southwestern Biology is different from a typical Research Center! The Museum of Southwestern Biology performs and supports scientific research and is a nucleus for new and integrative research and education opportunities at UNM. It is important to recognize, however, that curators and staff are obliged to serve as stewards for extensive natural history collections and all the materials entailed therein, including (but not limited to) animal and plant specimens, field notes, other archival materials, and electronic archives and inventories. Our curators and staff routinely obtain research funding for special projects, but it is nearly impossible to generate sustained extramural funding for maintenance and preservation of a natural history collection. Thus, UNM has taken on a great responsibility to preserve and protect this priceless resource in perpetuity. In contrast, research centers are designed to be short-lived and are, at least in principle, self-sustaining. There is thus a fundamental difference between UNM Science Museums like the MSB and research centers in the time frame and expected level of extramural support of activities, and the significant duties related to collection growth and maintenance that are outside the mission of a typical research center.

In recognition of the unique role that UNM museums play in the research, outreach, and education missions of UNM, President Schmidly appointed the directors of UNM’s museums to the UNM Collections Committee. This committee was charged with developing general policies for UNM Museums and Collections. An additional charge was to develop an inventory of objects held in UNM’s museums and collections. The committee largely completed these tasks in 2008. The resulting policy document addresses general issues of insurance, inventory, security, responsibility and stewardship. UNM Regents approval is expected in 2009, and subsequent inclusion of major findings and recommendations of the policy document are expected to be included in Big Red thereafter.
MSB Highlights: A Snapshot – As of December 31st 2008, MSB Director Turner completed his second year as Director of the Museum of Southwestern Biology. During calendar year 2008, the MSB continued with major initiatives, as discussed in an open forum (the MSB Retreat was held October 31st 2008) and agreed upon by the MSB Executive Committee that consists of the MSB curators, a collection manager representative, and a representative from the Department of Biology. In 2008, we achieved some important milestones and achieved good progress in the following areas:

- Created the MSB Division of Parasitology with the approval and assistance of the Biology Department and A&S. Activation of the Division is ongoing, and we remain in negotiations to move the US National Parasite Collection to the MSB as a cornerstone of an integrative research and education program in host-parasite interactions. We are seeking ways to fund positions, infrastructure, and an operating budget.

- Finalized an agreement for a full time I&G-supported line for a senior collection manager in the Division of Birds in March 2008. The position will take effect in FY 2010.

- Curated and integrated major federal, state, and “orphaned” university collections into the MSB, resulting in the addition of 300,000 specimens, data, and electronic archives. Activities included integration of the USGS collections into the Divisions of Amphibians and Reptiles (100% complete), Birds (100% complete), Fishes (80% complete), and Mammals (20% complete). The USGS collections will be fully integrated by 2010.

- Completed the demestid beetle facility with funding from the MSB, Biology, and the UNM Provost’s Office. The facility is now fully operational.

- Designed and obtained a complete set of drawings for CERIA 125 renovation for new fluid collection space to alleviate critical shortfalls and a potential fire hazard.

- Undertook a major review and inventory of hazardous materials in a report to UNM Safety and Risk Management. We also conducted a detailed inventory of space and usage in CERIA.

- Reviewed and renewed all applicable federal, state, and local permits for MSB activities.

- Sponsored and participated in intra- and extramural education and outreach activities. In 2008, we hosted an undergraduate-organized Sustainability Symposium in August 2008, conducted tours for special educational programs (i.e., MARC, PREP, UnO), hosted several departmental seminars and distinguished guests, and helped organize a tour with UNM Alumni as part of a program developed by Bill Uher and the UNM Foundation. The MSB routinely conducts tours for K-12 education, and a variety of UNM courses.

- Compiled and completed a 10-year Program Review of the Museum of Southwestern Biology as part of the Department of Biology review. MSB staff met with the review panel. A special panelist was selected by the MSB, Dr. David Wake from the Museum of Vertebrate Zoology at Berkeley, but Dr. Wake was unable to attend the review because of
unanticipated health problems and this diminished the impact of recommendations focused solely on improving the MSB.

- **Developed and completed the MSB Strategic Plan** (available upon request).
- **Participated in an invitation-only workshop at the National Museum of Natural History** in Washington DC that examined the collection, deposition, and curation of materials associated with the NSF-sponsored National Ecological Observatory Network (NEON). About 25 private, federal, and university museum directors developed a plan for specimen collection and curation for this 30-year project. A report of our activities is available upon request.
- **Represented UNM to the Colorado Plateau Cooperative Ecosystems Study Unit** meeting, held in Phoenix, Arizona. This group includes federal and state partners and is designed to facilitate contracts and grants between partners. There is an important role for museums as repositories for natural history and archaeological studies on federal lands on the Colorado Plateau. A 5-year renewal of the federal charter for this group was recently signed and UNM remains a member in good standing. More information can be found on the group's web site http://www.cefns.nau.edu/Orgs/CPCESU/.

### Significant Accomplishments in support of the College Mission

In 2008, the MSB made substantive contributions to the education, research, and service missions of the College of Arts and Sciences and the University of New Mexico in the following areas:

#### Graduate and Undergraduate Training

1) MSB faculty and staff directly mentored and **individually trained 35 graduate students and 54 undergraduate** students in 2008. The MSB provides high quality, hands-on, student research training, research, and curatorial experience. Hands-on experience with conservation, field biology, and biological research translates into placement into jobs for our students in the academic, government, and non-government (NGO) sectors in biology, ecology, evolution, natural resource management and conservation, and natural history museum management.

2) In 2008, MSB faculty and staff continued to develop and recruit students for our museum-centered and NSF-funded undergraduate training grant entitled “URM, Undergraduate Opportunities at UNM). Students from underrepresented groups are the target of this program and in 2008 we trained African-American, Hispanic, and Native American students in the program. In total, **17 undergraduate students were funded and mentored in natural history research** and attended a weekly seminar on how to succeed in graduate school. Retention rates in this program are over 95%, well above UNM’s average.
3) The MSB led a consortium of researchers in A&S, COE, and HSC that led to submission of an invitation-only proposal to the NSF aimed at developing an Integrative Graduate Education and Research Training (IGERT) program. Of 100 full proposals received by the NSF, the MSB-IGERT received good reviews and was placed in the 'high priority' for funding category, but unfortunately, the full proposal was not funded. We intend to strengthen this proposal and resubmit in 2009 - 2010. If funded, this museum-centered IGERT will be the first program of its kind in the nation to our knowledge and will strengthen graduate programs in A&S Biology, Earth and Planetary Sciences, Geography, and Mathematics and Statistics. It will also strengthen our connections to the UNM School of Pathology thereby helping to bridge the Lomas gap.

4) The MSB has been instrumental in working with the Maxwell Museum of Anthropology and other UNM Museums to reinvigorate the Museum Studies program at UNM. A full proposal for a Graduate Degree in Museum Studies was prepared during 2008. We intend to fully vet this proposal with multiple colleges on campus to implement this important program.

Classroom Teaching and Support

5) MSB faculty and staff taught 21 full courses at UNM and contributed specimens to 22 courses across the UNM campus. Students consistently rate inclusion of biological specimens highly in their undergraduate coursework. The MSB offers the only undergraduate certification in Conservation Biology in the state of New Mexico. This program provides training and know-how to tackle environmental issues that face New Mexico and the world.

Research Productivity, Grant Support, and Facilitation

6) MSB Faculty and Staff published 54 scientific papers (up from 50 in 2007) in peer-reviewed scientific journals in 2008. MSB specimens were cited in 60 scientific papers by scientists outside of UNM, which more than doubles the impact of specimen-based research productivity supported by the MSB. Although the number of specimen and tissue loans were down slightly in 2008 (125 compared to 140 in 2007), MSB personnel personally answered 1196 requests for information (up 50% from 2007). Web site hits of MSB databases exceeded 50,000 in 2008 reflecting increased dependence on web-based data by the international scientific and resource management community, and emphasizing growing demands on cyber-infrastructure in the MSB.

7) MSB Faculty and Staff garnered $9.4 million in new and in-force grants and contracts from a variety of agencies including the NIH and NSF, and generated roughly $1.5 million in facilities and administration (F&A) dollars. The MSB is the primary UNM liaison to state and federal natural resource management agencies in research and advisory capacities, and serves a special role in open space planning in the City of Albuquerque. The MSB Director serves as the UNM representative to the Colorado
Plateau Cooperative Ecosystem Study Unit (CPCESU), which facilitates grants and contracts between Federal Partners and UNM Departments of Anthropology, Architecture, Biology, Economics, and Native American Studies among many other units on campus.

Collections and Natural History Resources Development

8) The MSB cataloged over 389,000 new specimens and continued to integrate three ‘orphaned’ collections from University of Illinois, the US Fish and Wildlife Service, and the New Mexico Department of Game and Fish into the MSB collections. Integration is supported by ongoing grants from NSF (to Division of Mammals), and USFWS and NMDGF (to Division of Fishes). Acquisition of these collections further enhances the MSB role as an internationally recognized repository for natural history collections. Major research expeditions to Africa and Central and South America were mounted by MSB personnel in the Divisions of Amphibians and Reptiles, Arthropods, Birds, and Mammals. These activities substantially increased the geographic scope of our impact.

9) Through a cooperative agreement with the US Geological Survey, the MSB has nearly completed integration of internationally known and historically important federal collections, making these specimens and associated data more visible and available to the scientific community. Cindy Ramotnik, the USGS collection manager, spearheaded this effort in consultation with MSB collection managers.

10) In 2008, the MSB and the College of Arts and Sciences formally established a new Division of Parasitology, dedicated to the concept of ‘integrated’ research collections that simultaneously provide information of pathogens, parasites, and hosts for comprehensive study of epidemiology, pathology, ecology and co-evolution of infectious diseases and hosts. This is an emerging area of research that will undoubtedly generate enormous student and researcher development at UNM and in New Mexico.

Major Initiatives of the MSB

At our annual retreat held in October 2008, and at a number of MSB executive committee meetings throughout the year, we identified a number of goals, programs and key resources we will strive to accomplish over the next five years. They are:

1. Activate and grow an internationally recognized repository and research infrastructure for host-parasite interactions: In response to continued and unprecedented environmental change and the ongoing emergence and resurgence of infectious diseases, we have initiated the new Division of Parasitology in the Museum of Southwestern Biology. National and international research agendas aimed at elucidating the dynamic linkages between
hosts, parasites, environmental change and human health will be pursued, leveraging existing strengths, strengthening intra-university relationships. We envision the Division of Parasitology along with other Divisions at the MSB as an international resource for systematics, taxonomy, identification, ecological and epidemiological research in parasitology and hosts and will diversify and leverage UNM’s continued leadership in these research arenas. The new Division of Parasitology represents the development of new capacity to address current and emerging challenges to science and society. As a recognized leader in collections-based research and biodiversity informatics, the MSB is uniquely positioned to bridge existing gaps between collection-based research and environmental and biomedical science: resources of the MSB have been critical for policy makers, natural resource managers, and government and business leaders because they support investigations and decisions related to human health, climate change, conservation, and land management. Moreover, the Division of Parasitology will move UNM to the leading edge of efforts to understand and combat emerging infectious diseases by facilitating efforts to assess the complex and dynamic linkages between hosts and parasites in a changing world. The Division of Parasitology was established in January 2008 with a substantial donation of specimens from the Rausch collection and ongoing research initiatives at UNM (e.g., Beringian Coevolution Project, Center for Evolutionary and Theoretical Immunology).

We are continuing work to relocate and transfer the US National Parasite Collection (USNPC) from Beltsville, Maryland to the MSB. Relocation, transition and consolidation of the USNPC will involve five critical components represented by (1) curation and integration of liquid and dry specimens collections; (2) developing cyber-infrastructure and catalogues; (3) housing literature resources including an extensive reprint collection extending back to the 1800’s; (4) historical catalogues documenting diverse global collections of parasites since the late 1800’s; and (5) critical instrumentation. As part of this package, we propose temporary reassignment for USDA curatorial staff to the MSB for 5 years to ensure a timely and effective transition of the collection.

Significant resources are required to implement this vision. We are working to put together the following infrastructure with the help of the College of Arts & Sciences, the VPR’s office, the UNM President’s office, our congressional delegation, and leveraging from grants and contracts. Along with the commitment of USDA staff, the following elements are essential to make a successful transition and a thriving collection:

1) An endowed Professor-Curator position in Parasitology
2) Two full time I&G supported Collection Managers in the Division of Parasitology
3) Renovation of Fluid Collection Space in CERIA 125 (estimated cost $500,000)
4) Assistance to obtain office space and dry collection space for the Division including housing for a senior USDA-supported position to help move and integrate the collection into the MSB.
5) A graduate assistant dedicated to curation in the Division of Parasitology.
6) A Cryopreservation Facility that will serve as repository for host and pathogen specimens that can be assayed genetically.

7) An annual operating budget for collection maintenance

8) A permanent line for Information/Technology Support that would work with all Divisions of the MSB to help integrate parasite and host information into a common electronically accessible framework.

2. Develop and launch an MSB-centered Conservation Division: a special role for Natural Heritage New Mexico. A second major area for growth in the MSB addresses a critical need for historical data in conservation of endangered species and ecosystems and natural resource management. We seek to develop a Conservation Division, which is a program charged with maximizing the visibility and utility of our extensive specimen-based databases and to enhance development of a number of initiatives at the state and federal level involved with conservation issues. There are major policy issues at stake. For example, the development of alternative energy has potentially significant impact on native plants and animals. Scoping and siting new wind and solar energy projects will depend on distributional and historical data of plants and animals. Thus, we envision the Conservation Division as a centralized, core resource that serves the UNM community at large but is based in the MSB. We will seek to obtain funding, perhaps through the UNM Foundation for a Faculty Curator and a database/collection manager for the Conservation Division.

The full-time I/T systems administrator we propose below will forge critical links between the Conservation Division and other Divisions of the MSB. One challenge is to implement and connect database systems into a seamless server for conservation and management data that will be accessible by local, state, and federal resource managers. Our plan is to leverage this full time museum-wide position through programmatic grant proposals like the proposed NSF IGERT grant.

3. Work to develop and establish integrated online database systems for all Divisions of the MSB. This will require substantial planning and collaboration among divisions and success will depend heavily on a new I/T systems administrative hire. This goal emerges naturally from the previous goal of establishing a formal informatics program in the MSB.

4. Further develop and support our undergraduate training program afforded by NSF-funded UnO - Undergraduate Research Mentoring Program: Our progress so far has been excellent, 16 students are currently participating in the program. Seven students from the first cohort graduated and five are either enrolled in graduate school or are graduate-school bound. Details about students, research projects, and faculty mentors can be found at http://msb.unm.edu/mammals/UNO.html.

4. Refine, further develop, and resubmit a museum-centered interdisciplinary graduate training program through development of an NSF-IGERT proposal: In 2007, we
assembled a team of faculty researchers at the University of New Mexico (Table 1) who are interested in developing a museum-centered graduate training proposal aimed at documenting and understanding how abiotic and biotic systems change from molecular to ecosystem scales. There are three major underlying research areas: (i) identifying and understanding relationships of environmental change and host-pathogen interactions focusing both on human and wildlife diseases (ii) using museum collections to uncover evolutionary and ecological change in biota that results from landscape and water use and global climate change in the American Southwest over decadal time scales and (iii) developing informatics and modeling approaches to both create and use integrated relational databases that link specimens, environmental, molecular and geographic information.

We are continuing to develop and hone our MSB-IGERT program so that it will prepare students to meet substantial environmental challenges and for the job market by providing a strong grounding in their respective disciplines but also by providing a culture and infrastructure to allow them to tackle environmental and biotic changes in novel, integrative, and multidisciplinary ways. Most importantly, through our program, students will be equipped to bring time series data to bear on evaluating and predicting responses to environmental change over decadal time scales. Use of natural history collection specimens, data and materials will undoubtedly motivate new uses and ways of integrating databases in a reciprocally illuminating process that is likely to spark renewed interest in resources available in natural history collections.

5. Work to revitalize the museum studies program at UNM through MSB collaborations with other UNM Museums (e.g., Maxwell, Meteorite, and UNM Art Museums). The College of Arts & Sciences has recently hired a new director in the UNM Maxwell museum who is charged with revitalizing the Museum Studies program at UNM. The College has contributed significant resources including a new faculty position in addition to the new Director to coordinate this effort.

Major Challenges to Growth and Development of the MSB

We face a number of challenges to implementation of our goals that mainly revolve around a general lack of resources for staffing and operational budgets. We address the following challenges below, and propose some solutions:

1. We Lack Critical Information Technology Support: The MSB is sorely lacking information technology support, and it is our top priority to staff an IT Technologist/Systems Administrator position to help develop, grow, and maintain our overtaxed cyber-infrastructure (Over 50,000 web hits and data downloads in 2008). At present, our database management plan is reactive rather than proactive; we deal with problems involving data security, data backup/management, systems maintenance, IT innovation, trouble shooting viruses/worms,
purchasing hardware and software in highly piecemeal fashion using private contractors that vary tremendously in quality and service.

**IT/Systems Administrator rationale and proposed solution:** So much of the potential and promise for development of the MSB relies on enhancing our visibility and accessibility through electronic media such as the world-wide-web. We have enormous potential to provide integrated databases that could serve as tools to address questions of great societal import regarding emergence of pathogens and natural resource abundance and distribution. Our progress in this area has been seriously hampered by lack of personnel in computer systems administration. At minimum, we will seek to hire one full-time IT/Systems Administrator to manage and implement database and server systems. Our plan is to leverage this position through programmatic grant proposals like the proposed NSF IGERT grant, and UNM legislative priorities like relocation and integration of the US National Parasite collection.

2. **We lack assistance and funding in building management.** Cathy Osborn, the Museum Administrator, currently coordinates and is responsible for management of the CERIA, despite the fact that the building is occupied and used by the Sevilleta LTER program, the LTER Network Office, the Fine Arts Cinematic Arts Department and office space for the Arts Technology Center. The MSB receives minimal support and no funding for building management. Building management in CERIA is not an insignificant task. Cathy estimates that building and security issues occupy about 15 to 20 hours per week of her time. In 2008, a building management committee was developed to identify problems with the entire facility. The committee is comprised of all the collection managers of the MSB and representatives from the LTER Network office, the Sevilleta LTER program and Cinematic Arts. The average cost to maintain the physical aspects of the security system is approximately $1000 per year, with the MSB shouldering the entire amount. Other associated costs for the security system (software, partition maintenance) totaling an additional $1000 are also solely funded by the MSB.

**Proposed Solution:** We propose that the Department of Biology hire a part-time assistant who reports to John Cox, but who would have significant duties in CERIA (roughly 10 hours per week). Cathy would consult with John to identify recurring and new tasks to be conducted by this person.

3. **Critical Limitations on Fluid Collection Space:** Since the 2003 occupation of the renovated old UNM bookstore by the Museum of Southwestern Biology (MSB), all of the MSB divisions have acquired additional collections not originally factored into the estimated growth figures of 1998-99 when designing collection storage space for the Museum. Especially for invertebrates and vertebrates there have been unanticipated acquisitions of specimens. Important additions to the MSB collections include a large backlog of ethanol-preserved New Mexico insect collections taken from pitfall sampling and an increasing number of collections from South America and Africa since the hire of a Curator of Arthropods. There is also the Rausch Collections of Parasites acquired by the Division of Mammals and strong support both within and outside of the
MSB to acquire the US National Parasite Collections, currently located in Beltsville MD. All of these collections increase the importance of the MSB as a national and international resource for scientific research in ecology, systematics, molecular systematics, population studies, and emerging disease research. Currently, there are rooms/areas within the Museum facility that have been identified as potential collections space for the Museum. These areas, if minimally renovated, would make a big difference in specimen access and if important collections could be accepted (or not) by the MSB. The UNM Fire Marshal has mandated new collection space for fluid-preserved materials in the MSB, which makes this a health and safety issue.

Proposed Solution: CERIA 125 conversion from classroom space to fluid collection space: To alleviate shortfalls of fluid collections space, we propose a two phase plan. For Phase I, we propose that Room 125, a classroom on the lower level of CERIA Building 83, be used as a temporary storage area for select collections currently housed in the main fluid collection room, Room 145. These select collections include: large containers holding large specimens of fishes, reptiles, and mammals that are blocking the exit pathways, 165 boxes of a newly acquired collection of fishes from the New Mexico Department of Game and Fish in the main hallway of lower floor of CERIA Building 83, and jars of specimens that must be removed from select mobile carriages so that these units can be retrofitted for pull out tank shelves. Once these collections are stored in Room 125, the reconstruction of Room 145 can begin. This phase will add 45 roll out shelves, manufactured to hold stainless steel tanks (“coffins”) for large specimens of vertebrates, to the lowest shelf spaces on 3 of the mobile carriages currently holding collections specimens in jars. A stationary unit of roll out shelves and linear shelving will also be built along the south wall in the back of Room 145. Phase II construction will involve the complete reconstruction of Room 125 to accommodate fluid-preserved specimens. This reconstruction will involve bringing the room up to code for storage of specimens in 70% ethanol. The room is already equipped with an emergency sprinkler system. With other infrastructure in place, the renovation of the floor, walls, and HVAC system can be done in a cost effective manner.

4. Operating Budgets for Collection Care/Improvement: The operational budget for the Museum of Southwestern Biology is just under $50,000 for collections care, curation of new material, databasing, etc. This money is allocated to divisions at the beginning of the state fiscal year. There is considerable disparity among divisions in operating funds. Among the best supported divisions are Mammals, the Herbarium, Fishes, and Amphibians and Reptiles. Budget increases in these divisions have usually been negotiated as part of grant proposal packages that have a large curatorial component. The divisions of Arthropods and Birds are inadequately supported with operating budgets that are $2000 and $3000, respectively, for the entire year (not including a 1% university-imposed tax to support computerization of contract and grant accounting, etc.). Both divisions are headed up by new, highly motivated curators who are preparing research grants, and we plan to request budget increases commensurate with scholarly and curatorial activity in these divisions as a part of grant proposal packages. In general, total
allocations to the MSB have remained static and have not kept pace with inflation over the last five years despite rising costs of curation, shipping, and electronic infrastructure and maintenance.

5. Faculty Curator Credit/Compensation – In December 2007, the entire faculty of the Biology Department ratified a document entitled “Codifying Responsibilities for MSB Curators” which lays out the expectations and duties of faculty curators in the MSB. This constitutes important recognition that faculty curators have duties that exceed the normal responsibilities of UNM Biology Department Faculty members. We have yet to consider reallocation of teaching responsibilities and summer compensation for faculty curators. The MSB will work with the chairman of Biology and the Dean of Arts and Sciences to consider reallocation of duties and summer compensation to rectify this situation. The codification of curator duties document also requires that each faculty curator meet the general expectations of the MSB laid out there. Curators will be assessed each year by the Director in a letter to the Biology Department Chair that indicates whether faculty curators meet these standards. We propose that 0.25 FTE for faculty curators reside in a museum line (resulting in a one course per year reduction in teaching), and that faculty curators receive special administrative compensation (SAC) for work in summer.
APPENDIX I

SEVILLETA LTER
ANNUAL REPORT,
2008–09
Activities

Figure 1. The Middle Rio Grande Valley and Sevilleta National Wildlife Refuge in central New Mexico, with respect to regional biomes and the Rio Grande, Rio Puerco and Rio Salado.

The Sevilleta LTER Program addresses ecological concepts and theory through a comprehensive and interdisciplinary research program in desert grassland, shrubland, forest and riparian habitats in central New Mexico. Our focal sites are the 100,000-ha Sevilleta National Wildlife Refuge (SNWR) located about 80 kilometers south of Albuquerque (managed by the US Department of the Interior, Fish and Wildlife Service) and the Middle Rio Grande (MRG) bosque between Cochiti Dam and Elephant Butte Reservoir (Fig 1). Since its inception in 1988, the Sevilleta LTER program has conducted research at multiple ecological levels and a variety of spatial and temporal scales. Our studies are linked by an overarching theme that considers how abiotic drivers and constraints affect dynamics and stability in aridland populations, communities and ecosystems.

The Sevilleta LTER Program is a long-term, comprehensive, integrated, interdisciplinary research program addressing key hypotheses on pattern and process in aridland ecosystems. Our LTER research in central New Mexico is concentrated on studies in desert grassland and shrubland communities and piñon-juniper and riparian (‘bosque’) woodlands emphasizing transitions in space and time. Each landscape component is governed by key abiotic and biotic drivers, especially climate variability, fire, hydrologic variability, nutrient dynamics, and herbivory. The rates and intensities of these drivers are changing over time. Given the emerging research interest in ecohydrology of aridlands, our focus on the effects of biotic and abiotic drivers on spatial and temporal dynamics of these aridland ecosystems allows us to conduct long-term research that addresses important basic ecological questions and yet has significant relevance to state, regional, national, and international priorities.

The Sevilleta LTER site and its surroundings are positioned at the intersection of several major biotic zones: Chihuahuan Desert grassland and shrubland to the south, Great Plains grassland to
the north and east, pinon-juniper woodland at upper elevations in the mountains, Colorado Plateau shrub-steppe to the north and west, and riparian vegetation along the middle Rio Grande Valley (Figs 1 and 2). Because of the confluence of these major biotic zones, the SNWR and the Middle Rio Grande Basin present an ideal setting to investigate how environmental change and climate variability interact to affect ecosystem dynamics at the boundaries of major biomes in southwestern North America. Moreover, the rapid growth and southern expansion of the City of Albuquerque and its suburbs increasingly will have an impact on ecosystem processes throughout the Middle Rio Grande Basin, including the SNWR, and these urban forces will interact with climatic variation to catalyze change in this aridland region.

This is the second annual report from our fourth funding cycle. LTER IV (2006-2012) builds on our prior research on patch and boundary dynamics by placing a greater emphasis on interactions among key processes and drivers of change in aridland ecosystems, in particular nitrogen (N) availability and climate dynamics. This new emphasis greatly expands the spatial and temporal scales and conceptual bases of our LTER program. Our new organizing framework is designed to integrate the components of our research program and allow us to test important hypotheses of general ecological interest.
More specifically, Sevilleta research is designed to understand the individual and interactive effects of three key system components: abiotic pulses and constraints, ecosystem processes, and biotic responses and feedbacks (Fig 3). The main abiotic pulses and constraints are (1) seasonal, annual, and decadal variations in climate, (2) geomorphology, soil texture, structure and depth, and surface and riparian hydrology, and (3) season, periodicity, and intensity of fire. These abiotic factors affect dynamics of biogeochemical pools and cycles; water input, storage, use and loss; and patterns and controls on primary production. Biotic responses to the coupling of these abiotic factors and ecosystem processes include dynamics and stability in the distribution, abundance, and diversity of plant and animal populations and communities. Given the fundamental relationship between primary production and community structure in ecological communities, one of our core LTER activities is to link climate dynamics, disturbances, and soil structure with soil nutrient and water fluxes to better understand seasonal and annual variability in NPP and how that variability ultimately affects the dynamics, distribution and abundance of key aridland producers and consumers.

To accomplish these goals, the Sevilleta LTER program is organized into five overlapping thematic areas with designated group leaders: Climate and Abiotic Drivers (Cliff Dahm), Water Fluxes (Will Pockman), Soils and Biogeochemistry (Bob Sinsabaugh), Producer Dynamics (Esteban Muldavin), and Consumer Dynamics (Blair Wolf). These thematic areas are not mutually exclusive, but they serve as an effective mechanism to organize and synthesize our research. New and continuing research includes a variety of activities in each sub-area (Fig 3).

In 2008-2009 we continued all but one long-term data collection efforts described in our renewal proposal (LTER IV) and in the 2007-2008 annual report. These activities include (1) our multiple factor global change experiment that manipulates nighttime temperature, N-deposition, and winter rainfall frequency, (2) a summer monsoon rainfall manipulation experiment, (3) our rainfall manipulation experiment in piñon-juniper woodlands (Fig 4), (4) expanded efforts to restore Gunnison’s prairie dog colonies on the Sevilleta, (5) use of stable isotopes to understand food web dynamics, with specific focus on grasshoppers, lizards (Warne et al. 2009) and box turtles, and (6) monitoring of CO2 and H2O fluxes in riparian, grassland, shrubland, grass-shrub transition zone, piñon-juniper woodland, juniper savanna and mixed conifer forest. Also in 2008-2009, a number of Sevilleta LTER graduate students and REU students have conducted important short-term measurements and experiments on climate, biogeochemistry and soils.
water and nutrient cycling, producer, and consumer communities. Highlights of results from a subset of these activities are provided in “Findings.”

Riparian ET and water fluxes
The riparian corridor of the Rio Grande on and near the Sevilleta LTER has been the focus of long-term ecohydrological and bio-meteorological studies. An eddy covariance flux tower was installed in the spring preceding the 1999 growing season and has been operating since. This tower was initially installed to measure evapotranspiration and energy fluxes. Supporting activities have included vegetation surveys, plant water relations measurements and studies, groundwater dynamics and chemistry, scaling and classification using remote sensing, remote data collection using telemetry, and characterization of the surface layer for water, energy, and carbon dioxide fluxes.

Producer dynamics in response to disturbances
We continue to examine the effects of small, patchy disturbances on vegetation dynamics across grassland-shrubland ecotones. Five sites have been monitored since 1995 and the sixth was added in 1998. At each site, five 3 m x 4m plots were established by removing all plants of the dominant vegetation. An additional 5 control plots with no removals serve as controls at each site. We also added a series of 5 plots with total removals at each site in 2003. Sites are dominated by either blue grama, black grama, blue and black grama, creosotebush, or black grama and creosotebush. We monitor vegetation cover by species annually on each plot. Long-term monitoring is needed to determine the species that will dominate following the loss of the current dominant.

Simulation modeling
In collaboration with the JRN LTER, we continue to modify the ECOTONE simulation model by incorporating the horizontal and vertical distribution of water, nutrients, and soil particles by wind and water across a range of spatial scales, from plants to patches and landscape units. We are working with Greg Okin at UCLA to link ECOTONE with his model of wind redistribution of soil particles to incorporate effects of dynamic vegetation on wind erosion-deposition dynamics. We recently started working with Enrique Vivoni of NM Tech to link ECOTONE with his hydrologic models. In addition, we have an ARS postdoc at the JRN who is working with SEV Senior Scientist Deb Peters and Ed Fredrickson to develop an animal model to link with ECOTONE as part of our overall ENSEMBLE modeling effort.

Significant events in 2009
Two significant events occurred in August 2009. On 4-5 August 2009 multiple dry lightening strikes, 48.3 kph winds, and 38°C temperatures combined to create a wildfire that burned nearly 3200 ha of desert grassland at the Sevilleta. This fire burned through several of our major climate change experiments including our monsoon rainfall manipulation experiment (MRME), annual drought and rainfall augmentation plots, and our nighttime warming, winter rain, N deposition experiment (“warming”), as well as our grassland flux tower site. Most of the fire damage was confined to shelter infrastructure at warming and nearly all cables to soil moisture, temperature and CO₂ probes were burned. Infrastructure repairs and replacement parts for warming and MRME, plus labor costs will be covered by UNM insurance. In addition, postfire recovery of nutrient availability, vegetation composition, ANPP, and consumer population dynamics will
occur as part of our normal LTER sampling protocols. However, in response to this externality, we submitted a RAPID proposal to address some key hypotheses based on pre-fire background data related to fire effects on (1) plant-microbial coupling, (2) carbon fluxes during postfire succession, and (3) seasonal and interannual dynamics of consumer-ANPP linkages.

The second event was our mid-funding site visit. Materials associated with that site visit can be found at: http://tierra.unm.edu/.

Publications and grants.
In 2009, Sevilleta LTER scientists have published 2 book chapters and 16 peer reviewed journal articles thus far with 7 more currently in press and several more manuscripts currently in review.

The following four grants were awarded in 2009:


INFORMATION MANAGEMENT
Information management is an integral component of the Sevilleta LTER. The primary goal of the Sevilleta Information Management System (SIMS) is to support site and network research by 1) facilitating access and usability of data and metadata by LTER scientists and the public, and 2) ensuring data integrity and security for future generations.

I. SIMS Implementation and Design
1. Scope and Access: The Sevilleta database is extensive, encompassing tabular and spatial data and metadata from 1988 to the present. As specified in the LTER Network Data Access Policy, data and metadata generated by Sevilleta researchers are placed online within two years of data collection. Exceptions are made for imagery of a proprietary nature, data with quality assurance issues, and data collected by graduate students, which are made public only after the student publishes. Data sets too large to be stored online are accessible by ftp upon request. Sevilleta online information resources also include an up-to-date list of Sevilleta publications and archives of photographs, presentations, and reports.
2. **Infrastructure:** We acquired two SunFire X4140 servers in 2008 to reduce the burden on the nine-year-old SUN Enterprise 450 server which had previously housed the Sevilleta web, database and email servers and most data. One of the new servers is now the database and web server, while the other one provides email. The speed of our website has increased dramatically since it was migrated to the new server. More details about Sevilleta infrastructure are available online at http://tierra.unm.edu/simsitinrrastructure.

3. **Database:** Several mechanisms are employed to collect and enter data into the Sevilleta database. Approximately half of the data collected by Sevilleta staff are entered into MS Excel on handheld computers at the point of collection in the field, and these data are QA/QC’ed and entered into our MySQL database using a series of Perl scripts. Meteorological data and data collected from sensor networks are transmitted via the wireless network to a server at the Field Station, from which they are harvested every night and inserted into the MySQL database.

Most Sevilleta tabular data are archived as ASCII text files which can be directly downloaded from the website. For some data sets, query tools that interact directly with MySQL have been developed that will allow users to download a subset of the data from the web page as either text or Excel files. For instance, climate data through the previous day can be downloaded from one of our twelve meteorological stations. (http://tierra.unm.edu/projectdetails?id=SEV001).

Metadata are developed in compliance with EML, the LTER Network standard. All metadata are sufficiently detailed and can be considered of the highest level of “completeness” as defined in the 2004 document *EML Best Practices for LTER Sites* (http://intranet.lternet.edu/im/im_practices/metadata/guides).

4. **Personnel:** Sevilleta supports approximately 4 FTE’s, either from base LTER funding or through UNM’s Sevilleta Infrastructure Support account, who comprise the IM Team. The information manager, Kristin Vanderbilt, devotes 90% of her time to day-to-day IM duties and coordinating information management activities among the rest of the IM Team. Doug Moore spends 75% of his time managing climate data, and the system administrator, Renee Brown, divides her time between supporting the LTER and the Sevilleta Field Research Station, which co-funds her position. A permanent four-person field crew allocates 50% of their time to assisting the data manager with data entry, QA/QC, and updating metadata for core long-term studies. A quarter-time GIS Specialist manages spatial data resources, and a quarter-time student programmer helps the information manager develop data entry and QA/QC applications.

5. **Web Page:** The Sevilleta web page is in a state of transition. The web page at (http://sev.ltemet.edu) is no longer being updated, while the new web page (http://tierra.unm.edu) is not yet completely populated. The new website complies with the *Guidelines for LTER Web Site Design and Content*. The new web page is implemented in Drupal, a content management system, which offers new possibilities for data discovery. Drupal has a system of taxonomies (lists of keywords for themes and sites, for instance) and each information product (dataset, publication, image) can be tagged with these keywords, facilitating queries for related information. For instance, if two datasets are tagged with the same site name, then a search on that site name will turn up co-located research projects. The capability of Drupal to integrate content provides a powerful data discovery mechanism to the users of our web page.
Adoption of a standard set of keywords will be essential to the success of this system, and the Sevilleta has selected 260 keywords from the NBII Biodiversity Thesaurus to serve as the core keyword group. This list of keywords may be augmented by additional keywords from the standard LTER Keyword list that is presently under development by the LTER IM Committee.

6. Documentation: The Information Management Handbook, implemented as a Wiki (http://tierra.unm.edu/wikis/im/index.php/Main_Page), contains documentation regarding collection, processing, and archiving Sevilleta's core long-term data sets. All members of the IM Team update this wiki as necessary.

7. Review of SIMS: The IM Team is making progress toward addressing recommendations from previous site reviews. Concerns about server security have been resolved with the installation of a firewall. A new backup system has been purchased to replace the previous inadequate, borrowed system. Scalability of SIMS is addressed with greater use of the relational database MySQL.

SIMS Support for Site, Network, and Community Science

1. Integration with Site Science: The information manager contacts scientists as they initiate research at the Sevilleta to make them aware of data release policies and the procedures for submitting data and metadata. Acquiring data and metadata and quality assuring the data from non-staff researchers is typically an iterative process that eventually yields high quality products that can be released to the public. The Information Manager works closely with the field crew to ensure that Sevilleta long-term data sets are entered, quality assured, and archived in a timely manner.

2. Policies: Data access is tracked in accordance with the LTER Network Data Access Policy. Before a data download can be initiated, a data user must agree to abide by the SEV Data Access Policy (http://sev.lternet.edu/documents/dm/index.html) and to register with their name, address, and affiliation (academic, K-12, etc.). Once registered, a user may download all data sets of interest to them.

3. Metadata and Data Quality: Sevilleta has completed the task of transforming years of legacy semi-structured text metadata into Level 5 compliant EML, as specified in the EML Best Practices for LTER Sites (2004). This was a tedious and time-consuming experience that involved reformattng all of the old metadata and running Perl scripts to generate EML that often still had to be tweaked by hand. A MS Access application was developed that facilitated this project and also entered the metadata into a SQL Server 2000 database located at the LTER Network Office.

Rigorous QA/QC methods are applied to data collected by the Sevilleta field crew. Perl and SAS scripts are used to identify incorrect codes, out-of-range values, and other anomalies in the data. Non-staff researchers QA/QC their own data; the information manager ensures that no inconsistencies exist between data and metadata prior to archival.

For the sensor data that is inserted daily into the MySQL database, out-of-range values are flagged as the data are entered. If records indicate that the sensor is malfunctioning, then data
values collected during the problem period are also automatically flagged as incorrect. Graphs of sensor data are available on the Sevilleta website to help researchers detect when sensors are malfunctioning:

4. Contribution to LTER Network and Other Activities: Sevilleta updates meteorology data in the cross-site ClimDB database on a weekly basis. Cross-site personnel, site, and publication databases are updated at least twice a year. Sevilleta EML is harvested once a week and resides in the LNO Metacat.

Education, Outreach, Cross-site and Network Level Activities.
The SEV LTER continues its activity involvement in education and outreach through BEMP (our Schoolyard LTER), the SNWR, E-MRGE (our GK-12 program), our REU Sites program, ESA SEEDS, and our everyday classroom teaching activities. SEV scientists are also active in numerous cross-site and synthesis projects, and provide service to the LTER Network.

Schoolyard LTER.
The Sevilleta schoolyard LTER/Bosque Ecosystem Monitoring Program (BEMP) is dedicated to science, education, and stewardship, bringing together each year over 2,000 K-12 students, their teachers, and UNM researchers to monitor and understand the Rio Grande and its riverside “bosque” forest. BEMP is coordinated by Mr. Dan Shaw, Biology Teacher at the Bosque School, and by Cliff Crawford (Professor Emeritus, UNM Biology) and Kim Eichhorst (BEMP Science Education and Information Specialist), and Jen Schueutz, Program Administrator. Currently, BEMP organizes field and classroom activities at a variety of sites along the Middle Rio Grande in collaboration with more than 20 school systems, including the Albuquerque Public Schools, local private schools, one home school, several rural schools and two Pueblo schools. Each month, students use research sites spanning 250 km of the Rio Grande to gather key indicators of structural and functional change within this complex ecosystem. These data are published in reports and used by local, state, tribal, and federal governmental agencies.

Most BEMP students are from traditionally underrepresented groups in environmental education including large numbers of Hispanics and Native Americans. BEMP sponsors an upper level undergraduate/graduate biology class at UNM in which students from the sciences, education, communication, and other departments learn about the bosque ecosystem while serving as interns within the program. The interns act as liaisons between researchers and K-12 students, take on quality control duties, assist in field data collection, lab analyses, and are mentors to the K-12 students. BEMP activities meet national and state education standards for K-12 science, math, social studies, and also include lessons in art and language, as well.
Through a variety of funding sources, including core and supplemental NSF LTER support, BEMP staff coordinate field activities and design in-class exercises and materials, including a lending library of lesson plans and activity kits that BEMP interns and teachers can readily use with K-12 students. In addition, a professional educator works with BEMP staff to develop and present classroom activities in the context of ongoing bosque science. All activities are translated into Spanish and placed on the BEMP website (http://www.bosqueschool.org/BEMP/bemp.htm) as both a service to existing BEMP classrooms and as a recruitment and expansion tool.

Undergraduate education. UNM is a certified Hispanic serving institution, and the Department of Biology has over 1200 undergraduate majors of which 48% are Caucasian, 33% Hispanic, 10% Native American, 7% Asian and 2% Black. Thus, through our day-to-day activities UNM faculty regularly work with, encourage, mentor, and train a large number of minority students. In that regard, we serve the broader goal of recruiting minority students into ecological research.

In 1996, ESA established SEEDS (Strategies for Ecology Education, Development and Sustainability) to diversify and advance the profession of ecology. A key goal is to stimulate and nurture the interest of underrepresented students in ecological research. In 2005, UNM Biology established a local SEEDS Chapter (Collins is faculty rep). In November 2006, Sevilleta hosted a national SEEDS field trip and career forum. In September 2008 the Sevilleta LTER hosted a research visit and career forum for the SEEDS chapters at NAU and UTEP. In addition, in February 2009, the Sevilleta LTER hosted the annual SEEDS Leadership Conference.

Sevilleta REU Program.
Samantha Adelberg, Brown University. Geomicrobiology of the Sevilleta wells and springs: Predicting the metabolic energy available to microorganisms.

The semiarid Southwest, where rainfall is scare and rivers are few, groundwater wells and springs provide a vital source of water to all forms of life. However, despite the incredibly important role groundwater plays in this environment, there is a minimal understanding of the aqueous geochemistry and microbiology of these small desert oases. This study conducted a comprehensive survey of the hydrochemical composition of nearly 20 wells and springs in the Sevilleta National Wildlife Refuge (NWR) and surrounding area. We measured pH, temperature, conductivity, DO, and TDS in the field, and major, minor, and trace elements, Cl/Br ratios, 18O, D, d13C. Using geochemical modeling (PHREEQC) and basic thermodynamics we focused on 6 springs and wells with contrasting geology to predict the chemical reactions that could potentially occur in these waters as well as the metabolic energy available to any microorganism that facilitates one of these reactions. Preliminary evaluations reveal that...
potential reactions and accompanying affinity coefficients change significantly within the refuge due to the unique tectonic structure of the rift valley. Additionally, while the local geology influences the surrounding natural systems and thus water chemistry, the microorganisms that live in each system can manipulate the water quality as well, further creating distinct microenvironments within the Sevilleta NWR. This method of evaluation alone cannot confirm the existence of certain microorganisms; however, by combining thermodynamics with geochemical analyses we can create a thermodynamic model that predicts how and why microbial diversity differs as well as provide reliable information for future geomicrobiology research.

Cesar Coronado, Northern New Mexico University. Comparison of noninvasive sampling techniques for coyotes: Hair snares vs. scat surveys.

Reliable survey methods are important to managers when they make decisions regarding predator population conservation and management. Traditional methods, such as direct counts, are less useful due to the elusive and nocturnal behavior of mammalian predators. Furthermore, human activity can have significant impacts on predator movements and abundance. In this study we focused on the coyote (Canis latrans), which is a top predator at the Sevilleta National Wildlife Refuge (NWR) in central New Mexico. We compared success rates of two non-invasive survey techniques; scat surveys on roads and hair snares near roads. In addition, we considered how human activity (road use) affects coyote density and the success of these two non-invasive survey techniques.

Scat and hair snare surveys were completed on a weekly basis. Weekly scat counts were used to assess relative coyote density and hair snares were considered successful if hair was found. Results suggest that the type of scent lure used impacts hair snare success and that scat surveys were more successful than the hair snares. Furthermore, road use does appear to have a negative impact on both coyote density and the success of both survey techniques.

Albert Davila, Jr., Oberlin College. Chihuahuan Desert lizard abundance in Gunnison’s prairie dog habitat: Do lizards prefer prairie dog colonies?

Burrowing rodents, such as Gunnison’s prairie dogs (Cynomys gunnisoni), have been thought of as keystone species that provide suitable habitats for a number of other species. Shrubs also play a key role in the creation of suitable habitats especially for small animals that need to thermoregulate. Chihuahuan Desert lizards that live in areas inhabited with prairie dogs were the main focus of the study. Three lizards were observed during the study, the New Mexico whiptail (Cnemidophorus neomexicanus), the little striped whiptail (Cnemidophorus inornatus), and the lesser earless lizard (Holbrookia maculata). Six one hundred and fifty meter transects that ran through an area with prairie dog mounds and six other transects that ran through an area with similar terrain but did not have any prairie dog mounds were used for observation. To understand
the use of the terrain by the lizards and how lizard population densities are affected, shrub measurements were also taken along the transects to measure their densities on the plots.

Lizard population densities of the three plots that contained prairie dog mounds were compared to the population densities of the three plots that did not contain any mounds. It appears that population densities are greater on the plots with mounds than without. It also appears that a plot with a lot of mounds but low shrub density had few lizards then a plot with numerous mounds and high shrub density. These results are consistent with the conclusion that prairie dogs and shrubs play an important role in forming suitable habitats for animals such as Chihuahuan Desert Lizards.

Giomara La Quay, University of Metropolitana, Puerto Rico. Soil nitrogen and physical properties of the Los Pinos Mountains, New Mexico.

Soil and plants have a very close relationship, as they are strongly influenced by each other, and this complex relationship has always been of great interest to the ecological community. Soil is one of the more important factors for plants, as they show dependence for anchorage, water and nutrients. The different factors that are responsible for soil composition and nitrogen dynamics are unique in arid and semi-arid ecosystems. There is little know about this soil dynamics and what role they play in the Los Pinos Mountains, part of the Sevilleta Wildlife Refuge, New Mexico, where the study takes place. The study was conducted during the months of June and July of 2009, with the objective to answering the question of how the concentrations of total nitrogen (inorganic N) are related to abiotic and biotic factors. These factors being, soil moisture, temperature, and texture by aspect and elevation and the influence of vegetation. Two sites with similar topography and elevation were chosen within Los Pinos Mountains (Southern most and Northern most). Each site consisted of 32 points arranged by elevation, 16 in north facing slopes, and the same amount in south facing slopes, for a total of 62 points. In these points soil samples for measuring soil moisture and texture were taken and ion exchange resin bags were used to measure total nitrogen, these were place under Pinion (Pinus edulis), Juniper (Juniperus monosperma), grass (including blue and black grama) and bare spaces (an area greater than 30x30 cm). The north faces in general showed greater moisture than the south face as expected, being that the average temperature it’s also highest in the south site. There was more moisture under canopy than bare spaces. For nitrogen there is expected to be a higher concentration under Juniper than Pinion, and bare should have the lowest concentration.

Water quality in the Rio Grande and its neighboring ditch was assessed by sampling for the aquatic macroinvertebrates in both bodies of water. Sites were chosen according to their similarities in vegetation and three different types of vegetation were selected: willow, salt cedar, and Russian olive. The area that macroinvertebrates were sampled from was standardized using a throw trap. In addition, a water sample was taken to assess phosphate (PO4) and nitrate (NO3) levels. All collected macroinvertebrates were identified to family, genus, or species. ANOVA and regression were used to assess the relationship between site type, vegetation type, flow, water depth, nitrate and phosphate levels, taxonomic richness, and invertebrate abundance. In general more pollution tolerant taxa were found in the ditch than in the river. The ditch also had higher abundance in the number of macroinvertebrates than the river. Diversity was generally lower in salt cedar vegetated sites than in willow or Russian olive vegetated sites, which were similar. Higher flow and greater depth was associated with low abundance and richness. There was no significant relationship between phosphate or nitrate levels and either abundance or richness. These results indicate that the river and the ditch contained two different communities of macroinvertebrates, although there is some overlap between the two communities. Future work could focus on physicochemical parameters and precipitation and their affect on the invertebrate community.

Amanda Martinez, Brigham Young University. Aquatic invertebrate diversity in springs and wells on the Sevilleta.

Although, water is a limiting factor in arid ecosystems, there are 25 known wells and springs on the Sevilleta National Wildlife Refuge that provide a reliable source of water for wildlife. The source of the spring or well water can greatly influence the chemistry of the water. The sources of the water also influence the aquatic invertebrates that can be found living in them. This research addressed three questions: Is the aquatic invertebrate diversity significantly different between the man made wells and the naturally occurring springs? How does diversity correlate with water chemistry? Are the insects found in the Rio Grande and nearby ditches similar to those found in the wells and springs? I sampled from seven wells and four springs on the Sevilleta hoping to answer these intriguing questions.
Maxine Paul, Columbia University. Quantifying biome specific relationships and monsoon event responses using LAI (leaf area index), NDVI (normalized difference vegetation index) PRI (photochemical radiation index) in grassland and shrubland ecosystems at the Sevilleta.

The overall goal of this research is to collect and compare datasets from ground-based methods and remote sensing methods in order to better understand how well the satellite datasets capture physiological activity of shrubs and grasses during the monsoon season in specific biomes. This research was focused this comparison on two widespread biomes on the Sevilleta National Wildlife Refuge, desert grassland and desert shrubland. The grassland biome is dominated by Blue Grama (Bouteloua gracilis) and Black Grama (Bouteloua eriopoda), while the shrubland is dominated by the native invasive Creosote (Larrea tridentata).

Plant biomass production is related to absorbed light, which is determined by leaf area. NDVI and PRI estimate reflectance characteristics of vegetation and are used as a proxy for changes in photosynthesis and LAI over time. With three 100m transects at each site, I measured LAI, NDVI, and PRI at small scale plots (less than 1 square meter) in June and July 2009. These values have been compared to NDVI, PRI and net ecosystem exchange of carbon measured continuously on top of a 3m tripod in each biome. I used a portable NDVI/PRI sensor built by Dr. Lee Vierling from Idaho State University, and a Decagon PAR/LAI ceptometer (<1 square m scale) for the small plot measurements. Net ecosystem exchange of carbon was measured by the eddy covariance flux towers run by Litvak’s group continuously since 2007. With this data I report on trends over the months of June and July in all these factors to understand changes at the beginning of the monsoon season, specific to the arid grassland and shrubland biomes. Finally, a comparison of methods to quantify LAI in these biomes will be discussed. The results will help quantify the understanding of the relationship between these variables and contribute to future methods of understanding plant biomass production. In future work with the Litvak lab, we will go on to assess the relationship between ground measurements and remote sensing (satellite NDVI values).

Amanda Schaupp, Allegheny College. The effect of arthropods on Dipodomys spectabilis food stores and storing behavior.
Banner-tailed kangaroo rats (*Dipodomys spectabilis*) cut upper stems of the plant *Sporobolus cryptandrus* into small sections that they store in their cheeks. In their mound these seed stems are pushed out of their cheeks and placed vertically against the side of the den. Most of these stems are bundled together into tight packs of 50 or more stems. Two trials were done at seven active and seven inactive to see if placement of these stems vertically helps to reduce the amount of seeds pilfered by arthropods. In active dens when comparing orientation of seeds with pilfering by arthropods vertically orientated seeds were taken the least, followed by horizontal, and then scattered, although these were non-significant. In inactive mounds there was no preference shown by orientation of seed stems. When comparing the first trial to the second trial a higher percentage of seed stems were taken and this is most likely due to the arthropods learning of these locations and zoning into this area. Pilfering by arthropods is not the only reason for this behavior other possibilities could include fungal growth and mating interactions.

Hayley Stansell, North Carolina State University. Mapping the landscape of fear for Gunnison’s prairie dogs.

When determining the effective quality of a habitat to a species of animal, one factor that is perhaps overlooked is the degree of safety from predation a habitat can offer. On a small scale, landscape features affect a forager’s perception of predation risk, be they shrubs, manmade structures, or in the case of prairie dogs—burrow entrances. In order to examine the importance of such features, I isolated and spatially mapped the predation cost of foraging for a relatively dense colony of Gunnison’s prairie dogs located on the Sevilleta National Wildlife Refuge, New Mexico. This was done using a grid of experimental food patches, which were laid over a large portion of the colony in order to measure giving up densities on a fine scale over the landscape. The resulting contour map of predation risk constitutes the animals’ “landscape of fear” and reveals information as to which structures most strongly affect prairie dogs’ sense of security. It appears that proximity to burrows is key, but it is possible that presence of vegetation, which interrupts lines of sight, plays a role as well. There is also the possibility that vegetation may affect burrow placement. Thus, further study conducted in greater detail and over a larger time scale may provide more insight into the interrelatedness of burrow placement, vegetation, and predation risk.
Francisco “Frankie” Reyes, University of Texas – El Paso. A salinization study within the San Acacia Region, Sevilleta NWR, NM.

Water management and the scarcity of water is a considerable concern in the American Southwest. The quality of ground and surface waters is carefully monitored due to the shortage of renewable water supplies in the region and specifically in the Rio Grande rift corridor. Both high salinity and elevated trace element concentrations are regionally important in impairing water quality, and identifying sources of these contaminants remains an ongoing challenge. It has been hypothesized that deep-seated faults within the rift provide conduits for the ascent of deeply derived fluids, while others have proposed the hypothesis that upwelling sedimentary basin brines at interbasin constrictions represent a significant salinity input to the modern Rio Grande.

The purpose of this study is to test and refine existing models for Rio Grande salinization using analog studies of similar rift springs while reevaluating the influence of the underlying Socorro Magma Body (SMB). We used aqueous geochemical techniques (field parameters, major and trace elements, Cl/Br ratios, δ18O and δD) and geochemical modeling to identify salinity components in the middle Rio Grande basin (MRGB). An integrated study of spring geochemistry with factors related to poor water quality will allow for an improved comprehension of natural contaminants in the Rio Grande hydrochemical system.

The Rio Salado Box (RSB) and San Acacia springs, both located adjacent to the Sevilleta National Wildlife Refuge in central NM, have been identified as major salinity inputs in the MRGB. San Acacia contains the highest salinity concentrations of all Sevilleta NWR waters, and it is observed to influence the nearby canals and the Rio Grande by increasing the river salinity. The resulting irrigation water can lower crop yields and is unhealthy for livestock and wildlife, sometimes exceeding EPA guidelines. Major ion, stable isotope and trace element analysis suggest that the brine pool has evolved from evaporative concentration, but that the source springs are chemically similar to the RSB waters, which are established as deeply derived fluids sourcing from the Jeter fault. Rift-bounding and intrarift basement penetrating faults can provide “fast paths” for the ascent of these Cl-rich fluids, which may be related to degassing from the SMB.

Andrea Westerband, SUNY College of Environmental Science and Forestry. Effects of aspect and elevation on the distribution of Pinyon Pine and Juniper trees, along with index of grass density within the Los Pinos Mountains, New Mexico.
The concept of abiotic effects on the distribution of vegetation has been of interest to the scientific community, and has been studied among numerous long-term ecological research (LTER) stations across the United States. The Los Pinos Mountains within the Sevilleta National Wildlife Refuge, New Mexico, are dominated by a pinyon-juniper woodland and exhibit sufficient differences in microclimate, from one region to the next, to allow a study of the distribution of vegetation types. The study, conducted during the summer months of June and July, aimed to answer the question of whether or not different factors played a role in the abundance and/or percent cover of Pinus edulis, Juniperus monosperma and grass (including blue and black grama). It was hypothesized that the south face was markedly drier due to a higher amount of incoming solar radiation. This concept has been discussed in related research. For the purposes of this study flowering was used as an index of productivity. Principle independent variables include: site location (north end of the mountain range versus the southern end), aspect and elevation. Two areas of similar topography and elevation were chosen within each site and multiple vegetation transects were laid out in order to quantify how many individuals occurred and how much space they occupied. Grass density was also tabulated using small plots laid out along each transect. Key results include: a significant difference in the percent cover of both tree species explained by aspect, a significant difference in the amount of individuals encountered for each face, a significant difference in the number of individuals found per site, difference in the amount of individuals flowering in relation to the aspect, and a difference in the type of species that was predominant on each face. Statistical tests carried out included a logistic test and ANOVA. Based on the results it may be concluded that there are climactic differences within different areas of the Los Pinos Mountains, predominantly the north and south face, which could be further explained by measures of soil water content, ambient temperature, soil nutrients and total incoming solar radiation.

IV. K-12 Outreach. In 2006 we started E-MRGE, our GK-12 program in Ecohydrogeology in the Middle Rio Grande Environment (PI Collins, Co-PI, Laura Crossey - Dept. Earth and Planetary Sciences). E-MRGE Fellows work in partnership with middle school teachers in three rural New Mexico communities (Belen, Socorro and Laguna Pueblo) and the SNWR outreach program. Fellows and teachers develop activities to learn about long-term research and then develop related inquiry-based projects that provide hands-on science experiences for middle school students. These active learning projects are designed to meet New Mexico science standards. Several of our GK12 Fellows are also conducting part or all of their dissertation research at the Sevilleta.

In July of 2009 12 middle school students from our three GK12 schools attended a week-long summer internship at the Sevilleta National Wildlife Refuge organized by Sevilleta LTER graduate student and GK12 Fellow Jason Thomas. Participants included other GK12 Fellows and participating middle school teachers. Students participated in data collection and instruction in botanical illustration, sedimentary geology, orienteering and topographic maps, bird netting,
lizard capture, arthropod pitfall traps, small mammal trapping, plant identification and Sevilleta plant communities, and volcanic geology. The middle school students also had dinner with and interacted with our summer REU students.

In Summer 2009 we received a Research Experience for Teacher supplement from NSF for Ms. Theresa Apodaca, a middle school science teacher at Sarracino Middle School in Socorro, NM. Theresa is participating in a research project under the guidance of Dr. Laura Crossey and in collaboration with Dr. Crossey’s graduate student Amy Williams. Amy just won the best student presentation award at the 2008 AGU meetings in San Francisco based on work she did last year at the Sevilleta! Theresa is one of the current Teaching Partners in our E-MRGE GK12 Program directed by Scott Collins and Laura Crossey. Based on our nomination, in December 2008 Theresa awarded the 2008 Outstanding Science Teacher Award from the New Mexico Academy of Sciences. Theresa has been a tireless and enthusiastic participant in our GK12 Program, and we are very pleased to have her working on a research supplement award this year.

The primary goal of Theresa’s RET project is to acquire new aqueous geochemical data along targeted reaches of the Rio Grande and from springs located in the Sevilleta National Wildlife Refuge. Both groundwater and surface water are important resources for many metropolitan and agricultural communities along the Rio Grande corridor. High salinity has been identified as regionally important in impairing water quality. Although the river waters are dominated by spring snowmelt and monsoonal rainfall events, recent research has revealed the widespread presence of volumetrically small, but geochemically important groundwater contributions to the river system. These "endogenic" waters have been associated with springs issuing along rift-bounding faults in central New Mexico.

Network-level interactions. At the Network level and beyond, SEV LTER scientists continue to be involved in a variety of cross-site and international projects. The Sevilleta Information Manager (Vanderbilt) has been active in Network level activities. She has served on the Network Information System Advisory Committee (NISAC) since 2007. She has been the Chair of the International LTER Information Management Committee since 2006, and has organized and participated in ILTER IM Workshops in China, Korea, and Taiwan. She is collaborating with other US Information Managers and LTER Network Office personnel to create a series of training videos for new Information Managers, the first of which can be seen at http://www.ilternet.cdu/training/training-online-resources-collection. She has also collaborated with Judy Cushing of Evergreen State College and other grasslands LTER information managers on a research project to develop an integrated cross-site ANPP database. She organized an ILTER/LTER workshop in January 2009 that used the database as the basis for a research paper.

PI Collins represents the SEV on the LTER Science Council, and prior to that was an elected member of the LTER Executive Committee. Collins served as PI on the NSF-funded LTER Planning Grant that over a three year period developed an ambitious funding initiative and research agenda for the LTER Network (the LTER Decadal Plan) to increase network-level research coordination, cooperation, collaboration and capability. Finally, Sevilleta researchers are involved in numerous synthesis efforts and networks, such as Chapman conferences, PrecipNet, DireNet, TraitNet, and PDTNet (Clark et al. 2007, Cleland et al. 2008, Collins et al. 2008), and other cross site projects on compensatory dynamics (Houlahan et al. 2007), shrub
encroachment (Knapp et al. 2008), and the international Nutrient Network (NutNet) to name a few. Sevilleta LTER continues to participate in the National Phenology Network.

In an effort to promote cross-site research and communication, the Sevilleta LTER hosted a regional annual symposium with scientists from JOR, CAP, SGS, NWT and KNZ presenting synthesis talks and poster presentations along with breakout groups to coordinate existing and potentially new cross-site research activities. At this cross-site workshop we agreed to hold a multi-site workshop once every three years. Thus, on a three year cycle these sites would hold: one site-based meeting, one regional meeting, and then attend the LTER All Scientists meeting.

**SOCIAL-ECOLOGICAL RESEARCH**

The Sevilleta LTER Program has not had a social-ecological research component to date, but is currently expanding in that realm via three collaborative efforts:

1. **The Sevilleta LTER is part of a five site social sciences funding collaboration (JOR, CAP, SGS, KNZ and SEV), “Socio-ecological gradients and land use fragmentation: a cross-site comparative analysis.”** The objective of this cross-site collaboration is to answer the following research question: *Is the degree of land fragmentation a function of magnitude and/or rate of change of water availability, population growth, and urbanization?* At each site we will investigate the role of these drivers, in addition to other proximate drivers, in the process of land fragmentation.

2. **Our 2009 supplement included a request for a related, site based project to be conducted by Mike Agar, Professor Emeritus, University of Maryland, currently a resident of Santa Fe, who is an expert in agent-based modeling. In this research activity Professor Agar will review current literature in ecological anthropology with emphases on the "new ecology," historical ecology, and political ecology. He will then coordinate this background work with relevant work being conducted as part of the five site cross-site project funded in 2007. The problem focus will be land fragmentation, in part because of the ongoing supplement, mentioned above. The focal community for this supplement will be Rio Rancho, a rapidly growing community north and west of Albuquerque, for which Agar is developing a qualitative methodology to document long-term land fragmentation as an outcome of sociocultural processes.**

3. **The Sevilleta LTER Program is part of a collaborative ULTRA-ex (Urban Long-Term Research Areas) planning proposal with two other LTER Sites, JOR and CAP. Understanding the socio-ecological dynamics of urban areas is limited by inadequate knowledge of the type, quantity, and quality of ecosystem services delivered in metropolitan regions and how actors incorporate considerations of ecosystem services and household preferences into management decisions. The principal question of our proposed research is to understand how decision makers respond to and make land and water use decisions based on measured and preferred ecosystem services at the wildland-rural-urban fringe in the arid Southwest. If funded, we will employ a comparative, gradient approach using the metropolitan areas of Las Cruces and Albuquerque, NM and Phoenix, AZ as case studies. Primary methods include stakeholder forums and focus groups with decision makers, hedonic modeling of houses prices and ecosystem service amenities, and biophysical modeling of ecosystem services. This proposal is currently in "purgatory" in that it was not one of the first batch of proposals selected for funding, but NSF is**
searching for funds in hopes of making an award. If this planning grant is not funded, we plan to use our ideas as a basis for a Coupled Natural-Human (CNH) proposal to NSF in the near future.

Together these activities illustrate how the Sevilleta LTER and its scientists are committed to (1) conducting cutting edge research, (2) achieving the goals of the LTER Network, (3) expanding the spatial, temporal and conceptual bases of our research through the addition of new participants, and (4) furthering our education, outreach and training efforts at K-12, undergraduate, graduate, postgraduate, and informal levels.
Findings
As noted above, our research program is based on the concept of pulse dynamics in which pulses of rainfall, primarily at the event scale, stimulate biological processes from microbial metabolism through plant production and consumer population dynamics. The main components of our research are climate drivers, water in the environment, biogeochemistry and soils, producer dynamics, and consumer dynamics. Below we present highlights of some of the key results from our research in 2008-2009.

Climate variability (Doug Moore)

Analysis of the long-term climate record at our main on-site meteorological station, Deep Well, shows the very regulate interannual and seasonal pattern of temperature coupled with the highly variable seasonal and interannual variation in precipitation (Fig 1). For the most part, there are few temperature anomalies and those that occur tend to be during the summer. However, there are many precipitation anomalies over the 20 year record at Deep Well and these anomalies occur in both monsoon and non-monsoon seasons. Overall, the data suggest no change in mean precipitation or temperature over the previous 20 years, but an increase in precipitation variability during the summer monsoon.

Water and ecophysiology

Rio Grande water quality (Dave Van Horn and Cliff Dahm). To determine anthropogenic impacts on nutrient loading and retention in an arid land river ecosystem, Sevilleta graduate student Dave Van Horn collected samples once a month for 28 months at 30 sites along the 340 km Middle Rio Grande (MRG). During 15 months he also collected samples from all of the major tributaries to the MRG. Samples were analyzed for inorganic nutrients, and discharge data from 24 river and irrigation return flow gauges and four wastewater treatment plants were used to calculate nutrient loads. Water entering the MRG from upstream contained low concentrations and loads of NO3, SRP,
and NH4 (Fig 2a,b). During all months the Albuquerque wastewater treatment plant was the major contributor of inorganic nutrients to the MRG, resulting in instream concentration and load increases of ~2000% for NO3 and SRP. During months when little water was diverted from the MRG for irrigation, nutrient levels remained elevated for ~260 km below the wastewater inputs (Fig 2a). During months when significant portions of the river flow were diverted for irrigation, NO3 and SRP concentrations and loads declined dramatically in the downstream direction (Fig 2b). Total retention of wastewater inputs within the MRG corridor ranged from 18 to 99% and 34 to 99% for NO3 and SRP, respectively, with a strong and significant relationship found between the percentage of water diverted from the MRG for irrigation, and the percentage of NO3 ($r^2=0.86$) and SRP ($r^2=0.80$) removed within the reach (Fig 2c,d). These results indicate the MRG agricultural network acts as a nutrient sink. Nitrogen export as a function of population density from the MRG was significantly lower than that of mesic systems but was comparable to export from other arid land rivers (Fig 2e). Irrigation associated water losses averaged 62% of incoming water, highlighting that the important ecosystem service of nutrient retention provided by the MRG irrigation network comes with the expense of significant water loss.

**Rio Grande Bosque evapotranspiration** (James Cleverly, Jim Thibault, Cliff Dahm). Measurements of evapotranspiration (ET, via eddy flux towers) and water table (WT) depths beginning in 1999 have occurred at several Rio Grande riparian sites within, upstream, and downstream of the Sevilleta NWR. Sites include a cottonwood-dominated site near Albuquerque (CW), a xeroriparian saltcedar site within the Sevilleta (SCX), a young Russian olive and willow site in La Joya State Game Refuge (ROW), and a dense, monotypic saltcedar site at Bosque del Apache NWR (SCM). ROW and SCM are subject to flooding during episodes of high river flows. Climate conditions ranged from very wet
to extreme drought (Palmer Hydrological Drought Index), affecting river flows. In particular, many spring runoff periods (Apr.-Jun., Fig 3a) were well below normal, although spring flows 149-183% of normal occurred in 2005 & 2008. WTs ranged from ~4 m depth to flood stage and fluctuated dramatically at ROW and SCM, but were greatly dampened at CW and SCX, likely affected by nearby irrigation controls and municipal return flows (Fig 3b).

Within each site, total growing season ET declined with deeper mean WTs, with strong correlations at ROW and SCM (Fig 3c), especially in years with wider ranging WT depths. Mean growing season ranges of 1.6-2.3 m and range-to-depth ratios (R/D) of 1.5-1.6 occurred at these sites, vs. 0.5-0.6 m and 0.3 R/D at CW and SCX. In these mixed-phreatophyte communities, dynamic WTs, which expose a greater extent of the vadose zone throughout the growing season, may play a more important role than depth itself on transpiration rates.

Spring snowmelt floods tend to be greater in magnitude and duration than flashier summer monsoonal floods. To examine the effect of flooding on ET, we compared daily ET rates within sites during each year’s historic spring runoff period (1 May-15 June). Complete inundation occurred over the entire period at SCM in 2005 and 2008, and in 2005 at ROW, which was inundated or saturated in 2008. At ROW, ET increased significantly in flood years vs. dry years. While ET has increased over the last few wetter springs at SCM, it was not significantly different from ET in some nonflooding conditions, including the drought in 2006. ET was not related to ambient mean minimum spring temperatures. Structural and phenological differences between young, emerging mixed stands and mature, dense saltcedar sites may affect evaporation and transpiration during spring flooding.

Ecophysiology of piñon and juniper in response to prolonged drought. (Judd Hill, Rob Pangle, Jen Plaut, Will Pockman, Nate McDowell, Enrico Yapez). Long-term climate models predict that southwestern North America will become drier and warmer in the coming decades. Piñon pine (*Pinus edulis*) and juniper (*Juniperus monosperma*) woodlands are the dominant forests in the semi-arid regions of the Southwest, where some areas had almost 100% piñon mortality in the summer of 2003. To determine the
specific mechanisms leading to widespread piñon mortality, we established a long-term rainfall manipulation experiment in piñon-juniper woodland at the Sevilleta. The experiment has 12 plots, each 1600 m². Four different experimental treatments are each replicated in three blocks. Blocks are differentiated by slope and aspect (S facing and N facing slopes, and flat ground). Treatments include: 1) ambient control plots, 2) irrigation plots capable of supplementing 20mm of rain, 3) drought plots which remove 45% of natural precipitation, and 4) cover control plots that have a similar design to the drought treatment, but do not remove precipitation from the plot. An additional 40 piñon trees have been sprayed to prevent attack from Ips (pine bark beetle).

Five piñon and five juniper target trees are monitored and instrumented within each plot. Approximately 1300 sensors measuring microclimate and tree physiological characteristics record data every 15 minutes throughout the experiment (~125k automated observations/day). Periodic (~monthly) measurements are made for plant water potential; non structural carbohydrates (NSC); allometric characteristics of twigs and stems; leaf, stem, and soil gas exchange; litter production; nutrient (N) cycling; insect activity. Supplemental irrigation events significantly increase soil water; drought treatments decrease water (Fig 4a,b).

As noted above, portions of the southwestern USA experienced an estimated 40 to 95% mortality of piñon pine (Pinus edulis) and 2-25% mortality of juniper (Juniperus monosperma) during a recent prolonged drought (1998-2004). This mortality has significantly decreased woody plant cover and altered species distributions throughout the region. The prevailing mechanisms driving drought-induced mortality involve xylem
hydraulic failure, carbon starvation, or some combination of both (Fig 5a). In addition, carbon starvation and drought stress can weaken trees and predispose them to successful attack by biotic agents (i.e., beetles in the case of piñon pine).

During prolonged drought, piñon pine should exhibit carbon starvation due to isohydric stomatal behavior (constant mid-day leaf H₂O potential [Ψ]). Piñon will close stomata to prevent excessively negative Ψ (Fig 5b). Closed stomata prevent uptake of CO₂ and photosynthesis, leading to a reduction in non-structural carbohydrates as respiration losses accrue during a drought event (Fig 5c). In contrast, juniper should be prone to hydraulic failure due to anisohydric stomatal behavior (Fig 5c). Plants with anisohydric stomatal behavior do not strictly regulate midday leaf Ψ allowing for continued transpiration as soil water moisture declines during drought. To assess and model the hydraulic response to drought we measured tree transpiration (sap-flux – Fig 6), soil moisture (vol. % and Ψ), leaf gas exchange, stem and root hydraulic conductivity, and plant water stress (leaf Ψ). These variables are used to parameterize a hydraulic transport model that predicts tree transpiration and xylem hydraulic failure. We are testing the carbon starvation hypothesis by monitoring the temporal change in foliar and root non-structural carbohydrate levels, tree resin production, leaf gas exchange, and plant growth.
These measurements are designed to address key questions, such as, Do the hydraulic limitations of piñon pine (*Pinus edulis*) and juniper (*Juniperus monosperma*) significantly limit water use in this environment? Are transpiration patterns consistent with hydraulic failure or carbon starvation? The data will also be used to parameterize the Sperry (1998) model of water transport and calculate the critical transpiration rate (*E*<sub>crit</sub>) which, if surpassed, would lead to catastrophic hydraulic failure. We will also compare measured *E*<sub>s</sub> to modeled *E*<sub>crit</sub> to predict risk of hydraulic failure.

So far we have found that the drought treatment negatively affected measured *E*<sub>s</sub> in both species. Modeled hydraulic limits indicate that juniper maintained a large margin between *E*<sub>s</sub> and *E*<sub>crit</sub> (Fig 7), while piñon *E*<sub>s</sub> exceeded *E*<sub>crit</sub> when Ψ<sub>s</sub> was below -3.5 MPa. In late July 2008 piñons on the drought plot were attacked by and succumbed to *Ips confusus* (bark beetles). Approximately 65% mortality was observed on the intensively instrumented drought plot within 2 weeks.

Juniper transpiration appears conservative relative to modeled hydraulic limits. Piñon appears to violate its hydraulic limits in both control and drought treatments, however we cannot attribute observed mortality solely to hydraulic failure because no mortality was observed in the control treatment. Consistent with a carbon starvation mechanism of mortality, piñon modeled *E*<sub>crit</sub> reached extremely low values for twice as many days in the drought plot compared to the control plot (Fig 7).

**Biogeochemistry**
Large precipitation and soil respiration. (Rodrigo Vargas, Scott Collins, Michell Thomey, Jennifer Johnson, Renee Brown, Don Natvig, and Mike Friggens). Changes in the timing and magnitude of precipitation pulses will likely influence biogeochemical processes that regulate carbon dynamics in terrestrial ecosystems. Experimental data are necessary to measure changes in magnitude and synchronies of soil respiration to identify to which periods (e.g. day or weeks) biophysical mechanisms interact. We present results from a two-year study during a monsoon season (July-September) using a replicate experimental design that included ambient precipitation plus one 20 mm rain event per month, ambient plus four 5 mm rain events per month, and ambient precipitation as controls in an arid grassland. We continuously measured soil respiration and apply wavelet coherence analysis to the time series derived from experimentally manipulated monsoon scenarios to determine at which periods different treatments influence the synchrony between soil respiration and PAR (as a surrogate for photosynthesis). We find that large precipitation events increase the magnitude of soil respiration in comparison with multiple short pulses and ambient scenarios. With higher magnitude and frequency of precipitation pulses we identify an increase in synchrony between soil respiration and biophysical mechanisms that act at a 1-day period. These results suggest that studies and models need to consider that timing and magnitude of precipitation pulses influence the
strength and periodicity of the mechanisms that regulate soil respiration in terrestrial ecosystems.

**Riparian decomposition** (Mary Harner, Chelsea Crenshaw, Manuela Abelho, Martina Stursova, Jenniver Follstad Shah, Bob Sinsabaugh). Dynamics of nutrient exchange between floodplains and rivers have been altered by changes in flow management and proliferation of nonnative plants. We tested the hypothesis that the nonnative, actinorhizal tree, Russian olive (*Elaeagnus angustifolia*), alters dynamics of leaf litter decomposition compared to native cottonwood (*Populus deltoides* ssp. *wislizeni*) along the Rio Grande, a river with a modified flow regime, in central New Mexico. Leaf litter was placed in the river channel and the surface and subsurface horizons of forest soil at seven riparian sites that differed in their hydrologic connection to the river. All sites had a cottonwood canopy with a Russian olive-dominated understory. Mass loss rates, nutrient content, fungal biomass, extracellular enzyme activities (EEA), and macroinvertebrate colonization were followed for three months in the river and one year in forests. Initial nitrogen (N) content of Russian olive litter (2.2%) was more than four times that of cottonwood (0.5%). Mass loss rates (k; in units of d⁻¹) were greatest in the river (Russian olive, k = 0.0249; cottonwood, k = 0.0226), intermediate in subsurface soil (Russian olive, k = 0.0072; cottonwood, k = 0.0031), and slowest on the soil surface (Russian olive, k = 0.0034; cottonwood, k = 0.0012) in a ratio of about 10:2:1 (Fig 9). Rates of mass loss in the river were indistinguishable between species and proportional to macroinvertebrate colonization. In the riparian forest, Russian olive decayed significantly faster than cottonwood in both soil horizons. Terrestrial decomposition rates were related positively to EEA, fungal biomass, and litter N, whereas differences among floodplain sites were related to hydrologic connectivity with the river. Because nutrient exchanges between

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**Figure 9.** Decomposition of Russian olive and cottonwood leaf litter in (A) floodplain surface, (B) floodplain subsurface, and (C) river channel. Decomposition is expressed as the percentage of initial mass remaining. Values are means ± SE, based on 2–7 samples.
riparian forests and the river have been constrained by flow management, Russian olive litter represents a significant annual input of N to riparian forests, which now retain a large portion of slowly decomposing cottonwood litter with a high potential for N immobilization. As a result, retention and mineralization of litter N within these forests is controlled by hydrologic connectivity to the river, which affects litter export and in situ decomposition.

Photoacceleration of decomposition in the riparian zone (Marcy Gallo, Andrea Porras-Alfaro, Kylea Odenbach, Bob Sinsabaugh). In arid ecosystems, abiotic processes facilitate the physical and chemical degradation of plant litter to the extent that decomposition models that use climatic and litter composition variables as surrogates for microbial activity are not predictive. The purpose of this study was to estimate the potential contribution of photodegradation to the decomposition of plant litters that varies in architecture and chemical composition. Litter of *Pinus edulis*, *Juniperus monosperma* and *Populus deltoides* was exposed to ambient and attenuated sunlight, with and without supplemental water additions, at a riparian forest site along the Middle Rio Grande (New Mexico). Mass loss, elemental composition, and microbial extracellular enzyme activities (EEA) were measured over 639 days. The composition of the fungal communities associated with the decomposing litters was compared by analyses of fungal ITS nrDNA sequences. Litter exposed to ambient sunlight had greater mass loss rates than shaded litter, independent of the water treatment: *Populus* increased by 100%, *Pinus* by 86% and
Juniperus by 46%. The increases were proportional to exposed litter surface area per g dry mass. EEA potentials, particularly oxidative activities, were low in comparison to those measured in mesic ecosystems. For Populus litter, the principal driver of photoacceleration appeared to be photodegradation of cellulose; for Pinus, it was photodegradation of polyphenols; for Juniperus accelerated mass loss was associated with photodegradation of both polysaccharides and polyphenols. Fungal community composition varied by litter type, but the dominant colonizers were yeasts and dark-septate hyphal taxa (Fig 10); a finding consistent with the low enzymatic oxidation potential. This study shows that photochemical oxidation can supplement enzymatic oxidation and increase decomposition rates. As a result, organic matter decomposition in arid ecosystems is not restricted to periods of high moisture availability as is plant production. This decoupling may partly account for the low soil organic matter content of these ecosystems.

Figure 11. Comparison of yearly variation of total ANPP (g m⁻²), and ANPP of winter and summer annuals during spring and summer in Bouteloua-dominated grassland and Larea-dominated shrubland.

Annual species  Total species

Net primary production of desert annuals (Yang Xia, Doug Moore, Scott Collins, Este Muldavin). Precipitation variability and shrub encroachment in response to global environmental change are likely to affect both richness and aboveground net primary production (ANPP) of annual plants in arid and semi-arid ecosystems in the northern
Chihuahuan Desert, especially given the grazing history and desertification potential of this aridland region. Using a nine-year dataset (1999 to 2007), we examined the spatial and temporal variation in annual plant communities in grass- and shrub-dominated vegetation, and evaluated the relationships between species richness and ANPP with seasonal and annual precipitation and soil moisture. We found that species richness and ANPP varied among seasons and between years in both grass- and shrub-dominated areas (Fig 11). *Cryptantha crassispalpa*, *Plantago patagonica*, and *Phacelia integrifolia* were the most common species found in both communities in both seasons, and *Chamaesyce serrula*, *C. serpyllifolia*, and *Kallstroemia parviflora* were more common in summer only. We found that species richness in summer was significantly correlated with summer precipitation and summer soil moisture in both communities, but summer ANPP was significantly correlated with summer precipitation and soil moisture only in shrubland. However, richness and ANPP of winter annuals were significantly correlated with winter precipitation and winter soil moisture in shrubland and grassland. Our results demonstrate that temporal variation in rainfall can be as important as annual total amounts for plant performance, and that response to temporal dynamics varies among species but not between grass- and shrub-dominated communities. We conclude that desert annuals provide a highly dynamic system for understanding the processes that influence plant species composition and abundance, and that desert annual systems will likely be highly impacted by shrub encroachment along with increases in precipitation variability as a consequence of anthropogenic climate change.

*Mechanisms affecting shrub encroachment* (Juliana Medeiros, Will Pockman). Freezing may limit the high latitude expansion of warm desert shrub populations and because drought and freezing often occur together in deserts, it is important to determine their interactive effects on plant performance and survival. To understand these effects on the leaves and xylem of *Larrea tridentata*, we measured survival, leaf loss and re-sprouting, plant water potential, gas exchange, relative electrolyte conductivity, freezing point depression, and leaf specific xylem hydraulic conductance following freeze/thaw events in well-watered and droughted...
greenhouse-grown saplings following freezing to -8°C, -15°C, -19°C and -24°C. Following mild (-8°C) or extreme (-24°C) freezes drought and well-watered plants showed similar survival, but there was a significant positive effect of drought on freezing tolerance at intermediate freezing temperatures. Reductions in performance due to freezing were generally smaller among drought plants than among well-watered plants, and significantly more drought plants survived freezing to -15°C and -19°C. Drought plants had higher rates of leaf retention and re-sprouting than well-watered plants, which are close to the long-term minimum of -20°C measured at Five Points (Moore, 1989-2000). Following freezing to -15°C drought plants also exhibited higher rates of gas exchange and increased freezing point depression in leaves and green stems. The drought treatment also reduced the rate of cell death in green stems (Fig 12a); measured as relative electrical conductivity or REC) and leaves (Fig 12b). Drought plants also had higher leaf specific xylem hydraulic conductance (ki) following freezing compared to well-watered plants (Fig 12c). Finally, in drought plants the percent loss of function in leaves (Fig 12b) was well coordinated with percent loss of function in xylem (Fig 12d), while in well-watered plants xylem was more vulnerable than leaves. Reduced cell death in concert with higher leaf specific hydraulic conductance following freezing in drought plants suggests a role for living cells in preventing or repairing embolism.

Consumer Dynamics

Rodent disturbance and fire effects on plant community dynamics (Terri Koontz). Soil disturbance resulting from both biotic and abiotic factors can affect the composition of the plant community above and below ground. Small biotic scale disturbances, like ones from rodent digs, can create 'hot spots' containing unique combinations of species in the aboveground annual plant community. In the Chihuahuan desert grassland at the Sevilleta, one of the dominant rodents, the banner-tail kangaroo rat, creates living habitats of open gravely soil patches on the landscape. At a small scale these gravely patches trap seeds where a seed can germinate, flower, fruit, and establish in a community. Fire, limiting resources, and abiotic disturbances can also affect plant populations and alter community structure. In this Chihuahuan grassland, fire increased the number of forb species and
forb production. However, certain extreme precipitation events, dry winters and wet summers, dampened the effects (Fig 13).

Implications of woody plant encroachment for mammalian predators (Virginia Seamster)
Woody plant encroachment, or the spread of woody plants into a grassland area, is a widespread phenomenon and has the potential to impact the ecology of a large number of mammalian species. However, little is known about the magnitude or exact nature of this impact, especially for mammalian predators. The primary goal of this project is to assess the consequences of woody plant encroachment for the feeding ecology of a top, omnivorous predator. The specific question being addressed is: What is the base of the food chain for coyotes living in grassland vs. shrubland habitats in an area where woody plant encroachment has been occurring over the past century? The hypothesis is that woody plant encroachment will lead to a shift in coyote feeding ecology. In particular, coyotes in shrubland areas will obtain a high percentage of their food resources directly or indirectly from shrubs and there will be a positive relationship between the percent of the coyote diet coming from shrubs and percent woody plant cover. To test this hypothesis, data was collected in June to August 2008, April 2009 and July 2009 at the Sevilleta National Wildlife Refuge (NWR) and Long Term Ecological Research (LTER) site in New Mexico. A fourth field season is planned for October 2009. Data collection in 2008 consisted of the following: scat collection along 20 one mile long, road based transects and survey of vegetation within 40 circular plots (diameter=30m). Half of all transects and plots were located in grassland habitat, the other half in shrubland. In 2009, 22 scat transects were surveyed and data was collected for 22 vegetation plots (one per scat transect). In both years, scat transects were driven at <10 mph. Each scat sample encountered was measured (maximum diameter, length of longest piece, Fig 14) and then collected for future genetic and stable carbon isotope analysis. For each vegetation plot, total percent woody vegetation cover was assessed along 4x15m line intercept transects and vegetation samples were collected for future stable carbon isotope analysis.

Over 760 carnivore scat samples have been collected. Roughly 70% of the samples that have been run through a mitochondrial DNA species identification test (n=609) were from coyotes. Microsatellite data from approximately 40% of the collected samples shows that there is a minimum of 46 different coyotes at the study site.
Preliminary stable carbon isotope data indicates that, contrary to expectations, grass is an important food source in both habitat types, percent shrub in the coyote diet is slightly higher for coyotes in grassland areas (Fig 15a), and there is a very weak ($R^2=0.14$), negative relationship between percent coyote diet coming from shrubs and percent woody plant cover (Fig 15b).

**Ecosystem respiration** (Marcy Litvak, Andy Fox). To determine how carbon storage varies across the major ecosystems in the southwest, we have established a network of eddy covariance flux towers in the following upland environments: desert grassland, desert shrubland, juniper savanna, piñon juniper woodland, ponderosa pine, and mixed conifer woodland. These sites occur along an elevation gradient that creates an increase in both annual precipitation and soil moisture, and a decrease in mean annual temperature. Towers at each site measure net ecosystem exchange of carbon, water and energy. Results from 2008 show that gross primary production exceeds respiration in the forested habitats, but that grassland and shrubland habitats are either carbon neutral or small carbon sources to the atmosphere (Fig 16). As a consequence there is a strong correlation between mean annual precipitation and total C stored across these ecosystems. The next step is to estimate the land area associated with each habitat type to assess how these ecosystems combine to affect carbon dynamics in southwestern North America.

**Social-ecological research**

*Socioecological Gradients and Land Fragmentation: A Cross-site Comparative Analysis* (Milan Shrestha, Sainan Zhang, Abigail York, Christopher Boone, Jack Wright, John Harrington, Mike Antolin, Barbara Nolen, Tom Prebyl, Mike Agar, Amaris Swann). This cross-site study organized a workshop on April 20 and 21, 2009 and developed a common methodology and action plans. We have a follow-up workshop scheduled for ASM 2009 (see abstract below). For all the LTER sites involved in this study, we used...
the National Land Cover Dataset (NLCD) 1992 and 2001, compiled from Landsat TM satellite images. NLCD land-cover classes were reclassified into seven classes common for the southwestern United States. Using various fragmentation metrics, we quantified the fragmentation patterns for both the class-level and the landscape-level. While the detailed analysis is still in progress--mainly the analysis of the causes of land fragmentation for each site, some of the preliminary results of fragmentation analysis for the Sevilleta LTER site are appended below. Please note that the results are based on the transect shown on .

Increasing land fragmentation, mostly caused by urban sprawl and "leap-frog" developments, is a major concern in many rapidly growing metropolitan cities of the US. Land fragmentation affects biodiversity and ecosystem processes, as portions of the landscape become isolated without connecting corridors and this, in turn, can change ecological structure and function. This cross-site comparative study, a joint-collaboration of several LTER sites (i.e. Central Arizona-Phoenix, Sevilleta, Konza Prairie, Jornada Basin, and Shortgrass Steppe), takes a cross-site comparative approach to: (1) examine the land fragmentation patterns in some of the fastest growing southwestern cities of the US, and (2) understand the roles of urban population dynamics, water infrastructure, transportation networks, and annexation on land fragmentation.

Data used in this study are from the National Land Cover Dataset (NLCD) for the years 1992 and 2001, compiled from Landsat TM images. We reclassified the original land-use/cover classes of each research site into seven categories: developed (higher intensity), developed (lower intensity), agriculture/cultivated, forest, undeveloped/remnants, grass/shrubland, and water. We also quantified the fragmentation pattern through landscape metrics: Patch Density (PD), Interspersion and Juxtaposition Index (IJI), Contagion (CONTAG), Landscape Shape Index (LSI), Edge Density (ED), Shannon Density Index (SDI). We calculated these metrics for individual research sites and then

![Figure 17. Study site showing the selected land cover classes in 1992 and 2001, and the transect (15km x 15km window moving 5km each time).]
Finally compared fragmentation patterns across these sites. The results of this study will help understand the patterns and the processes of land fragmentation in the Southwestern United States.

Preliminary results of the fragmentation analysis for the Sevilleta LTER site at the Class-level found that 1) developed rural areas and agricultural land have expanded along the transect, especially at 0-10km, 40km, 120km, and 2) the most fragmented areas for undeveloped land are located at 40km, 120km and 140km.
At the Landscape-level, except for the Patch Density Metric, all other metrics indicated a rapid fragmentation caused by the sprawl of developed land. The most fragmented area is in city center (0km-20km), but the area where fragmentation rose the fastest is distributed evenly through 40km to 160km.

Metrics at landscape level (1992 & 2001)
APPENDIX J

LTER NETWORK OFFICE
ANNUAL REPORT,
2008–09
Summary Report for FY 2008-09

The present report covers the accomplishments of the Long Term Ecological Research (LTER) Network Office (LNO) during FY 2008–09, covering the period from June 30, 2008 to June 30, 2009. We organize major activities of the LNO during this period into four areas: “Synthesis,” “Cyberinfrastructure,” “Core Services,” and “Development and Outreach.” The report includes brief descriptions of the 14 most important accomplishment of the LNO under our four categories of activities.

Synthesis

Preparation for the ASM — LNO staff began preparation for the 2009 LTER All Scientists Meeting (ASM) to be held in Estes Park, CO. Initial steps included selecting the venue and dates and writing proposals for supplemental funding for the meeting. Preparations included contracting with the venue, the YMCA of the Rockies, for appropriate meeting space as well as with a professional meeting organizer, the Schneider Group, to assist the LNO with the meeting. With the assistance of the LTER Executive Board, the staff constituted a Program Committee representing the breadth of participants in the ASM. The committee determined the structure of the program, including plenary speakers, number and kinds of working groups, number and distributions of scientific poster presentations, and other elements of the program.

Support for Research Working Groups — The LNO provided funding for seven new LTER working groups. In support of this activity, LNO staff developed a working group web page, prepared a solicitation for proposals, received and distributed the solicited proposals, and organized proposal review by the Executive Board.

Support for Baltimore Science Council Meeting — LNO staff provided overall logistical support for the 2008 LTER Science Council meeting held at the Baltimore Ecosystem Study LTER Site. This included working with the Site and Science Council members on the scientific and business meeting program and preserving a record of the meeting in a report on the LTER Intranet website. LNO also worked with the Site for the field trip as well as arranging the hotel venue and travel for the meeting. With 52 LTER personnel attending, the meeting included a number of organized and ad-hoc working group meetings focused on 3 network-level science topics identified in the research planning process: (1) Urbanization, exurbanization, and working systems, (2) Ecological and social responses to climate change and variability, and (3) Biotic, water, and nutrient changes in socio-ecological systems.
LTER Mini-symposium – The LNO supported participation by several LTER scientists in the annual mini-symposium at NSF and facilitated the organization of the meeting. The 2009 mini-symposium, held February 26, 2009, was titled “Ecological Connectivity and Climate in a Changing World: Perspectives from LTER” and comprised the following presentations: Ecological Connectivity in a Changing World; The Coastal Nexus; The Airshed: Connecting Air, Land and Water; Hydrologic Connectivity, Climate Change and Nutrient Delivery to Receiving Waters; Connectivity and Species Change; How Dust Shapes Ecosystem: The Past, Present and Future; and Biofuels and Biodiversity: Linking Landscape Change and Ecosystem Services.

Support for San Diego Science Council, Executive Board, and National Advisory Board Meetings – LNO staff provided overall logistical support for the 2009 LTER Science Council meeting held in San Diego, CA. The LTER National Advisory Board (NAB) meeting was held concurrently with the Science Council meeting, while the Executive Board meeting was held prior to the Science Council meeting.

The LNO team also organized or facilitated several other meetings during the period, including:

- Network Information Science Advisory Committee meeting in March, 2009, at UNM.
- Changing Snow and Ice conditions and Ecosystems Response? in March/April, 2009, in Woods Hole, MA.
- Future Scenarios of Landscape Change in March/April, 2009, in Woods Hole, MA.
- Two Cyberinfrastructure (CI) Team meeting in April and June, 2009, respectively in Woods Hole, MA, and Flagstaff, AZ.
- Project DB Development Workshop II in April, 2009 at UNM.
- Trends (Disturbance, NPP/biomass) in April, and Trends (State change working group, Animals, and Air) in May.
- INTEROP seminar/workshop in May/June, 2009 at UNM.

Other achievements in Synthesis

An LNO staff member served a quarter time as associate director for the Center for Rapid Environmental Assessment and Terrain Evaluation (CREATE) at the University of New Mexico (UNM), which provided salary for this position. As part of this interaction, production of standard Geotiff MODIS data products from the Terra and Aqua satellites became operational at the beginning of 2008 for 22 of the 26 LTER sites within the reception coverage of the Center. An article describing this activity and the data was published in the Spring 2008 LTER Newsletter, as well as in scientific publications and presentations during 2008. The data are available through a link on the LTER remote sensing/GIS web page at: http://www.lternet.edu/technology/ltergis/ or directly on the CREATE website at: http://create.hpc.unm.edu/create/lter.php.

The LNO staff represented LTER at three NASA planning workshops for future satellite missions related to important data from space-borne LIDAR and Synthetic Aperture Radar instruments from the proposed NASA DESDynI mission and space-borne hyperspectral and multispectral thermal imaging data from the proposed HYSPIRI mission. Both of these missions
also have a potential ground-truth/validation component that could be important research opportunities for LTER sites.

The same staff member also represented LTER at an NSF Workshop on High-Resolution Topographic Data and Earth Surface Processes that focused on use of high resolution airborne LIDAR data from the NSF funded NCALM center, which could be an important source of LIDAR data for LTER sites. Information and workshop reports from these meetings are included on the LTER GIS/Remote Sensing Web page at: http://www.lternet.edu/technology/ltergis/

LNO Staff submitted four technical papers to Environmental Information Management conference held at UNM in September 2008.

**Cyberinfrastructure**

**Network Information System Progress** – Progress was made during FY 2008-09 in the design and development of the Network Information System. Effort was focused on supporting sites in their goal toward compliance with the LTER Data Policy by finalizing the Data Access Server (DAS). The centralized DAS was moved into early prototype phase where several sites worked closely with LNO by making a test set of public data available only through DAS proxy URLs. The DAS model routes all data requests through an authentication, auditing, and notification service, prior to allowing the pass-through of the LTER data on behalf of the site. The goal of the DAS is to validate the user credentials, thus confirming their compliance with LTER Data Access Policy, before allowing access to any site data. At least six sites indicated interest in becoming early adopters by end of FY 2008-09.

**EcoTrends Data Delivery Portal** – The NIS development team spent the year refining EcoTrends data delivery interface and assisting EcoTrends staff with data entry for release in early 2009. Enhancements to the EcoTrends exploratory interface included adding contextual help for Browse pages; adding multiple selections to drop-down lists in Advanced Search page; restructuring and making search layout collapsible in Advanced Search page; adding advanced sorting and reorganizing layout on Search Result; adding plot options to Search Result; adding additional metadata to the Data Download page; adding additional citation information to all metadata; and refining and reformatting Plot functions. Work on this system advanced and demonstrated the efficacy of several major components of the PASTA framework and was praised by the LNO proposal review panel in September of 2008. The overall interface design and functionality has been well received at scientific meetings where the work has been presented.

**Other achievements in Cyberinfrastructure**

LNO staff developed a plan, prepared a platform, and successfully migrated a parallel version of ClimDB and HydroDB databases from Andrews LTER to LNO servers. The work was completed in late Spring 2009.

LNO staff provided setup, technical support, and quality of service monitoring for 51 Video Teleconferences (VTCs) for Executive Board, IMEXEC, NISAC, IM committee, and others;
implemented upgraded virtual server support capability for development and production services; among other things.

LNO staff also wrote and submitted papers to peer reviewed journals, including an invited article about the RDIFS program to *BioScience*, and were co-authors on a Brevia article submitted to *Science* based on the results of network analysis on LTER publication data. An LNO staff member also presented a paper at the International Society for Ecological Informatics meeting December 2-4 entitled “The use of Ecological Metadata Language in LTER.”

**Core Services**

**Renewal of the LTER Network Office Cooperative Agreement** — LNO staff expended significant effort in responding to NSF’s request to submit a renewal proposal for the LNO Cooperative Agreement. In addition to the actual writing, members of the LNO worked to engage appropriate user groups to identify site and Network needs to be addressed in the proposal. LNO staff developed logic models based on these needs, and constructed implementation plans for each logic model. The implementation steps were linked with resources needed, which were then translated into personnel and other budget requests. LNO staff prepared and gathered supporting and supplementary material to justify the proposal request. The LNO hosted a Site Review, and prepared presentations to explain and justify the proposal. Based on guidance from NSF, LNO staff prepared two budget revisions and accompanying budget impact statements. These budget impact statements served to define the scope of work of the renewed Cooperative Agreement.

**Meetings Facilitated and Meeting Participants** — LNO staff coordinated all logistical requirements for 29 meetings involving 374 participants for a total cost of $270,846. Logistical requirements included hotel, flight, and ground transportation arrangements for all participants; audio, visual, and daily room requirements; and post-meeting workshop payment of invoices, travel reimbursements, and reconciliation of the meeting budget.

**Other achievements in Core Services**

During FY 2008-09, LNO managed the following separate grant accounts: (1) the Science Environment for Ecological Knowledge (NSF), (2) National Biological Information Infrastructure (USGS), (3) a CI-TEAM demonstration project (NSF), (4) the follow-on full implementation CI-TEAM project (NSF), (5) INTEROP: Creation of an International Virtual Data Center for the Biodiversity, Ecological and Environmental Sciences (NSF), and (6) A Digital Repository for Preservation and Sharing of Data Underlying Published Works in Evolutionary Biology (Duke University/NSF).

We created and reconciled sub-accounts for 18 LTER cross-site working groups.

We organized meetings and maintained communications that addressed global IT infrastructure (SEEK).

LNO prepared or edited reports and minutes from Coordinating Committee/Science Council, Executive Committee/Board, Information Management (IM) Committee, and IM Executive
Committee/Network Information System Advisory Committee meetings, tele-conferences, and video conferences and posted these reports on the appropriate LTER web page.

Senior LNO staff facilitated cross-site research activities involving LTER and non-LTER investigators by serving as intermediaries between sites and investigators and by providing letters of support for proposals for work at LTER sites.

All Core Staff members are actively involved in the creation of an electronic training manual for LNO administrative services. This electronic manual will be incorporated into the Critical Procedures Manual and will address UNM compliance policies.

**Development and Outreach**

**New Partnerships** — LNO formed new partnerships with the National Evolutionary Synthesis Center, Oak Ridge National Laboratory, the USGS NBII, and the Global Biodiversity Information Facility to develop a recently funded 4-year NSF INTEROP project (with LNO staff as Principal Investigator and Co-Investigator) entitled: “Creation of a Virtual Data Center for the Biodiversity, Ecological and Environmental Sciences.”

INTEROP collaborators include teams from the National Center for Ecological Analysis and Synthesis at UC-Santa Barbara; National Evolutionary Synthesis Center (NESCent) at Duke University; Oak Ridge National Laboratory DAAC for Biogeochemical Dynamics; USGS National Biological Information Infrastructure; Global Biodiversity Information Facility; University of Kansas; and NESCent, University of North Carolina.

The LNO formed additional new partnerships with the National Evolutionary Synthesis Center, the University of North Carolina, and Yale University to develop a recently funded 4-year NSF project (again with LNO staff as PI and Co-I) entitled: “A digital repository for preservation and sharing of data underlying published works in evolutionary biology” and commonly referred to as Dryad.

Dryad collaborators include teams from the National Evolutionary Synthesis Center (NESCent) at Duke University; NESCent at the University of North Carolina (UNC); UNC/Metadata Research Center, School of Information and Library Science; and the Peabody Museum of Natural History at Yale University.

**INTEROP** — The LNO was supported through an NSF INTEROP award (with LNO staff PI; Co-I). The recently funded four-year effort (2008–2011) is designed to develop new community capacity and new technologies to support the design, implementation, and deployment of a Virtual Data Center (VDC) for biodiversity, ecological and environmental data. Technical Working Groups (engaging information scientists from data centers representing many diverse disciplines), a developer, and numerous students will contribute to VDC prototypes and adopting and adapting basic system interoperability standards, such as the Open Archives Initiative Protocol for Metadata Harvesting from the digital library community and various scientific community data exchange standards (e.g., SEEK EarthGrid protocols, the oceanographic communities’ OPeNDAP protocol, Federal Geographic Data Committee Biological Data Profile, and the web community’s grid service protocols).
A Community Engagement Working Group (two dozen or more representatives of scientific societies and emerging national and international environmental observatories) plus an annual External Advisory Committee meeting will address socio-cultural barriers to data preservation and data sharing, as well as data center and VDC sustainability. Education and outreach are integral to the project. Four students will participate annually in a summer cyberinfrastructure traineeship that is modeled after the Google Summer of Code™. Additional students will be engaged during the academic year in projects identified by the Working Groups. Outreach will be provided at annual meetings of relevant professional societies, emerging environmental observatories, and research networks.

Dryad – The LNO also participated in an NSF proposal (LNO staff as Co-PI and Co-I) to facilitate data sharing in the evolutionary community. At the behest of major journals and societies in evolutionary biology, NESCent initiated development of a digital repository, called Dryad, for the preservation, discovery and sharing of data underlying published works throughout the discipline. The overall aim of this recently awarded four-year collaborative project (2008–2011) is to facilitate data sharing upon publication by the evolutionary community, addressing the major hurdles to adoption of Dryad, both technical and otherwise, in three broad areas: (i) deposition and access interface, (ii) incentives and interoperability, and (iii) sustainability. We will also promote the use of Dryad as an educational tool to teach future scientists about the value of digital data archives.

The project will have a broad and transformative impact by enabling the preservation, discovery, sharing, and re-use of data for an entire biological discipline. It represents a unique collaboration among diverse institutions (academic journals and associated scientific societies, a national synthesis center and research network, a major community database) and expert communities (evolutionary biologists, information scientists and research librarians) and a pioneering application of digital library technology to data sharing for “small science.” We intend that this will serve as a model for efforts to preserve and share data in other disciplines facing a similar crisis of data attrition.

Renewal of Cooperative Agreement NBII-LTER for 2008–2009 – LNO staff continued the ongoing collaboration between USGS-NBII and LTER. LNO will continue with the ongoing collaborative efforts between the NBII and LTER with metadata enhancement efforts, editor/entries, crosswalks, and synthesis efforts. Specific tasks to be accomplished by LNO staff for the next year include:

- Coordination, training, and help-desk support (base tasks that enable support for reporting and accountability, organization and participation in training activities, and provision of help desk support for the community)

- Support for development of metadata tools and interoperability solutions, as well as information dissemination to the community

Partnership with the National Phenological Network – Working under instructions from the LTER Executive Board, LNO negotiated a Memorandum of Understanding (MOU) with the National Phenological Network (NPN). The purpose of this MOU is to identify areas of collaboration that will advance the goals of both NPN and LTER. The MOU was ratified by the Executive Board in November, 2008.
Other contributions in Development and Outreach

A major role of LNO is to disseminate the results obtained by LTER scientists to professional scientific colleagues and students and popularize the Network to the wider public, as well as support information flows within LTER and between LTER and these broader communities. The office does this through various means—for example, the dissemination of scientific publications based on LTER research that inform the ecological community of our accomplishments, and the dissemination of such results through popular mass media and other publicity material to the general public and other non-scientific audiences.

In line with the Network's strategic goal of expanding the use of LTER knowledge in education, policy-making, management, and public understanding of scientific issues, LNO established a Public Information and Outreach (PIO) program that utilizes print and electronic media, personal presentations, video, the World Wide Web, workshops, symposia, and other means, to disseminate LTER information.

Over the past several years, the PIO has developed several communication tools and products to meet this goal. However, current and emerging challenges means that the PIO has to strive constantly to, among other things: (1) identify gaps in information products and materials that need filling and develop strategies and means for filling them; (2) refine and modify the existing material; (3) keep the material relevant to the vision and mission of LTER; (4) create new materials, tools and products; and (5) produce material and information that is more targeted to various audiences.

The PIO will continue to refine our communication strategies as necessary. In 2008, for example, we put forward proposals for a complete makeover of the LTER travelling exhibit. The new multimedia exhibit, upon full completion, will consist of a high-definition display, space for books and brochures, and a series of modular banners that roll-up from a floor base. The modular design enables easy and inexpensive transport of only those modules needed at a particular meeting or LTER site.

Similarly, the PIO is working on developing relevant material to populate the U.S. LTER page on the International LTER website, and plans to work with sites to develop and publish first-class, up-to-date material about LTER on Wikipedia, the highly popular web-based/online encyclopedia.

Among the major achievements and activities during FY 2008-09, the PIO continued to develop new material and maintain existing material suitable for LTER meetings and conferences, including the Ecological Society of America's (ESA) annual conference in Milwaukee, WI (August 2008) and the annual LTER Mini-symposium at NSF in Washington, D.C. (February, 2009).

We continued to develop content for the LTER network web sites and databases, adding material and updating the existing intranet and LTER web sites as necessary to support the LTER Network as a whole, including a major revamping of the LNO website to provide relevant material for reviewers before, during, and after the LNO proposal review in September 2008.
LNO staff collected and archived images for use on the LTER websites, in in-house and external publications, and other information material. LNO invited sites to provide new images for updating the LTER multimedia gallery, and organized with the UNM Public Affairs office to shoot professional quality photos of training activities in LNO’s Ecoinformatics and Usability Testing Labs, for use in Network publications and for other appropriate purposes.

We produced articles and edited two LTER Network Newsletters, working closely with writers from LTER sites and partners to assure broad, balanced coverage of research, outreach, publishing, and other site activities. The PIO worked with the printers to manage production and distribution, and reformatted both issues for presentation and distribution our revamped online news portal.

The PIO, with the assistance of the Executive Director and other staff, continued to develop internal strategies and methods for disseminating LTER information, including an overall communication strategy for LTER activities. LNO is currently developing plans and possible participants for a planning workshop in the coming year on the LTER Strategic Plan for Communication. The workshop will allow participants to assess LTER strengths, barriers, and opportunities; identify and prioritize strategies, tactics, and actions; develop timelines, metrics and milestones; and assign responsibilities. The strategic plan may lead to the modification of some existing communication and outreach activities, as well as to the addition of new activities that are approved by the LTER Executive Board, though we expect the core activities that presently form the foundation for the LNO communication and outreach program to continue.

The PIO also designed and completed an informational brochure for the LNO. Working with site representatives, the team has now completed the design and development of site brochures for all 26 LTER sites.
APPENDIX K

FACULTY SCHOLARLY
& PROFESSIONAL
ACTIVITIES,
CY 2008
I. TEACHING.

A. Graduate Education.

1. Master's Students.

a. Degrees awarded.

BERGTHORSSON, U.

COLLINS, S.L.
Laura Calabrese: "Effects of Fire, Grazing and Topography on Vegetation Dynamics in Native Tallgrass Prairie," Summer.

COOK, J.A.
Frances, Jose, "Spatial Genetic Structure and Demographic History of the Wolverine in North America," Summer.

CUNNINGHAM, C.
Reza Imani, "Transcriptome Analysis of Stress Responses in Schistosoma mansoni," Summer.

DAHM, C.N.
Jennifer L. Tichy, "A Comparison of Methods to Estimate Primary Production and Respiration in Streams," Fall.

HANSON, D.T.
Heath Powers, "A Dynamic Soil Chamber System Coupled with a Tunable Diode Laser for Online Measurements of $\delta^{13}$C, $\delta^{18}$O, and Efflux Rate of Soil Respired CO$_2$," Fall.

LITVAK, M.E.
Daniel A. Brese, Plan II.
LOKER, E.S.

POCKMAN, W.T.
Sandra White, “Vegetation and Environmental Controls on Soil Respiration in a Piñon-Juniper Woodland,” Fall.

POE, S.

b. For current and past M.S. students, the number of primary and the total number of middle-author papers based on work done in our graduate program that were published in the last year. “Primary” is defined as either first-author or senior author.

BERGTHORSSON, U.
One middle-author.

CUNNINGHAM, C.
One primary on one published paper and one middle author on one paper in press (Reza Imani).

One middle author in press (Sandra Melman, E.S. Loker’s M.S. student).

HANSON, D.T.
One middle author.

SINSABAUGH, R.L.
One primary, three middle (Martina Stursova).

SNELL, H.I.
Three primary, three middle.

TURNER, T.F.

WOLF, B.O.
One primary (Casey Gilman).
2. Doctoral Students.

a. Degrees awarded.

BROWN, J.H.
Alison Boyer, "Evolution and Ecological Correlates of Body Size, with Special Emphasis on Pacific Island Birds," defended April 23.

COOK, J.A.
Dawson, Natalie G, "Vista Nortefia: Tracking Historical Diversification and Contemporary Structure in High Latitude Mesocarnivores," Fall.

CRIPPS, R.M.
Kathryn Ryan, Regulation of svp Expression by Hox Genes in the Drosophila Dorsal Vessel," Summer.

DAHM, C.N.
LYDIA H. ZEGLIN, Microbial Diversity and Function at Aquatic-Terrestrial Interfaces in Desert Ecosystems," Summer.

LOWREY, T.K.
Joanna Redfern, "Phylogeny and Phylogeography of the Fouquieriaceae," Fall.

MILLER, R.D.

NATVIG, D.O.
ANDREA PORRAS-ALFARO, "Diversity, Distribution Patterns and Effect of Nitrogen Fertilization on Fungal Communities in a Semiarid Grassland," May.

POCKMAN, W.T.
Teresa Newberry, "Multi-scale Temporal Variability of Water Relations in Piñon Pine (Pinus edulis)," Summer.

SMITH, F.A.

TAKACS-VESBACH, C.D.
Lydia Zeglin, "Microbial Diversity and Function at Aquatic-terrestrial Interfaces in Desert Ecosystems," Summer.
THORNHILL, R.

WOLF, B.O.


b. For current and past Ph.D. students, the number of primary and the total number of middle-author papers based on work done in our graduate program that were published in the last year. "Primary" is defined as either first-author or senior author.

BROWN, J.H.
Four primary and two middle.

COLLINS, S.L.
One primary.

CRIPPS, R.M.
One primary and no middle.

DAHM, C.N.
One primary, one middle.

HANSON, D.T.
One primary and one middle.

KODRIC-BROWN, A.
Two primary.

LOWREY, T.K.
One primary.

MILNE, B.T.
Two primary, one middle.

NELSON, M.A.
One primary.

POCKMAN, W.T.
One middle.
SINSABAUGH, R.L.
Three primary, eight middle.

SMITH, F.A.
Two primary, three middle.

SNELL, H.L.
Six primary, three middle.

TAKACS-VESBACH, C.D.
One middle.

THORNHILL, R.
Four primary-author papers.

TURNER, T.F.
One middle.

WERNER-WASHBURN, M.
Three primary, one middle.

c. For current Ph.D. students, the number of grants for which they applied, and the number of grants awarded (for granting agencies outside of UNM).

BROWN, J.H.
Share with Wildlife Program, N.M. Game and Fish Department, $11,000.
Research Fellowship, Universidad Nacional Autónoma de México, $25,000.
NSF/IBS Student Travel Grant to attend the 2009 Annual Meeting of the International Biogeography Society (Mexico, January 2009), $1,000.
National Academy of Sciences Student Travel Scholarship, December, $250.
Gordon Conference Participant Grant, Summer, $550.

COOK, J.A.
Alaska Dept. of Fish and Game, $20,000.

HANSON, D.T.
One grant application, none received.

KODRIC-BROWN, A.
Four.
MILNE, B.T.
One applied for, one awarded.
One applied for, one awarded.

NELSON, M.A.
One applied, not awarded (Diego Martinez, Truman Fellowship)

SMITH, F.A.
Dolly Crawford applied for two external grants, received two.
Ian W. Murray applied for two external grants, received two.
Shawn (Fred) Whiteman applied for three external grants, received two.

SNELL, H.L.
One applied for, none awarded.

WAIDE, R.B.
Three applied for, two awarded.

3. Bona fide graduate courses and number of students enrolled; indicate new courses (for you) with an asterisk.

ADEMA, C.M.
Fall: Biol. 546L, Lab Methods in Molecular Biology, 1 student

BERGTHORSSON, U.
Fall: Biol. 502, T/Genome Evolution, 2 students

BROWN, J.H.
Spring: Biol. 503, Biological Complexity Seminar, 4 students
Fall: Biol. 503, Interdisciplinary Biological & Biomedical Sciences, 4 students
Biol. 516, Basic Graduate Ecology, 11 students

CHARNOV, E.L.
Spring: Biol. 502, Evolutionary Ecology, 13 students
Fall: Biol. 565, Sociobiology and Evolutionary Ecology, 9 students

COLLINS, S.L.
Spring: * Biol. 502, ST/Distributed Graduate Seminar (included lectures and data analysis/processing). This course, sponsored by the National Center for Ecological Analysis and Synthesis (NCEAS), included students from UC-Irvine, UC–Santa Barbara, UC–Berkeley, UNM, University of Houston, Florida International University, and Columbia University. It included a five-day

K-6
working group meeting at NCEAS in Santa Barbara with two students and one faculty member from each university.

**Fall:**
- Biol. 514, Ecosystem Ecology, 9 students
- Biol. 575, Plant Community Ecology, 6 Students

**COOK, J.A.**

**Spring:**
- Biol. 502, Coalescent 1, 5 students
- Biol. 517, Basic Graduate Evolution (¾ of class-time), 12 students
- Biol. 561, Tropical Biology, 3 students

**Fall:**
- Biol. 502, Spatial Genetics, 5 students
- Biol. 502, Advanced Field Mammalogy, 1 student

**CRIPPS, R.M.**

**Spring:**
- Biol. 502, T/Fly Development, 1 student

**Fall:**
- Biol. 502, T/Fly Development, 2 students

**DAHM, C.N.**

**Spring:**
- Biol. 495, Limnology, 3 students
- Biol. 496L, Limnology Lab, 1 student

**HOFKIN, B.V.**

**Spring:**
- Biol. 556, Immunology, 5 students
- Biol. 490, Biology of Infectious organisms, 3 students

**Fall:**
- Biol. 371, Invertebrate Biology, 2 students

**HOWE, K.A.**

**Fall:**
- * Biol. 597, Principles of Gene Expression, 4 students

**KAJU, V.**

**Spring:**
- * Biol. 502, ST/Speciation, 5 students

**Fall:**
- * Biol. 500, New Graduate Student Seminar, 20 students
- Biol. 502, ST/Evolutionary Genetics & Genomics, 3 students

**KODRIC-BROWN, A.**

**Spring:**
- Bio. 517, Basic Graduate Evolution, 15 students

**Fall:**
- Bio. 521, Advanced Behavioral Ecology, 4 students
- Bio. 502, T/Sexual Selection, 5 students

**LITVAK, M.E.**

**Fall:**
- Maternity Leave

**Spring:**
- * Biol. 502, T/Ecosystem Dynamics, 1 student

**LOWREY, T.K.**

**Fall:**
- Biol. 651, Advanced Field Biology, 1 student
MARSHALL, D.I.
Fall:  Biol. 502, Topics in Plant Reproduction, 4 students

MILLER, K.B.
Spring:  Biol. 585, Entomology, 2 students

MILLER, R.D.
Spring:  Unpaid leave-of-absence while an NSF Program Director.
Fall:  Biol. 556, Immunology, 5 students

MILNE, B.T.
Spring:  Biol. 551, Research Problems, 2 students
Fall:  Biol. 551, Research Problems, 2 students (5 SCH)
       Biol. 699, Dissertation, 1 student (12 SCH)

NATVIG, D.O.
Spring:  Biol. 502, T/Biology of Fungi (3 cr), 2 students
       Biol. 517, Graduate Evolution Core (4 cr), 6 students
Fall:  Biol. 546, Laboratory Methods in Molecular Biology (4 cr), 1 student

NELSON, M.A.
Fall:  Biol. 428, Human Heredity, 3 students

POCKMAN, W.T.
Fall:  Biol. 516, Basic Graduate Ecology, 101 students
Spring:  Biol. 502, T/Plant Physiological Ecology, 2 students
       Biol. 571, Plant Physiological Ecology, 7 students

POE, S.
Spring:  Biol. 651, Advanced Field Biology, 1 student
Fall:  Sabbatical Leave

SINSABAUGH, R.L.
Fall:  Biol. 516, Basic Graduate Ecology (¼ of the course), 8 students

SMITH, F.A.
Spring:  Biol. 502, ST/ Topics in Paleoecology, 12 students
       Biol. 502, ST/Animal Physiology Ecology, 8 student (co-taught with J.H.
       Brown and B.O. Wolf)
       Biol. 503, Biocomplexity Seminar (Seminar in Integrative Biology and Biomedical
       Science [SiBBs]), 4 students (but many more attended). Cross-listed in five
       departments. (co-taught with J.H. Brown)
       Biol. 517, Basic Graduate Evolution, 6 students (co-taught with A. Kodric-
       Brown)
Fall:  
Biol. 516, Basic Graduate Ecology, 11 students (co-taught with  

SNELL, H.L.  
Teaching release as Faculty Senate President.  

Spring:  
Biol. 699, Dissertation, 2 students  
Biol. 551, Research Problems, 1 student  
Fall:  
Biol. 699, Dissertation, 2 students  
Biol. 551, Research Problems, 2 students  

TAKACS-VESEBACH, C.D.  
Spring:  
Biol. 502, T/Current Literature in Microecology, 2 students  
Fall:  
Biol. 502, T/Current Literature in Microecology, 1 student  

THORNHILL, R.  
Spring:  
Biol. 502, ST/Human Sexuality, 3 students  

TOOLSON, E.C.  
Spring:  
Biol. 502, T/Ecology Seminar, 3 students  
* Biol. 502, T/Intermediate Mathematical Biology, 6 students  
Biol. 545, Biology of Toxins, 3 students  
Fall:  
Biol. 502, T/Ecology Seminar, 1 student  
Biol. 592, Introductory Mathematical Biology, 7 students  

TURNER, T.F.  
Spring:  
Biol. 502, T/Ecology and Evolution of Fishes, 3 students  
Awarded A&S Research Semester (for MSB-IGERT pre-proposal preparation)  
Fall:  
Biol. 651, Advanced Field Biology, 1 student  

WAIDE, R.B.  
Spring:  
Biol. 505, Ecosystem Dynamics, 1 student  

WEARING, H.J.  
Fall:  
* Biol. 516, Basic Graduate Ecology (four-week unit on population ecology)  
(team-taught with W.T. Pockman, E.A. Smith, B.O. Wolf)  

WERNER-WASHBURN, M.  
Spring:  
Biol. 502, Biomedical Research I, 5 students  
Biol. 544, Genomes and Genomic Analysis, 6 students  
Fall:  
Biol. 502, T/Biology: Discovery and Innovation; 4 students  
Biol. 502, Biomedical Research II, 5 students  

K-9
WITT, C.C.

Spring:  Biol. 502, Molecular Systematics Discussion Group, 5 students (with more participating)
        * Biol. 502, Avian Specimen Preparation, 2 students
Fall:    Biol. 502, Molecular Systematics Discussion Group, 3 students (with more participating)
        * Biol. 500, New Graduate Student Seminar, 20 students
Summer: * Biol. 502, Ornithological Field Expedition, 2 students

WOLF, B.O.

Spring:  Biol. 502, T/Animal Physiological Ecology, 3 students (team-taught with J.H. Brown and E.A. Smith)
Fall:    Biol. 503, Topics in Interdisciplinary Biology and Biological Sciences (TIBBS), 8 students (team-taught with J.H. Brown, R.R. Parmenter (Biology), S. Nelson (Anthropology) S. Forrest (Computer science), N. Kenkre (Physics).
        Biol. 502, T/Evolutionary Medicine, 6 students (J. Alcock, M.D., primary instructor)
        Biol. 402, T/Animal Physiological Ecology, 5 students (team-taught with J.H. Brown and E.A. Smith)
        Biol. 502, T/Physiological Ecology, 10 students
        Biol. 516, Basic Graduate Ecology, 11 students

4. Your service on graduate student committees, not as chair, in semester oral exam was given.

BROWN, J.H.

William Dunn, Marcus Hamilton, Larissa Harding, Hilary Lease, Teresa Newberry, Robin Ware

CHARNOV, E.L.

Fall:    Wenyun Zuo

COLLINS, S.L.

Etsuko Nonaka (Helen Wearing)
Jen Tichy (Clifford N. Dahm)
Jordan Okie (James H. Brown)
Robin Warne (Dissertation defense, Blair O. Wolf)
William Dunn (Bruce T. Milne)

CRIPPS, R.M.

George Davidson

DAHM, C.N.

Matthew Kirk, Ph.D. student, Dept. of Earth & Planetary Sciences, UNM
Andrew Robertson, M.S. student, Water Resources Program, UNM
Amy J. Williams, M.S. student, Dept. of Earth & Planetary Sciences, UNM

HANSON, D.T.
Teresa Newberry (Ph.D. received in December).

HOFKIN, B.V.
Reza Imani, Master's degree, Spring
Sandra Melman, Master's degree, Spring

LITVAK, M.E.
Sally Koerner, oral exam, Fall
Jennifer Plaut, oral exam, Fall

LOWREY, T.K.
Natalie Dawson, "Vista Norteña: Tracking Historical Diversification and Contemporary Structure in High Latitude Mesocarnivores," Fall (J.A. Cook).

MARSHALL, D.L.
Chris Frazier, Comprehensive Exam, Spring

MILLER, R.D.
External Reader on Janice Lee Joss' doctoral dissertation, "Immunomodulatory Compounds in Marsupial Milk," Macquarie University, Sydney, Australia, Fall.

POCKMAN, W.T.
Laura Calabrese, M.S., Fall.

SINSABAUGH, R.L.
Andrea Porras-Alfaro, Ph.D. defense, April 2
Lydia Zeglin, Ph.D. defense, May 15
Maco Martinet, Ph.D. defense, September 26
Armoud Dichosa, Ph.D. defense, October 21
Jennifer Tichy, M.S. defense, October 31
Kendra Mitchell, Ph.D. defense, November 17

SMITH, F.A.
William R. Burnside, comprehensive exam, October.

SNELL, H.L.
Eric Schaad, oral and written Comprehensive Exams, Spring.

THORNHILL, R.
Ilanit Tal, Ph.D. student in UNM Psychology, Spring.

K-11
Rachael Falcon, Ph.D. student in UNM Psychology, Fall.

TOOLSON, E.C.
Hillary Lease

WEARING, H.J.
Etsuko Nonaka, Department of Biology, Fall (co-chair)
Wenyun Zuo, Department of Biology, Fall

WERNER-WASHBURNE, M.
George Davidson and Diego Martinez, comprehensive exams

5. Professional accomplishments and awards of your graduate students, exclusive of those on which you were a co-author or participant (e.g., foreign travel, papers presented, papers published, awards and grants received, etc.).

BROWN, J.H.

BURNSIDE, WILLIAM:

DAVIDSON, ANA:


Share with Wildlife Program, N.M. Game and Fish Department, $11,000.

Research Fellowship, Universidad Nacional Autónoma de México, $25,000.

OKIE, JORDAN:


NSF/IBS Student Travel Grant to attend the 2009 Annual Meeting of the International Biogeography Society (Mexico, January 2009), $1,000.

National Academy of Sciences Student Travel Scholarship, December, $250.

Student Research Allocation Committee Grant, UNM, Summer, $400.

Student Enrichment Opportunity Award, Programs in Biomedical & Biological Sciences (PIBBS), UNM, Summer, $400.

Gordon Conference Participant Grant, Summer, $550.

PIBBS Focus Group Grant on “The Statistical Physics and Thermodynamics of Ecological Systems,” $400.


COLLINS, S.L.

SARAH “SALLY” KOERNER: passed her Ph.D. oral exam

My students received GRAC and SRAC awards.

SALLY KOERNER, LAURA CALABRESE and ETSUKO NONAKA (co-advised at the time) presented papers at the Annual Meeting of the Ecological Society of America and the Annual Meeting of International Association of Landscape Ecology–North America (IALE-NA).

ALEJA CARVAJAL: co-author with Sally Koerner, Laura Calabrese and Etsuko Nonaka on their paper presented by Koerner.

COOK, J.A.

YADEEH ESCOBEDO Sawyer: Hertel Scholarship & Gaudin Scholarship
ANDREW HOPE: Grove Scholarship

BRITTANY BARKER: Grove Scholarship

JASON MALANEY: Share with Wildlife grant, $5,000

CRIPPS, R.M.

ELISA LABEAU:
> Honorable Mention for talk, Society for the Advancement of Chicanos and Native Americans in Science (SACNAS), Salt Lake City UT, October 9-12.
> Honorable Mention for poster, 17th Annual Research Day, Department of Biology, UNM, April 11.

HANSON, D.I.

CHRIS BICKFORD:
2008 Grove Scholarship, Department of Biology, UNM, $750.

2008 Graduate Research Allocations Committee Grant, Biology Department, UNM, $150.

Travel Award for the 2008 Gordon Research Conference “CO_2 Assimilation in Plants: Genome to Biome,” $500.

JOHN DELONG:

2008 Grove Scholarship, Department of Biology, UNM

SUSAN MIRABAL:
Travel Award from the American Society of Plant Biologists to attend the summer 2009 Annual Meeting.

KODRIC-BROWN, A.

DIANA ANDRES:
Attended and presented a poster, the Animal Behavior Society, Snowbird UT, August 16-21

GRAC grant, UNM, $200, Spring.

BELDING, BETH:
Undergraduate Honors Program, graduated *magna cum laude*

“Effects of Early Experience and Male Behavior on Female Choice in Pupfish Hybrids,” poster, 17th Annual Research Day, Department of Biology, UNM, April 11.

K-14
ANDREW EDELMAN:


Poster, “Do Kangaroo Rats Indirectly Facilitate Harvester Ants? Implications of Inter-specific Spacing Patterns,” 17th Annual Research Day, Department of Biology, UNM, April 11.

“Banner-tailed Kangaroo Rats: Ecosystem Engineers of Desert Grasslands,” Summer Seminar Series, Sevilleta Long Term Ecological Research (LTER) Field Station, Soccoro NM.

Albert R. and Alma Shadle Fellowship, American Society of Mammalogists, $4,300.

Joseph Gaudin Scholarship, Department of Biology, UNM, $1,500.

Graduate Teaching Fellowship in K-12 Education, NSF and UNM.

Graduate Student Summer Grant, Sevilleta Long Term Ecological Research (LTER), $3,500.

DANIELLA SWENTON-OLSON:


Jan Smith Award for Best Application of Behavior to Fish Conservation, 2008 Ecological and Evolutionary Ethology of Fishes Biennial Conference, Boston, MA, June 29–July 3.

Second Place, Best Graduate Poster, 17th Annual Research Day, Department of Biology, UNM, April 11.

LOWREY, T.K.
JOANNA REDFERN:

MILLER, K.B.
NATHAN LORD:

Invited lecture, “Predation and parasitism among insects,” Entomology for Teachers (ENTO 5730/7730), Department of Entomology, The University of Georgia, July.


EUGENE NEARNS:


MILNE, B.T.
DELONG, JOHN:
➢ Grove Scholarship

DUNN, WILLIAM:
➢ Passed qualifying exams; achieved candidacy for Ph.D.

SANTISTEVAN, MIGUEL:
➢ Featured in Santa Fe Reporter, “Red, Green, or GMO?”
NATVIG, D.O.

ANDREA PORRAS-ALFARO, Fungal Environmental Sampling and Informatics Network (FESIN) $750 travel award to attend the 93rd Meeting of the Ecological Society of America, Milwaukee WI, August 3-8.

POCKMAN, W.T.

SANDRA WHITE:
GRAC Award, UNM, $250, Spring.

JULIANA MEDEIROS:
> Graduate Research Development Grant, UNM, $3,000.
> Specialized Travel Grant, UNM, $300
> Organizer, Ecological Society of America International Meeting Special Session “Pedagogical Frameworks for Teach Scientific Inquiry: Lessons from GK12,”
> Student Director, Sevilleta GK12 Summer Internship Program

JESSICA SNIDER:
SRAC Award, UNM, Spring
GRAC Award, UNM, Spring
Springfield Scholarship, UNM, Spring

SMITH, F.A.

CRAWFORD, DOLLY

“A Desert Runs Though It: Comparative Phylogeography of Three Rodent Taxa Across the Highlands of Mexico and the Southern United States,” International Biogeography Society Travel Grant, $1,300.

Mentor, UNM Undergraduate Nurturing Opportunities (UNO) (Justin Pichardo).

HARDING, LARISA E.


K-17
Harding, L.E. and E.S. Wiaslow, Eds. 2008. *Proceedings of the Ninth Western Black Bear Workshop*, Raton, NM. N.M. Department of Game and Fish, Santa Fe NM.

Outreach presentations on black bear ecology and bear safety to six first-grade elementary school classes at Mary Blount Elementary School, Maryville TN, December 19.

Invited speaker/presenter to biology classes on vertebrates and their natural history, Rio Rancho High School, Spring.

Joined the International Biogeographical Society; participated in the IMPPS Research Coordination Network (October); and served as a reviewer for *Molecular Phylogenetics and Evolution*.

**MARTIN, JESSICA**


Accepted into UNM Undergraduate Nurturing Opportunities (UNO) Program, Spring.

Elected to *Who's Who in American Colleges and Universities*.

Outstanding Sophomore Award, University Honor's Program, UNM.

UNM Regents Travel Grant to fund trip to Argentina as a student teacher of "Biogeography of Arid Zones," $750.

UNM University Honors Program, $1,000.

“Not in My Backyard: Patterns of Donations to Environmental Organizations,” International Biogeography Society Travel Grant, $650.

**MURRAY, IAN W.**


Award for Best Student Talk, 33rd Annual Symposium of the Desert Tortoise Council, Las Vegas NV, February 22-25.


Mentor, Sevilleta Long Term Ecological Research (LTER) Research Experience for Undergraduates (REU) (Emily Stinson).

Mentor, UNM Undergraduate Nurturing Opportunities (UNO) (Dave Garcia).

Reptile and Amphibian Merit Badge Facilitator, Boy Scouts of America.

WHITEMAN, SHAWN
Smithsonian Graduate Student Fellowship, $5,500.

Travel grant, International Biogeography Society, $1,300.

GK–12 Fellowship, UNM Ecohydrogeology in the Middle Rio Grande Environment (E-MRGE) GK–12 Program, $30,000/ year, plus tuition and health insurance.

SNELL, H.L.

TOM GIERSMAKOwSki:
► Attended two professional meetings.
► Five–10 field research trips in the Southwest and Ian Latella

IAN LATELLA:
► Attended two professional meetings.
► Traveled to South & Central America twice.
TAKACS-VESBACH, C.D.

KENDRA MITCHELL: Killam Post-doctoral Fellowship.

TURNER, T.F.

AYESHA S. BURDETT, Ph.D., Post-doctoral Research Associate:

Attended Third Annual Student Water Symposium, UNM, March 28.


Attended the Annual Fall UNM Water Forum, UNM, October 5.


Daves-Brody, N., Bixby, R.J., and A.S. Burdett, Seasonal effects on water chemistry and algal growth and diversity in the Rio Grande. Poster, 17th Annual Research Day, Department of Biology, UNM, April 11.


Ad hoc proposal reviewer, NSF Ecosystem Science Cluster (1)


Member, Collaborative Program Database Working Group

Attended, Tipulid Taxonomy/Ecology Workshop, May 25

Attended Annual Meeting of North American Benthological Society, Salt Lake City UT, May 25-30

Regular participant in Ecology Discussion Group (spring and fall semesters)

Research Experiences for Undergraduates (REU) Student Mentoring: Jane Fencl, May–August 2008

NSF Undergraduate Research Mentoring: Monica Tellez, September 2007–present.

Judge, 2008 Central N.M. Science and Engineering Research Challenge, CNM, March 21

Poster Judge, 17th Annual Research Day, Department of Biology, UNM, April 11

Judge, Annual Meeting of North American Benthological Society, Salt Lake City UT, May 25-30

Guest lecturer, Biol. 203, Ecology and Evolution, November 5

THOMAS L. KENNEDY, Ph.D. candidate:


Crawford Grant for work on the Rio Grande, NM, $1,500.

“The Effects of Channelization on the Terrestrial–Aquatic Ecotone in an Arid-land River,” research talk, UNM.


TREVOR KRABBENHOFT, Ph.D. student:


Graduate Assistant, the Museum of Southwestern Biology, Department of Biology, The University of New Mexico, Spring and Fall.

Field Technician, American Southwest Ichthyological Research Foundation, Albuquerque NM, Summer.

Submitted, Sandia National Laboratories Excellence in Scientific Research Fellowship Program.

*Ad hoc* reviewer: *Copeia, Integrative Zoology, Journal of Morphology, Zootaxa*.  

K-23
MEGAN J. OSBORNE, Ph.D., Research Assistant Professor:


“Genetic Monitoring of the Threatened Pecos Bluntnose Shiner (*Notropis simus pecosenis*)”; M.J. Osborne, PI, T.E Turner, co-PI; N.M. Department Game and Fish; $24,000.


Member, Rio Grande Silvery Minnow Controlled Propagation and Genetics Working Group.

Member, Rio Grande silvery minnow Population Viability Analysis Technical Group.

Reviewed *Fish and Fisheries* (1)
Undergraduate student mentoring: Tracy Diver, Sierra Netz, Alana Sharp.

**STEVEN D. SCHOLLE, Master's Student:**
Teaching Assistant, Biol. 203L: Ecology and Evolution Laboratory (two sections, 33 students, Fall.

**WADE D. WILSON, Ph.D. candidate:**


Wilson, W.D. and T.E Turner. Accepted pending revision. Phylogenetic analysis of the Pacific salmon and trout (*Oncorhynchus*; Salmonidae) based on mtDNA ND4 sequences: A closer look at the highly fragmented inland species. *Molecular Phylogenetics and Evolution*.

Representative, Graduate Policy Committee, Department of Biology, UNM, 2007-08

Full membership, Sigma Xi

Member, American Association for the Advancement of Science (AAAS)

Member, Society for the Study of Evolution

Member, American Fisheries Society

**WERNER-WASHBURNE, M.**

**PHILLIP TAPIA:**
Outstanding Poster, Society for the Advancement of Chicanos and Native Americans in Science (SACNAS), Salt Lake City UT, October 9-12.

**SUSHMITA ROY:**
Outstanding Poster, Fourth Annual CS UNM Student Conference (CSUSC), Computer Science Department, UNM, March 5.
Awards to attend REcomb Satellite Meeting, MIT, Boston MA, October, and an bioinformatics meeting in Hawaii.

Invited to turn poster presentations into papers for (Los Alamos National Laboratory's Q-Bio (Quantitative Biology) Conference, Santa Fe NM, August.

OSORIO MEIRELLES:
Invited to turn poster presentations into papers for (Los Alamos National Laboratory's Q-Bio (Quantitative Biology) Conference, Santa Fe NM, August.

B. Undergraduate Education.

1. Bona fide undergraduate courses taught each semester and number of students enrolled. Indicate new course (for you) with an asterisk.

ADEMA, C.M.
Spring:    Biol. 201, Molecular and Cellular Biology, 360 students (co-taught with Kelly A. Howe).
Fall:     Biol. 446, Lab Methods in Molecular Biology, 12 students (co-taught with D.O. Natvig)

BERGTHORSSON, U.
Fall:    Biol. 202, Genetics, 124 students
Biol 402, T/Genome Evolution, 3 students
Biol. 499, Undergraduate Problems, 2 students

COLLINS, S.L.
Spring:    Biol. 203L, Ecology & Evolution, 144 students (three sections)

COOK, J.A.
Spring:    Biol. 402, T/Undergraduate Nurturing Opportunities (UNO), 4 students
    Biol. 461, Introduction to Tropical Biology, 13 students
Fall:    Biol. 402, Advanced Field Mammalogy, 2 students
Biol. 402, T/Undergraduate Nurturing Opportunities (UNO), 13 students
Biol. 489, Mammalogy, 10 students

COUCH, L.
Spring:    Biol. 239L, Microbiology for Health Sciences & Non-majors, 146 students
    seven sections (average/class = 21 students)
Fall:    Biol. 239L, Microbiology for Health Sciences & Non-majors, 168 students
    eight sections (average/class = 21 students)

COUNCIL-GARCIA, C.L.
In charge of the freshman labs and I instruct the T.A.'s.
>  Biol. 112, Biology Laboratory for Non-majors, ~72 students/semester
> Biol. 124, Biology for Health Related Sciences & Non-majors Laboratory, ~380 students/semester, ~72 students/summer semester
> Biol. 201, Molecular & Cellular Biology, ~380 students/semester, ~72 students/summer
> Biol. 202, Genetics, ~280 students/semester, ~48 students/summer
> Biol. 203, Ecology & Evolution, ~240 students/semester
> Biol. 204, Animal & Plant Form & Function, ~180 students/semester

CUNNINGHAM, C.
Spring: Teaching release
Fall:  Biol. 201, Molecular and Cell Biology, 350 students (two sections)
      Biol. 402, T/Comparative Immunology, 4 students

CRIPPS, R.M.
Spring: Biol. 202-002, Genetics, 80 students
       Biol. 402, T/Fly Development, 2 students

DAHM, C.N.
Spring: Biol. 495, Limnology, 14 students
       Biol. 496L, Limnology Lab, 9 students

FARNSWORTH, P.
Spring: Biol. 110, Biology Non-majors, 2 sections, 274 students
Fall:  Biol. 110, Biology Non-majors, 2 sections, 260 students

FRIDRICK, C.O.
Spring: On Maternity Leave
Fall:  Biol. 123, Biology for Health Related Sciences and Non-majors, 256 students (in four sections)

HANSON, D.T.
Spring: Biol. 204, Plant and Animal Form and Function, 166 students (three sections)
       (co-taught with E.C. Toolson)
Fall:  Biol. 204, 174 students (two sections) (co-taught with B.O. Wolf)

HOWE, K.A.
Spring: Biol. 123, Biology for Health Related Sciences, 138 students
        *Biol. 201, Molecular Cell Biology, 324 students (first eight weeks of two sections) (team-taught with C. Adema)
        Biol. 202, Genetics, 143 students
Summer: Biol. 123, Biology for Health Related Sciences, 30 students
       Biol. 202, Genetics, 43 students
Fall:  Biol. 202, Genetics, 130 students
       Biol. 429, Molecular Cell Biology I, 39 students
        * Biol. 497, Principles of Gene Expression, 23 students

K-27
HOFKIN, B.V.

Spring: Biol. 456, Immunology, 73 students
       Biol. 490, Biology of Infectious Organisms, 88 students
Summer: Biol. 201, Molecular and Cell Biology, 47 students
Fall:  Biol. 201, Molecular and Cell Biology, 403 students (two sections) (team-taught
       w/ Charles Cunningham)
       Biol. 371, Invertebrate Biology, 13 students (two for graduate credit)

KATJU, V.

Spring: * Biol. 402, ST/Speciation, 1 student
       * Biol. 499, Undergraduate Problems, 1 student
Fall:  * Biol. 402, ST/Evolutionary Genetics & Genomics, 3 students

KODRIC-BROWN, A.

Spring: Bio. 455, Ethology: Animal Behavior, 46 students

LITVAK, M.E.

Fall:  Maternity Leave
Spring: * Biol. 402, T/Ecosystem Dynamics, 9 students

LOKER, E.S.

Spring: Biol. 490, Biology of Infectious Organisms, 90 students (co-taught with B.V.
       Hofkin)

LOWREY, T.K.

Spring: Biol. 402, T/Plants and People, 1 student
       Anthro. 450, Plants and People, 12 students
Fall:  Biol. 463, Flora of New Mexico, 18 students

MARSHALL, D.L.

Fall:  Biol. 360L, General Botany, 22 students

MILLER, K.B.

Spring: Biol. 485, Entomology, 15 students
Fall:  Biol. 203, Ecology and Evolution, 213 students (two sections; team-taught with
       E. Smith)

MILNE, B.T.

Spring: * Sust. 434, Synthesis of Sustainability Perspectives and Innovations, 20
       students
Fall:  Sust. 134, Creating a Sustainable Future: Introduction to Environmental,
       Social, and Economic Health, 30 students
       Biol. 310L, Principles of Ecology, 11 students

K-28
MILLER, R.D.
Spring: Unpaid leave-of-absence while an NSF Program Director.
Fall: Biol. 456, Immunology, 142 students

NATVIG, D.O.
Spring: Biol. 402, T/Biology of Fungi (3 cr), 6 students
Fall: Biol. 446, Laboratory Methods in Molecular Biology (4 cr), 12 students

NELSON, M.A.
Fall: Biol. 402, T/Undergraduate Research, 1 student
Biol. 402, T/ GRE Prep, 1 student
Biol. 428, Human Heredity, 34 students
Spring: Biol. 425, Molecular Genetics, 20 students

POCKMAN, W.T.
Spring: Biol. 471, Plant Physiological Ecology, 4 students

POE, S.
Spring: Biol. 386, General Vertebrate Zoology, 35 students (team-taught with H.L. Snell)
* Biol. 488, Herpetology, 12 students (team-taught with H.L. Snell)
Fall: Sabbatical Leave

SHANER, M.G.M.
Spring: Biol. 123-002, Biology for Health Related Sciences, 130 students
Biol. 123-003, Biology for Health Related Sciences, 130 students
Biol. 123-004, Biology for Health Related Sciences, 130 students
Summer: Biol. 123, Biology for Health Related Sciences, 40 students
Fall: Biol. 123-003, Biology for Health Related Sciences, 130 students
Biol. 123-004, Biology for Health Related Sciences, 130 students

SINSABAUGH, R.L.
Fall: Biol. 499, Undergraduate Research, Alex Jenks (1 credit) and Savannah Stanbury (3 credits)
Biol. 351, General Microbiology, 96 students

SMITH, F.A.
Spring: Biol. 402, ST/Topics in Paleoecology, 5 students
Biol. 494, Biogeography, 32 students (co-taught with J.H. Brown)
Fall: Biol. 203, Ecology & Evolution, 213 students (two sections) (co-taught with K.B. Miller)
SNELL, H.L.
Teaching release as Faculty Senate President.

Spring: * Biol. 379, Conservation Biology, 36 students.
Fall: Biol. 402, T/Conservation Biology Field Seminar, 9 students.

STRICKER, S.A.

Spring: Biol. 412, Developmental Biology, 84 students
Fall: Biol. 416L, Histology, 33 students

SWAN, J.

Spring: Biol. 237, Human Anatomy and Physiology I for Health Related Sciences, 203 students (two sections)
Biol. 238, Human Anatomy and Physiology II for Health Related Sciences, 212 students (two sections)
Biol. 402, T/Mentor in Anatomy, 1 student
Biol. 402, T/Advanced Dissection, 2 students
Biol. 447, Prosection, 7 students
Fall: Biol. 237, Human Anatomy and Physiology I for Health Related Sciences, 207 students (two sections)
Biol. 238, Human Anatomy and Physiology II for Health Related Sciences, 234 students (two sections)
Biol. 402, T/Mentor in Anatomy, 2 students
Biol. 402, T/Advanced Dissection, 2 students
Biol. 447, Prosection, 8 students

TAKACS-VESBACH, C.D.

Spring: Biol. 351, General Microbiology, 94 students
Fall: Biol. 451, Microbial Ecology, 41 students

THORNHILL, R.

Spring: Biol. 203, Ecology and Evolution, 143 students (two sections)
Biol. 402, T/Human Sexuality, 10 students
Fall: Biol. 365, The Evolution of Human Sexuality, 89 students

TOOLSON, E.C.

Spring: Biol. 204, Plant and Animal Form and Function, 166 students
Biol. 402, T/Ecology Seminar, 17 students
* Biol. 402, T/Intermediate Mathematical Biology, 3 students
Biol. 445, Biology of Toxins, 73 students
Fall: A&S 198, Biology of Toxins, 22 students (a Freshman Learning Communities course)
Biol. 402, T/Ecology Seminar, 14 students
Biol. 435, Animal Physiology, 14 students
Biol. 492, Introductory Mathematical Biology, 3 students

K-30
TURNER, T.F.
Spring: Research Semester (for MSB-IGERT preproposal preparation)
Biol. 402, T/Ecology and Evolution of Fishes, 5 students

WAIDE, R.B.
Spring: Biol. 405, Ecosystem Dynamics, 9 students

WEARING, H.J.
Spring: * Math 181, Elements of Calculus (for the Life Sciences) II, 14 students (all biology and/or B.A./M.D.)
* Math 412, Nonlinear Dynamics & Chaos, 11 students

WERNER-WASHBURNE, M.
Spring: Biol. 402, Biomedical Research II, 14 students
Biol. 444, Genomes and Genomic Analyses, 10 students
Fall: Biol. 402, Biology: Discovery and Innovation, 5 students
Biol. 402, Biomedical Research I, 22 students

WITT, C.C.
Spring: * Biol. 300, Evolution, 37 students
* Biol. 402, Avian Specimen Preparation, 2 students
Biol. 402, Molecular Systematics Discussion Group, 1 student
Fall: * Biol. 386, General Vertebrate Zoology, 36 students
Biol. 499, Undergraduate Problems, 1 student (1 cr.)
Summer: * Biol. 402, Ornithological Field Expedition, 4 students

WOLF, B.O.
Spring: Biol. 402, T/Animal Physiological Ecology, 3 students (team-taught with J.H. Brown and E.A. Smith)
Fall: Biol. 204, Plant & Animal Form & Function, 174 students (two sections) (co-taught with D.T. Hanson)
Biol. 402, T/Evolutionary Medicine, 19 students (J. Alcock, M.D., primary instructor)
Biol. 402, T/Animal Physiological Ecology, 1 student (team-taught with J.H. Brown and E.A. Smith)
Biol. 402, T/Physiological Ecology, 4 students

2. Number of undergraduates who performed research under your supervision in the last year.

BERGTHORSSON, U.
Two.

COOK, J.A.
10.

K-31
CRIPPS, R.M.
Six.

CUNNINGHAM, C.
Two, including one non-graduating student.

HANSON, D.T.
Six.

HOFKIN, B.V.
Four.

KATJU, V.
Four.

KODRIC-BROWN, A.
Two.

LITVAK, M.E.
Three.

LOWREY, T.K.
One.

MARSHALL, D.L.
One.

MILLER, K.B.
Five.

MILNE, B.T.
Six.

NELSON, M.A.
Eight.

POCKMAN, W.T.
Five.

SINSABAUGH, R.L.
Two.

K-32
SMITH, F.A.
Four.

SNELL, H.L.
Research with extra-mural support, 4.
Serious independent research associated with a class, 36.

STRICKER, S.A.
Two.

TAKACS-VESBACH, C.D.
Five.

TURNER, T.F.
11.

WEARING, H.J.
Two.

WERNER-WASHBURNE, M.
Forty Initiatives to Maximize Student Diversity (IMSD) students, three in my lab.

WITT, C.C.
Nine (Brielle Archuleta, Monica Lucero, Stacey Peters, Alessandra Quiñonez, Hagit Salamon, Sarah Sheldon, Doug Whalen, Geneva Williams)

WOLF, B.O.
Two.

3. Number of undergraduates who attended local or national scientific conferences in the last year.

CRIPPS, R.M.
Three.

CUNNINGHAM, C.
One.

HOFKIN, B.V.
Two.
LOWREY, T.K.
One.

MARSHALL, D.L.
One.

MILLER, K.B.
Three.

NELSON, M.A.
Three.

SMITH, F.A.
Two.

SNELL, H.L.
Two.

TAKACS-VESBACH, C.D.
Two.

TURNER, T.F.
Four.

WEARING, H.J.
One.

WERNER-WASHBURN, M.
30 total, five in my lab.

WITT, C.C.
One (Doug Whalen via IMSD Program)

4. Number of undergraduates who received local or national awards (travel awards, scholarships, presentation awards).

CRIPPS, R.M.
One (Thai Lee, Honorable Mention for poster presented at the Annual Meeting of the Society for the Advancement of Chicanos and Native Americans in Science [SACNAS], Salt Lake City UT, October 9-12).
HOFKIN, B.V.
One (Jesse Van Westrienen, First Place, Undergraduate Oral Presentation, Annual Research Day, Department of Biology, UNM, April 11.

MILLER, K.B.
Two.

NELSON, M.A.
One (Charles Sanchez)

SMITH, F.A.
Three.

WEARING, H.J.
Two.

WERNER-WASHBURNE, M.
Six travel awards to Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) meeting, one presentation award from my lab, four presentation awards for Initiatives to Maximize Student Diversity (IMSD) students.

5. Number of undergraduates graduating with Biology Honors based upon a project under your supervision.

HANSON, D.T.
One.

KODRIC-BROWN, A.
Beth Belding, graduated magna cum laude.

NELSON, M.A.
One.

SMITH, F.A.
One in progress, none graduated.

TAKACS-VESBACH, C.D.
One.

WERNER-WASHBURNE, M.
Two or three Initiatives to Maximize Student Diversity (IMSD) students

6. Number of undergraduates in your program who were co-authors on peer-reviewed papers in the last year.

K-35
BERGTHORSSON, U.
One.

CRIPPS, R.M.
One.

CUNNINGHAM, C.
One non-graduating student was a middle author on one published paper and one paper in press.

SMITH, F.A.
Two.

TAKACS-VESEBACH, C.D.
Two.

THORNHILL, R.
One (Devaraj Aran)

WERNER-WASHBURN, M.
One in my lab.

C. Teaching Awards.

HANSON, D.T.
Nominated for the 2007–08 Outstanding Teacher of the Year Award, UNM.

SNELL, H.L.
IDEA median scores for Biol. 379, Conservation Biology above Departmental norms at 5.5, 5.6 and 5.5.

D. Curriculum Development/Production of Teaching Materials.

ADEMA, C.M.
Generated ~ESTs from *Echinostoma parvensei* for instruction of bioinformatics in Biol. 446/546L. Obtained 10-seat loaner license for commercial Sequencher® software from GC codes (MI) for instruction of bioinformatics in Biol. 446/546L, Fall.

COUCH, L.
COUNCIL-GARCIA, C.L.
Continuous curriculum development for all six lab classes.
Biol. 204, Animal & Plant Form & Function, lab manual currently in press.

CRIPPS, R.M.
Continued development of Biol. 202, Genetics, discussion sections.

FARNSWORTH, P.
Developed a program for a peer-to-peer instruction component to the Biol. 110 (Biology Non-majors) lectures.

Obtained funding from the Title V program to start and mentor a group of Peer Learning Facilitators. Performed duties of an in-class peer facilitator, which included:
- Working one-on-one or with small groups of learners to support successful completion of, and learning from, in-class assignments, such as short essays and worksheets.
- Providing specialized in class facilitation and other instructional support to UNM students.
- Answering student questions with new questions that promote understanding for the learner, and clarifying and explaining assignment expectations.
- Following specific assignment instructions provided by the instructor.
- Maintaining confidentiality of student work and progress consistent with FERPA, including completion of the online training, Securing Private Data.
- Serving as a liaison between Title V and faculty and staff in other UNM departments.
- Participating in mandatory training sessions.
- Meeting regularly, probably weekly, with the course instructor to receive instructions and advice for effective execution of tasks.

HANSON, D.T.
Continued development of lab for Biol. 204, Plant and Animal Form and Function.

HOWE, K.A.
Biol. 497/597, Principles of Gene Expression, was taught from primary literature and involved five student group presentations, also of primary literature, in the semester.

MILNE, B.T.
Sust. 434, Synthesis of Sustainability Perspectives and Innovations: lectures for 25 class sessions, study exercises.

Sust. 499, Sustainability Independent Capstone Project as Research or Creative Expression: mentor guidelines and student orientation materials.

* Sust. 402, Topics in Sustainability: Form C submission.

SMITH, E.A.
Developed a Collaborative Interdisciplinary Teaching (CiT) course (pending approval).
As co-Director of the Program in Integrative Biology and Biomedical Sciences (PIBBS), in collaboration with faculty from other departments, developing and implementing a series of three courses and a unified curriculum that ultimately will lead to a cross-departmental concentration in Integrative Biology at UNM.

SNELL, H.L.
Biol. 402, Conservation Biology Field Seminar, a new field course, required developing a new content and four complete weekends of field work. Students felt the course was valuable and three of them continued as undergraduate TAs in my Conservation Biology course this Spring (2009).

SWAN, J.
Biol. 237-238: new hybrid course testing and assessment materials.

Lab manuals for Biol. 247 and 248.

TOOLSON, E.C.
Developed curriculum and labs for Biol. 402/502, Intermediate Mathematical Biology, particularly the section on partial differential equations.

WERNER-WASHBURN, M.
Ongoing for Biol. 402/502 (soon to be Biol. 470), Biology: Discovery and Innovation

WITT, C.C.
Taught two new three-credit, 300-level biology classes, each involving substantial curriculum development.

E. Museum Curator, Advisor, Assistant Chair, EM Director, etc.

COLLINS, S.L.
Director, Sevilleta Long Term Ecological Research (LTER)

COOK, J.A.
Curator, Division of Mammals, Museum of Southwestern Biology, Department of Biology, UNM.

Acting Curator, Division of Genomic Resources, Museum of Southwestern Biology, Department of Biology, UNM.

Assistant Director, Museum of Southwestern Biology, Department of Biology, UNM, 2007–present.

COUCH, L.
Coordinator/Advisor of Microbiology Facility, T.A.'s, and the Microbiology Technician
COUNCIL-GARCIA, C.L.
Undergraduate Student Advisor

Cripps, R.M.
Associate Departmental Chair
Director, Molecular Biology Facility

Hanson, D.T.
Associate Curator, UNM Herbarium, Museum of Southwestern Biology, Department of Biology, UNM.

Hofkin, B.V.
Pre-veterinary Student Advisor

Loker, E.S.
Chair, Department of Biology

➤ Met with provost and dean about Biological Society of New Mexico, early January.

➤ Met with External Academic Program Review team and wrote departmental responses to review report, April 7-9.

➤ Presided over Annual Research Day, Department of Biology, UNM, April 11.

➤ Prepared a list of faculty concerns and worked on petition statements, 13 April 13.

➤ Lead speaker, general faculty meeting, UNM, April 30.

➤ Attended Data Net One site visit, Dr. Michener, NSF; May 6.

➤ Follow-up meeting with David Harris and Andrew Cullen regarding general faculty meeting, May 8.

➤ Attended Faculty of Color Awards ceremony, UNM, May 8.

➤ Attended and participated in Long Term Ecological Research (LTER) Network office site visit, September 4.

➤ Served on panel (Sterling and McFadden), representing the Biology Department and Center for Evolutionary & Theoretical Immunology (CETI) at National Science Foundation ADVANCE/Paid program, October 3.

➤ Center of Biomedical Research Excellence (COBRE) IAC meeting, October 13.

➤ Library planning session, October 29.

➤ Long Term Ecological Research (LTER) Field Station meeting, October 30.
> Prepared four tenure and promotion packages, late December.

Director, Center for Evolutionary & Theoretical Immunology (CETI)

LOWREY, T.K.
Curator, UNM Herbarium, Museum of Southwestern Biology, Department of Biology, UNM.

MILLER, K.B.
Curator, Division of Arthropods, Museum of Southwestern Biology (MSB), Dept. of Biology, UNM.

Undergraduate Student Advisor

Faculty sponsor, Biology Undergraduate Society

MILNE, B.T.
Director, Sustainability Studies Program (0.5 FTE)

NATVIG, D.O.
Director, Sevilleta Long Term Ecological Research (LTER) Field Station, Socorro NM.

NELSON, M.A.
Director, Minority Access to Research Careers (MARC) Program, June 2003–present.

POE, S.
Associate Curator, Division of Amphibians and Reptiles, Museum of Southwestern Biology, Department of Biology, UNM.

Advisor for Ian Latella (co-advising, with primary advisor, H.L. Snell), Mason Ryan (Ph.D.) and Eric Schaad (Ph.D.).

SHANER, M.G.M.
Spring, Summer & Fall: Academic Undergraduate Advisor.

SMITH, F.A.
Co-Director, Program in Integrative Biology and Biomedical Sciences (PIBBS), 6-10 graduate students from various departments.

Undergraduate Student Advisor, 3-10 students/week, January–July.

Faculty mentor, Undergraduate Nuturing Opportunities (UNO) Program

SNELL, H.L.
Curator, Division of Amphibians and Reptiles, Museum of Southwestern Biology, UNM.

K-40
Advisor, Conservation Biology concentration (5 to 10 new students pursue this concentration each year).

President, Faculty Senate, UNM.

STRICKER, S.A.
Department Associate Chair
Director of Microscopy Facilities

TOOLSON, E.C.
Undergraduate Student Advisor

TURNER, T.F.
Director, the Museum of Southwestern Biology (MSB), Department of Biology, UNM.
Curator of Fishes, Division of Fishes, Museum of Southwestern Biology, Dept. of Biology, UNM.

WAIDE, R.B.
Executive Director, Long Term Ecological Research (LTER) Network Office, Dept. of Biology, UNM.

WERNER-WASHBURNE, M.
Director, Initiatives to Maximize Student Diversity (IMSD) Program, UNM, 30 students, six staff.
Coordinator for development of Flybase at UNM

WITT, C.C.
Curator, Division of Birds, The Museum of Southwestern Biology (MSB), UNM.

F. Mentoring. Please list names of undergraduates (with or without Biol. 400 or 499 credit) or non-UNM students you mentored this year. Indicate the period of mentoring, program (if any), Honor's thesis, etc.

ADEMA, C.M.
Volunteer Tara Kraus (graduated with a B.S. in Biology in 2007) obtained rDNA sequences for fish parasites, collected previously as part of a completed Biol. 499, Undergraduate Problems; manuscript in preparation; Summer.

BERGTHORSSON, U.
Angela C. Tye, Biol. 499
Monalisa C. Husrevoglu, Biol. 499
COLLINS, S.L.
Rene Aguiler
Ashley Schaffer, Ursinus College (Collegeville, PA), Summer NSF Research Experiences for Undergraduates (REU)
Jarrod Blue, Davidson College (Davidson, NC), former Summer REU

COOK, J.A.
Dave Banks-Richardson, Undergraduate Nurturing Opportunities (NSF)
Eudora Claw, Undergraduate Nurturing Opportunities (NSF)
Randle McCain, Undergraduate Nurturing Opportunities (NSF)
Ashley Montoya, Undergraduate Nurturing Opportunities (NSF)
Elisha Song, Undergraduate Nurturing Opportunities (NSF)
 Kelly Speer, Regents' Scholar, Undergraduate Nurturing Opportunities (NSF)

CRIPPS, R.M.
Spring: Melanie Adams (MARC), MaryAnn Jaramillo, Candice Lovato, Jared Najjar, Levon Phelan, Thai Lee (IMSD), Joseph Varoz.

Summer: Melanie Adams (MARC), Thai Lee (IMSD), Ashley Montoya, Cloyce Nelson, Levon Phelan,

Fall: Melanie Adams (MARC), Thai Lee (IMSD), Ashley Montoya, Cloyce Nelson, Justin Trujillo

CUNNINGHAM, C.
Vint Blackburn, January–August
Jarrett Hines, May–August

HANSON, D.T.
Rose Afandi, independent research in plant physiology Summer and Fall 2008.
Carmela Carrasco, independent research on symbiosis and food webs (with Ursula Shepherd), Spring.
Susan Mirabal (previously, Susan Sanchez Monzon), completed with Honors, UNM Biology Outstanding Senior, Fall 2003–Spring 2008.
Stephanie Moquin, independent research on symbiosis (with Ursula Shepherd), Spring.
Nichole Neff, independent research in plant physiology Summer 2008–present.
Dianne Pater, independent research in plant physiology, Fall 2008–present.
Rachel Powell, independent research in plant physiology Summer 2008–present

HOFKIN, B.V.
Lindsay Livingstone, Biol. 499, Spring
Jesse VanWestrienen, Biol. 499, Spring
Joseph Campbell, Biol. 499, Fall
Jacob Greenberg, Biol. 499, Fall
KATJU, V.
Joseph Castillo, Biol. 499, Undergraduate Problems, January 2008–present
Hallie Rane, April 2008–present
Jessica Smith, January–December 2008
Laura Urrea, February–July 2008

KODRIC-BROWN, A.
Bio. 400, Senior Honor’s Thesis, Beth Belding (3 cr), Carrie Wright (3 cr)

LOWREY, T.K.
Margaret Garcia

MARSHALL, D.L.
Andrea Chavez, Spring

MILLER, K.B.
William Edelman, all year
Alicia Hodson, January 1–May 31
Emily Hodson, all year
April Tafoya, all year
Nicole Telles, All year

MILLER, R.D.
Jennifer Rice
Elena Sharp

MILNE, B.T.
Fall: Sust. 499, Sustainability Independent Capstone Project as Research or Creative Expression, Ashleigh Abbot (photographic exhibition), Mary Beggjo ( proposal), Craig Brownrigg ( proposal), Audrey Chismar ( proposal for green purchasing), Stephen Martinez ( proposal for green purchasing) and Bryan Nelson ( Web-based community garden social networking).
Ad-hoc: Sonja Dewing ( English proposal class; draft of Ford Foundation Letter of Intent [ LOI]).

NATVIG, D.O.
Spring: Biology 499, Sarah Abrams (3 cr), Christina Johnston (3 cr)

NELSON, M.A.
Christine Chec, MARC and IMS student, Spring and Fall.
Abdullah Feroze, Biol. 400, Senior Honors Thesis, Spring and Fall.
Erin Hahn, Biol. 400, Senior Honors Thesis, Spring and Fall.
Leslie Harless, Biol. 499, Undergraduate Problems, Fall.
Joseph Kunkel, Spring, Summer and Fall.
Ishak Mohammad, Biol. 499, Undergraduate Problems, Fall.

K-43
Charles Sanchez, IMSD student, Spring, Summer and Fall.
Nicholas Santistevan, Biol. 499, Undergraduate Problems, Fall.

Co-advisor (with Stephanie W. Ruby, Dept. of Molecular Genetics and Microbiology, HSC, UNM) on Erin Hahn's Senior Honors Thesis: "Direct Interactions Between Pre-mRNA and the DEAD-box Prp5 Protein in the Commitment Complex of the Saccharomyces cerevisiae Spliceosome" (graduated Fall 2008, summa cum laude).

POCKMAN, W.T.
Nicole Davidson, Julie Glaser, Molly Ladd, Sam Markwell, Jacob Ring

POE, S.
Natalie Blea, Fall 2008–present.
Julian Davis, Fall 2007–present.

SINSABAUGH, R.L.
Alex Jenks, Biol. 499, Undergraduate Research, 1 credit, Fall
Savannah Stanbury, Biol. 499, Undergraduate Research, 3 credits, Fall

SMITH, E.A.
Jessica Martin, an undergraduate Biology major, Spring, Summer and Fall. Currently, she is working on her Honor's thesis and is a participant in the Undergraduate Nurturing Opportunities (UNO) Program.

Justine Pichardo, an undergraduate Biology major at UNM, since Fall 2008; a participant in the Undergraduate Nurturing Opportunities (UNO) Program.

Tatiana Paz, a post-baccalaureate student, Summer and Fall.
Tara Stewart, a post-baccalaureate student, Fall.

SNEILL, H.L.
Jenny Alsup, Honor's Program.

STRICKER, S.A.
Lisa Fowles
Hagit Salamon
Pooneh Soltani

TAKACS-VESBACH, C.D.
Dan Colman, June 2008–present
Shannon Fitzpatrick, all year
Justine Hall, Summa cum laude, all year
Stephanie Moquin, all year
Ashley Reid, August 2008–present
THORNHILL, R.

Spring: Biol. 499, Undergraduate Problems, 7 students (Douglas Alden, Devaraj Aran, Jessica Black, Andrew Hawk, Alvena Largo, Brandon Rice, Pooneh Soltani)

Fall: Biol. 499, Undergraduate Problems, 3 students (Brian Malott, Brandon Rice, Amanda Watson)

Summer: Biol. 499, Undergraduate Problems, 1 student (Mary Walker)


Tracy Diver, Fall 2006–2008, undergraduate research assistant; currently, an undergraduate Honors Student.

Monica Tellez, Summer 2007–present, Research Experiences for Undergraduates (REU) student, NSF–Undergraduate Nurturing Opportunities (UNO) student.


Alana Sharp, Fall 2008–present, current undergraduate Honors Student.

Sierra Netz, Summer 2008–present, undergraduate research associate.

June Fencl, summer 2008–present, Research Experiences for Undergraduates (REU) student, undergraduate Honors Student.

Cynthia Rivera, Fall 2006–present, MSB Division of Fishes Curatorial Assistant, catalog and accession support to Collections Manager.

Alicia M. Hodson, Fall 2006–Fall 2008, MSB Division of Fishes Curatorial Assistant, Special Collection organization.

Kaitlin M. Hulsbos, Summer 2008–present, MSB Division of Fishes Curatorial Assistant, field-notes digital imaging and processing collections.

Chand Jim, Summer 2008–present, MSB Division of Fishes Curatorial Assistant, field-notes digital imaging and processing collections.

WEARING, H.J.

Sandra Baldridge, Math 499, Spring and Fall.
Alexander Washburne, Minority Access to Research Careers (MARC) Program, Fall.

WERNER-WASHBURN, M.

Approximately 40 Initiatives to Maximize Student Diversity (IMSD) students per year and about 15 non-IMSD students at UNM.

Three honors theses and graduate applications.
Three undergraduates and four graduate students in my lab.

WITT, C.C.
Faculty mentor to UNM Birding Club; ca. 18 members, Sarah Guillinger, organizer. Monthly meetings plus led one field trip to Rio Grande Nature Center with 11 undergraduates.

Keith Adams, Bird Division student worker, Spring.
Brielle Archuleta, student employee on hummingbird project, Fall.
Monica Lucero, independent research hours with Biol. 499 credit and UNO program, Fall.
Stacey Peters, molecular laboratory undergraduate assistant, Spring, Summer, Fall.
Alessandra Quinionez, University of Peruana Cayetana-Heredia, Peruvian undergraduate collaborator, Summer and Fall
Hagit Salamon, undergraduate volunteer, Spring.
Jonathan Schmitt, Research Experiences for Undergraduates (REU) supervisor, Biol. 402 credit, Summer.
Sarah Sheldon, undergraduate assistant on hummingbird projects, Spring, Summer, Fall.
Doug Whalen, IMSD program undergraduate researcher, Fall.
Geneva Williams, UNO Program undergraduate researcher, Fall.

WOLF, B.O.
Sevillera LTER Summer Research Experiences for Undergraduates (REU), National Science Foundation: Natalie Alberg, Ashley Melendez, Emily Stinson.

David Adrian Garcia, Undergraduate Nurturing Opportunities (UNO), National Science Foundation, 2007-09.

G. Other Teaching Activities.

COLLINS, S.L.
Director, Sevillera Long Term Ecological Research (LTER) Summer NSF Research Experiences for Undergraduates (REU) Program

COOK, J.A.
Victoria Corvino, high school mentee, Highland High Research Assistantships for Minority High School Students (RAMHSS) (NSF).

CRIPPS, R.M.
Guest lecturer, Ursula Shepherd's Honors class.

FARNSWORTH, P.
Member, the Freshman Learning Communities Institute, helping coordinate cross-disciplinary freshman courses from all Colleges in the University.

Director, the Small Group Instructional Diagnostics Program. Surveys of dozens of courses are conducted campus-wide during the semester and generate feedback for the instructors based on consensus student-responses to facilitated questioning.
LITVAK, M.E.

LOKER, E.S.
Mentoring activities for the following post-docs/research faculty:
Coen Adema
Sara Brant
Ben Hanelt
Patrick Hanington
Michelle Steinauer
Bo Wang
Si-Ming Zhang

MILNE, B.T.
Summer: Sustainability Studies Program as a client for UNM English Department proposal writing class.

Fall: Sustainability Studies Program as a client for UNM English Visual Rhetoric class, English 419/519.

Outcomes assessment document for Sustainability Studies Program:

Strategic plan for Sustainability Studies Program:

NATVIG, D.O.
Spring: Biol. 551, Research Problems, Christopher Kitchen (12 cr), Andrea Porras (8 cr)
         Biology 699, Dissertation, Andrea Porras (9 cr)

Summer:  Biol. 551, Research Problems, Christopher Kitchen (6 hrs)

Fall:    Biol. 551, Research Problems, Christopher Kitchen (12 cr)

NELSON, M.A.
Spring:  Biol. 400, Senior Honors Thesis, 2 students
       Biol. 499, Undergraduate Problems, 2 students
       Biol. 551, Research Problems, 1 student

Fall:    Biol. 400, Senior Honors Thesis, 2 students
       Biol. 499, Undergraduate Problems, 3 students
       Biol. 599, Master’s Thesis, 1 student
TAKACS-VESBACH, C.D.

“Exploring for Life in Extreme Environments,” M.S. Education, Montana State University, Bozeman MT, July.

WEARING, H.J.

Mathematical/Theoretical Ecology Journal Club (non-lab discussion group), cross-listed as Math 439/679 and Biol. 402/502 (zero enrollment), 1 credit hour, Spring and Fall.

WITT, C.C.

Led two (January and October) and coordinated two additional (May-June, July-August) expeditions to Peru, with more than 26 total participants, including both Peruvian and American students, six of whom earned UNM course credit for their participation.

Guest Lectures:
Biol. 461L/561, Introduction to Tropical Biology/Tropical Biology, Spring
University Honors 222, People and Animals, April 17
Biol. 502, T/Biological Discovery and Innovation, Fall.
Biol. 502, T/Undergraduate Nurturing Opportunities, Fall.

II. PUBLICATIONS.

A. Books Authored.

LOWREY, T.K.


THORNHILL, R.


B. Books Edited.

None.

C. Chapters in Books or Major Synthetic Reviews.

ADEMA, C.M.


BROWN, J.H.


COLLINS, S.L.


DAHM, C.N.


SMITH, F.A.


TAKACS-VESBACH, C.D.


WAIDE, R.B.


WEARING, H.J.

D. Articles in Refereed Journals.

ADEMA, C.M.


BERGTHORSSON, U.

BROWN, J.H.


CHARNOV, E.L.


COLLINS, S.L.


COOK, J.A.


CRIPPS, R.M.


CUNNINGHAM, C.

DAHM, C.N.


HANSON, D.T.
Uehlein, N., B. Otto, D.T. Hanson, M. Fischer, N.G. McDowell and R. Kaldenhoff. 2008. Function of *Nicotiana tabacum* aquaporins as chloroplast gas pores challenges the concept of membrane CO₂ permeability. *Plant Cell* 20:648-657. (Highlighted with an “In Brief” article written by the journal editor for that issue; rated “Must Read 6.0” by the Faculty of 1000.)


Katju, V.


Litvak, M.E.


Loker, E.S.


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LOWREY, T.K.


MILLER, K.B.


MILLER, R.D.

MILNE, B.T.

NATVIG, D.O.
NELSON, M.A.


POCKMAN, W.T.


POE, S.


SINSABAUGH, R.L.


SMITH, F.A.


SNELL, H.L.


TAKACS-VESBACH, C.D.


THORNHILL, R.


TOOLSON, E.C.


TURNER, T.F.


WAIDE, R.B.


WERNER-WASHBURNE, M.


WITT, C.C.


WOLF, B.O.


E. Book Reviews.

FARNSWORTH, P.


SHANER, M.G.M.


WITT, C.C.

F. Articles in Non-scholarly Journals.

MILNE, B.T.

G. Quasi-public Reports for Internal/External Circulation.

COOK, J.A.
Annual Report of the Division of Mammals, Museum of Southwestern Biology, Department of Biology, UNM.

KODRICK-BROWN, A.
Evaluation of Dexter Fish Technical Center Program, Dexter, NM.

MARSHALL, D.L.
Biology Department Self Study for Academic Program Review

Annual Report for the Noyce Scholarship Program

TURNER, T.F.


WAIDE, R.B.


2008 Annual Report to the Luquillo Long Term Ecological Research (LTER) Program for a subcontract with the University of Puerto Rico.

WITT, C.C.
H. Abstracts (Refereed or Invited).

DAHM, C.N.
Invited abstracts, North American Benthological Society (NABS; Salt Lake City UT, May 27), American Geophysical Union (AGU), GSA, CALFED Science Conference (Sacramento CA, October 22), L’Institut Català de Recerca de l’Aigua (ICRA; Girona, Catalonia, Spain, November 24) Science Conference, and the UNM Water Symposium (Albuquerque NM, March 28.)

HANSON, D.T.


KODRIC-BROWN, A.

LITVAK, M.E.


MILNE, B.T.
Milne, B.T. and M. Saulistevan, Concepts for a carbon-neutral food-shed in New Mexico. Southwestern and Rocky Mountain (SWARM) Division, 83rd Annual American Association for the Advancement of Science (AAAS), Albuquerque NM, April 9-12.

NELSON, M.A.

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POCKMAN, W.T.


THORNHILL, R.


Workshop on Evolutionary Approaches to War, Institute of Cognitive and Decision Sciences, University of Oregon, “Parasites and Civil Conflict,” Eugene OR, October.

TURNER, T.E.


WAIDE, R.B.


WERNER-WASHBURN, M.

“Mentoring for Students and Faculty,” Peer Mentoring, The Mentoring Institute, California State University, Fresno CA

“Computer Sciences and the Quiescent State in Yeast,” Computer Science Department, UNM, January.

I. Abstracts (Contributed) (including Research Day abstracts of your students).

ADEMA, C.M.


COLLINS, S.L.

An author or co-author on five contributed presentations at the Ecological Society of America Annual Meeting.

One presentation at the British Ecological Society Annual Meeting.

Two presentations at the American Geophysical Union Annual Meeting.

COOK, J.A.


CUNNINGHAM, C.


DAHM, C.N.
North American Benthological Society (NABS), Salt Lake City UT, May 27-30.

American Geophysical Union (AGU)

HANSON, D.T.


HOFKIN, B.V.


KODRIC-BROWN, A.


LOKER, E.S.


LOWREY, T.K.


NATVIG, D.O.


NELSON, M.A.


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POCKMAN, W.T.


SINSABAUGH, R.L.


SMITH, F.A.


TURNER, T.F.


Daves-Brody, N., Bixby, R.J., and A.S. Burdett, Seasonal effects on water chemistry and algal growth and diversity in the Rio Grande. Poster, 17th Annual Research Day, Department of Biology, UNM, April 11.


WAIDE, R.B.

WEARING, H.J.


WERNER-WASHBURNE, M.


WOLF, B.O.


J. Other.

HANSON, D.T.

HOFKIN, B.V.
Continued work on a microbiology textbook, to be completed 2009.

MILNE, B.T.
Featured as one of “15 to Watch: These Albuquerqueans are Primed to Change the City in 2009,” *Albuquerque, the Magazine,* December 2008-January 2009.

III. RESEARCH PROJECTS OR OTHER CREATIVE WORK IN PROGRESS OR COMPLETED DURING PERIOD.

A. Grants and Contracts, Extramural and Intramural.

1. Submitted to all agencies in 2008.

ADEMA, C.M.

“Anti-pathogen-responses in Biomphalaria glabrata”; C.M. Adema, PI; National Institutes of Health (NIH), NIAID R01 AI052363; $1,250,000, 2009-2013. Not funded, but see III.A.2.

“Schistosomiasis in Snails: Understanding the Immunological Basis of Long-Term Production of Human-infective Cercariae”; E.S. Loker and R.D. Miller, PIs, C.M. Adema, leader of subproject; National Institutes of Health (NIH), NCRR, a component of COBRE proposal for Center for Evolutionary & Theoretical Immunology [CETI] Institute at UNM; ~$250,000 annually for two years (2008-09) for component. Pending.

BERGTHORSSON, U.

“The Spontaneous Rate of Gene Duplication and Deletion in a Model Organism, Caenorhabditis elegans”; U. Bergthorsson, PI, Vaishali Katju, co-PI; National Science Foundation; $331,901.

BROWN, J.H.

“NIBIB Interfaces Initiative for Interdisciplinary Graduate Research Training (T32)”; J.H. Brown and E.A. Smith, PIs; T-32, National Institutes of Health; $1,736,990, April 1, 2009-March 30, 2012.

“Integrative Graduate Education and Research Traineeship (IGERT) Program”; J.H. Brown and S. Forrest, National Science Foundation, pre-proposed.
COLLINS, S.L.

“Collaborative Research (Yale University, Colorado State University, UNM, Kansas State University): Convergence and Contingencies in Savanna Grasslands”; M. Smith, A. Knapp, S.L. Collins and J. Blair, PIs; National Science Foundation renewal; $800,000 (UNM $161,189); February 1, 2009–January 31, 2012. Submitted twice in 2008 (January and July), recommended for funding (2009 start date) after second submission with a 12% budget cut.


“Fire Seasonality and Climate Variability in Desert Grasslands”; P. Ford and S.L. Collins, PIs; Japan Society for the Promotion of Science; $149,083, June 1, 2009–May 30, 2012). Declined.

COOK, J.A.

“Swift Fox Identification”; J.A. Cook, PI; N.M. Department of Game and Fish; $20,100.

“ISLES—Island Survey to Locate Endemics”; J.A. Cook, PI; USDA Forest Service; $100,000, September 2008–December 2012.

CRIPPS, R.M.

“UNM PREP”; R.M. Cripps, PI; National Institute of General Medical Sciences (NIGMS), National Institutes of Health; $1,400,000, January 1, 2009–December 31, 2012, $350,000/year.

“Specification of Adult Muscles”; R.M. Cripps, PI; Muscular Dystrophy Association; $270,000, January 1, 2009–December 31, 2011, $90,000.

CUNNINGHAM, C.

“Schistosoma mansoni Defense Genes: Identification and Exploitation in the Development of New Therapeutics”; C. Cunningham, PI; National Institutes of Health, as part of a Centers of Biomedical Research Excellence submission; $400,000, $200,000/year.

DAHM, C.N.

An EPSCoR RII3 proposal was submitted to the NSF for $15 M (funded).
A full proposal for a renewal of our Freshwater Science Interdisciplinary Doctoral Program was submitted to the IGERT competition at the NSF; the proposal is still pending.

An LTREB proposal was submitted to the Ecosystem Studies Program at the NSF.

A supplement proposal for the Sevilleta LTER was submitted to the NSF (funded).

FARNSWORTH, P.

"National Academies Summer Institute on Undergraduate Education in Biology"; P. Farnsworth and M.A. Nelson, co-PIs; Howard Hughes Medical Institute (not awarded).

HANSON, D.T.


"A Strategy for Algal Triglyceride Production, Processing and Refining to JP-8 Surrogate"; P. Lammers (NMSU), PI, David T. Hanson (UNM) et al., co-PIs; Strategic Technology Office (STO), Defense Advanced Research Projects Agency (DARPA); $100,000 for UNM, total award not listed, 2008–10.

"Towards an Isotopic Early Warning System of Climate Change Impacts"; D.T. Hanson, NG. McDowell (LANL), co-PI; Institute of Geophysics and Planetary Physics, Los Alamos National Laboratory; $91,723, October 1, 2008–September 30, 2011.

KATJU, V.

"Genomic Determinants Influencing the Evolutionary Fate of Young Gene Duplicates in Caenorhabditis elegans"; V. Katju, PI; National Science Foundation; $368,720, March 1, 2009–February 28, 2011.

"The Spontaneous Rate of Gene Duplication and Deletion in a Model Organism, Caenorhabditis elegans"; U. Bergthorsson, PI, V. Katju, co-PI; National Science Foundation; $331,901, January 1 2009–December 31, 2010.

KODRIC-BROWN, A.


LITVAK, M.E.

Determining Soil Respiration in Semi-arid Environments"; Z. Sharp, PI, M.E. Litvak, co-PI; Ecosystems, National Science Foundation; $235,596, August 1, 2008–July 31, 2011.

"Does Large-scale Tree Mortality Affect Surface Energy Balance?"; M.E. Litvak (UNM), T. Rahn (LANL), co-PIs; IGPP, Los Alamos National Laboratory; $164,283, August 1, 2008–July 31, 2011.
LOKER, E.S.
“COBRE: Center for Evolutionary and Theoretical Immunology”; E.S. Loker, PI; National Center for Research Resources, P20 RR018754, National Institutes of Health; $8,622,683 (direct costs), July 1, 2008–June 30, 2013.

“Evo-epidemiology of Schistosoma mansoni in Children in Kenya”; E.S. Loker, PI; RTW008127A, Fogarty International Center, National Institutes of Health; $110,000 (direct costs), July 1, 2008–June 30, 2011.

Submitted Gates Grand Challenges Explorations (two pages), May 30.

Participated as part of consortium of schistosomiasis workers in submission of a Gates SCORE award, lead by Dr. Dan Colley, University of Georgia.

Participated as part of consortium of UNM NIH-funded researchers to produce a Fram­eworks For Global Health Program Grant to the NIH.

LOWREY, T.K.
“IGERT: The Museum of Southwestern Biology as a Nexus for Interdisciplinary Graduate Research, Education and Training (MSB-IGERT)”; T.E Turner, PI, TK. Lowrey, co-PI; National Science Foundation; $2,808,032, June 1, 2009.

MILLER, K.B.
“Improvements to the Division of Arthropods Collection, Museum of Southwestern Biology,” K.B. Miller, D. Lightfoot and S. Brantley, co-PIs; National Science Foundation; $459,520.


“Collaborative Research: a Critical Study of Species Discovery Strategies with Special Reference to the Darkling Beetle Genus Eleodes”; Q.D. Wheeler, K.B. Miller, and A. Hamilton, co-PIs; National Science Foundation; $563,659.

MILLER, R.D.
“COBRE Center for Evolutionary and Theoretical Immunology”; E.S. Loker, PI, R.D. Miller, co-PI; National Institutes of Health; $11,945,971, July 1, 2009–June 30, 2014.

MILNE, B.T.
“Cultivate New Mexico,” B.T. Milne, PI; McCune Charitable Foundation; $20,000, February 21, 2009–February 28, 2010, $20,000/year. (Funded.)

“Agricultural Revitalization Through Stewardship of New Mexico’s Foodscape”s”; I. Andaluz and B. T. Milne, co-PI; Western Sustainable Agriculture Research and Education (SARE)
Program; $60,000, Letter of Intent submitted in partnership with Cuatro Puertas. (Declined.)

NATVIG, D.O.

"Native and Non-native Plants and Their Microbial Associates on New Mexico (NM) Department of Defense (DOD) Lands"; A.J. Powell, PI, D.O. Natvig, co-PI; Dept of Defense Pre-proposal; $1,000,000.

Microbial Aridland Metabolic Loop (MAML), proposal to Roche for a gigabase of sequencing.

NELSON, M.A.
"National Academies Summer Institute on Undergraduate Education in Biology"; P. Farnsworth and M.A. Nelson, co-PIs; Howard Hughes Medical Institute (not awarded).

POCKMAN, W.T.

POE, S.
"Adaptation, Exaptation, and Colonization in Solitary Anolis Lizards"; S. Poe, PI; Division of Environmental Biology-0844624, National Science Foundation; $350,000. (Funded, starts in 2009.)

SINSABAUGH, R.L.
"Climatic Controls on the Fungal Nitrogen Cycle of Semiarid Grassland"; R.L. Sinsabaugh, PI, A. Porras-Alfaro, K. Treseder and J. Herrera, co-PIs; Ecosystem Science, National Science Foundation; ??-??, $587,000

"Microbial Control of Litter Decay at the Cellulose–Lignin Interface"; M. Weintraub, PI, D.L. Moorhead, C. Blackwood and R.L. Sinsabaugh, co-PIs; Ecosystem Science, National Science Foundation; ??-??, $572,000.

"Plant and Microbial Contribution to Resilience in a Changing Environment"; K. Suding and R.L. Sinsabaugh, co-PIs; Long Term Research in Environmental Biology Program, National Science Foundation; 2010-2013, $450,000.

SMITH, F.A.

"Program in Interdisciplinary Biological and Biomedical Sciences (PIBBs)"; J.H. Brown, PI, F.A. Smith, co-PI; National Institute of Biomedical Imaging and Bioengineering (NIBIB) Interfaces Initiative for Interdisciplinary Graduate Research Training (T32), 1T32EB009414-01, National Institutes of Health; $963,225 (direct costs), March 2009-February 2014. Grant was funded with a start date of March 1, 2009.

TAKACS-VEBACH, C.D.

"Continental Smokers: Evaluating Mantle Degassing, CO₂ Flux, Geomicrobiology, and Water Quality in Extensional Continental Regimes"; L. Cressey, PI, C.D. Takacs-Vesbach, co-PI; Hydrological Sciences, Earth Sciences, National Science Foundation; $294,562, July 2009-June 2011, $54,551/year. NSF has indicated they wish to fund this project, but we have not received official notification.

"Collaborative Research: The Role of Snow Patches on the Spatial Distribution of Soil Microbial Communities and Biogeochemical Cycling in the Antarctic Dry Valleys"; J. Barrett, PI, M. Gooseff and C.D. Takacs-Vesbach, co-PIs; Office of Polar Programs, National Science Foundation; $306,050 (UNM), July 2009-June 2012, $63,154/year.


"Role of Dispersal Versus Vicariance in the Distribution of Yellowstone Thermophilic Bacteria"; C.D. Takacs-Vesbach, PI; Systematic Biology and Biotic Surveys, Division of Environmental Biology, National Science Foundation; $468,582, April 2009-March 2012, $90,551/year.

TOOLSON, E.C.

"Physiological Measures as Predictors of Treatment Response to Acupuncture in PTSD"; B. Perry, M. Hollifield, E.C. Toolson, co-PIs; National Institutes of Health; $400,000, September 1, 2009-August 31, 2012.

TURNER, T.F.

"Conservation Genetics of Zuni Bluehead Sucker"; T.F. Turner, PI; N.M. Department of Game and Fish; $15,340 ($2,557 F&A), August 1, 2008-June 30, 2009.


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WAIDE, R.B.

"Long-Term Ecological Research Network Office 09-15"; R.B. Waide, PI; National Science Foundation; $15,662,179, March 1, 2009–February 28, 2015, $2,600,000/year.


WEARING, H.J.

"Population Biology and Dynamics of Multi-pathogen Interactions"; P. Rohani, PI, H.J. Wearing, co-PI; National Institutes of Health; $1,125,000 (direct costs), August 1, 2008–July 31, 2013.

WERNER-WASHBURN, M.


"Chemical Screen of TOR Pathway GFP-fusion Proteins in S. cerevisiae"; M. Werner-Washburne, PI; National Institutes of Health R03 MH086450-01; $25,000, April 1, 2009–March 31, 2010.

"UNM-IMSD 5R25GM060201"; M. Werner-Washburne, PI; The Division of Minority Opportunities in Research, National Institutes of Health; $3,000,000 direct, February 1, 2009–January 31, 2013, ~$570,000/year direct.

WITT, C.C.

"REU Supplement: The Phylogenetic and Biogeographic History of High Altitude Adaptation in Hummingbirds: Selection on Hemoglobin Proteins as a Function of Oxygen Supply and Demand"; J.A. McGuire, PI, C.C. Witt, co-PI; National Science Foundation; $7,540. (Award to University of California–Berkeley.)

Pre-proposal: "Evolutionary Adaptations for Respiration in High-altitude Hypoxia"; (2) C.C. Witt, PI; N.M. Institutional Development Award (IDeA) Networks of Biomedical Research Excellence, NIH; unspecified.

2. Awarded with 2008 initial start date.

ADEMA, C.M.

"Anti-pathogen-responses in Biomphalaria glabrata"; C.M. Adema, PI; National Institutes of Health (NIH), bridging funds for scoring in top 20%, yet not receiving funding; $250,000, 2008–09.
COLLINS, S.L.


“Sevilleta LTER REU Sites Program”; National Science Foundation; S.L. Collins, PI, L. McFadden, co-PI; $246,705, March 1, 2008–February 28, 2011.

“Ecosystem Consequences of Precipitation Extremes in Semiarid Grassland and Shrubland”; W.T. Pockman, PI, S.L. Collins and E. Small-Tilden, co-PIs; Department of Energy, National Institute of Climate Change Research (NICCR); $374,829, April 1, 2008–March 31, 2011.


COOK, J.A.

“Swift Fox Identification”; J.A. Cook, PI; N.M. Department of Game and Fish; $20,100.

“ISLES—Island Survey to Locate Endemics”; J.A. Cook, PI; USDA Forest Service; $100,000, September 2008–December 2012.

“A Test of Landscape Connectivity across the Sky Islands Region using Large Carnivores as Model Organisms”; J.A. Cook, PI, G. Roemer (NMSU), co-PI; Wilburforce Foundation; $25,000.

“Curation, Databasing, and Integration of the Orphaned Illinois Mammal Collection”; J.A. Cook, PI; DEB 0744025, National Science Foundation; $259,285, February 1, 2008–February 1, 2010.

“The Terry Yates Endowment for Field Mammalogy”; J.A. Cook, PI; UNM Foundation; $102,000.


Cripps, R.M.


“Specification and Function of the Drosophila Cardiac Pacemaker”; R.M. Cripps, PI; March of Dimes Birth Defects Foundation; $270,000, May 1, 2008–April 30, 2011, $90,000/year.
KODRIC-BROWN, A.


“Co-occurrence of Two Species of Mosquitofish”; A. Kodric-Brown, PI, D. Swenton-Olson, co-PI; N.M. Department of Game and Fish Share with Wildlife Research Grant; $13,000.

LITVAK, M.E.

“Do Vegetation–Microclimate Feedbacks Promote Shrub Encroachment in the Southwestern United States?”; M. Litvak, PI, S.L. Collins and W.T. Pockman, co-Pi’s; Ecosystems, National Science Foundation; $289,008, March 1, 2008–February 31, 2011.


LOKER, E.S.

“Evo-epidemiology of Schistosoma mansoni in Children in Kenya”; E.S. Loker, PI; RTW008127A, Fogarty International Center, National Institutes of Health; $110,000 (direct costs), July 1, 2008–June 30, 2011.

LOWREY, T.K.


POCKMAN, W.T.


“Ecosystem Consequences of Precipitation Variability and Extremes in Semiarid Grassland and Shrubland”; W.T. Pockman, PI, S.L. Collins, E.E. Small, co-Pi’s; National Institute for Climate Change Research (NICCR), DOE; $374,829; April 1, 2008–March 31, 2011.

SINSABAUGH, R.L.

SNELL, H.L.

TURNER, T.F.

“Community Responses to River Drying in an Arid-land Ecosystem: a Field and Experimental Study”; T.F. Turner, PI; National Science Foundation; Total Award: $345,000 ($115,000 F&A), August 15, 2007-July 31, 2010.

WAIDE, R.B.
“A Proposal for the Network Office of the U.S. Long Term Ecological Research Network”; R.B. Waide, PI; National Science Foundation; $100,000, August 6, 2008-February 28, 2009, $100,000/year.

“A Proposal for the Network Office of the U.S. Long Term Ecological Research Network”; R.B. Waide, PI; National Science Foundation; $540,000, September 17, 2008-February 28, 2009; $540,000/year.

WERNER-WASHBURNE, M.
IMSD supplements for Evaluation, $50,000, and for extra student support, $60,000.

WITT, C.C.
“REU Supplement: The Phylogenetic and Biogeographic History of High Altitude Adaptation in Hummingbirds: Selection on Hemoglobin Proteins as a Function of Oxygen Supply and Demand”; J.A. McGuire, PI; C.C. Witt, co-PI; National Science Foundation; $7,540. (Award to University of California–Berkeley.)

WOLF, B.O.

“Use of Wildlife Water Developments by the Bird and Bat Community on the KOFA National Wildlife Refuge, Arizona”; B.O. Wolf, PI; Arizona Game and Fish Department, $74,9994, January 30, 2008-February 1, 2009.

3. In force from previous years.

ADEMA, C.M.
“Anti-pathogen-responses in Biomphalaria glabrata”; C.M. Adema, PI; National Institutes of Health (NIH), NIAID RO1 AI052363; $1,562,500, 2003-08.

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BROWN, J.H.
“Program in Interdisciplinary Biological and Biomedical Sciences”; J.H. Brown, PI, E.A. Smith, co-PI; Howard Hughes Medical Institute 56005678; $1,000,000, January 1, 2006–December 31, 2008.


COLLINS, S.L.
“Collaborative Research (UNM, Colorado State University, Kansas State University, Yale University): Convergence and Contingencies in Savanna Grasslands”; A. Knapp, J. Blair, M. Smith and S.L. Collins, PIs; National Science Foundation; $830,000 (UNM portion $60,000), September 1, 2005–August 31, 2008.


COOK, J.A.
“URM: Undergraduate Nurturing Opportunities (UNO)”; J.A. Cook, PI; Division of Environmental Biology (DEB) 0731350, National Science Foundation; $1,010,000, August 1, 2007–August 1, 2012, $116,155/year (OH $15,000).

“Mongolia Vertebrate Parasite Project”; S. Gardner, PI, J.A. Cook, co-PI; Division of Environmental Biology (DEB) 0717214, National Science Foundation; $466,000,
September 11, 2007—September 1, 2009, $210,000/year (grant and OH to University of Nebraska).

"Training in Hantavirus Ecology, Virology and Clinical Investigation in the Americas"; G. Mertz (School of Medicine, UNM), PI; J.A. Cook, co-PI; Fogarty International Training Grant, 2 D43 TW001133-06A1, National Institutes of Health; $510,000, July 1, 1999—March 31, 2011, $132,133/year.

"Transfer of BCP and Rausch Helminth Collections to the Museum of Southwestern Biology"; J.A. Cook, PI; Division of Environmental Biology (DEB) 0726625, Amendment No. 6 to DEB-0415668, National Science Foundation; $9,997 (OH 3,000).

"Molecular Genetics of Endemics"; J.A. Cook, PI; U.S. Fish and Wildlife Service, Juneau; supplement ongoing to December 2008, one-year: $75,000 (OH $25,000).


"ICIDR, Hantavirus Ecology and Disease in Chile and Panama" (2nd year); G. Mertz (School of Medicine, UNM), PI; National Institutes of Health 2 U19 AI045452-06; $800,000, August 31, 2005—April 30, 2010.

"Mammal Inventory of Tongass"; J.A. Cook, PI; USDA Forest Service Pacific Northwest Lab; $49,983, May 2005—July 2010, $24,000/year.


Cripps, R.M.

"Genetic Regulation of Cell Fate in the Drosophila Heart"; R.M. Cripps, PI; National Heart, Lung, and Blood Institute (NHLBI), National Institutes of Health; $1,240,140, April 1, 2005—March 31, 2010, $248,000/year.

"Genetic Regulation of Muscle Fiber Diversity"; R.M. Cripps, PI; National Institute of General Medical Sciences (NIGMS), National Institutes of Health; $1,054,680, May 1, 2006—April 30, 2011, $264,000/year.

Dahm, C.N.

"Integrative Graduate Education and Research Traineeship (IGERT): Freshwater Graduate Studies Link Fundamental Science with Applications through Integration of Ecology, Hydrology, and Geochemistry in Regions with Contrasting Climates"; C.N. Dahm, PI; University of Alabama (subcontract on award from the National Science Foundation); $1,331,615, August 1, 1999—July 31, 2008.


"New Mexico Nanotechnology, Education, and Water (NEW);" C.N. Dahm, PI; Experimental Program to Stimulate Competitive Research (EPSCoR) proposal from New Mexico to the National Science Foundation; $6,750,000, May 1, 2005–May 30, 2008. (I direct the ET measurement portion at UNM, which receives $464,677 from the NSF and $408,795 of cost-share from the State of New Mexico and UNM; I also serve as one of the three overall directors of the “Water” portion of this statewide project.)


HANSON, D.T.

"Integrated Bioenergy Processing System for Productive Use of N.M. Dairy Industry Waste Streams"; R. Pate, P. Pohl, K. Hoodenpyle, D.T. Hanson, V. Cabrera, S. Deng, PIs; New Mexico Technology Research Collaborative; $350,000 ($64,000 to UNM), February 15, 2007–June 31, 2008.

"Light Enhanced $^{13}$C Enrichment of Dark Respired CO$_2$: Implications for Leaf Internal CO$_2$ Conductance and Leaf Respiration in the Light"; D.T. Hanson, N.G. McDowell, and T. Rosenstiel (Portland State University), co-PIs; Integrative Organismal Biology Environmental and Structural Systems Cluster, National Science Foundation; $480,000 ($360,000 to UNM), July 1, 2007–June 30, 2010.

HOFKIN, B.V.

"Mosquito Feeding Patterns in Bernalillo County, NM: Implications for the Transmission of West Nile Virus to Horses"; B.V. Hofkin, PI; New Mexico Horse Council; $4,400, awarded in 2006.

KODRIC-BROWN, A.


LITVAK, M.E.

"Woody Plant Encroachment into Karst Terrain: Implications for Regional Cycles of Carbon, Water and Energy"; M.E. Litvak, PI, J. Heilman, K. McInnes and K. Owens, co-
Pis; National Institute for Climate Change Research, U.S. Dept. of Energy; $395,000, August 2007–July 2010.


"Quantifying the Role of Summer Vs. Winter Precipitation on Carbon Uptake of Montane Forests"; M.E Litvak, PI; Sustainability of semi-Arid Hydrology and Riparian Areas (SAHRA), National Science Foundation; $135,000, June 2006–December 2008.


"Sevilleta Long Term Ecological Research IV: Long Term Ecological Research in a Biome Transition Zone"; S.L. Collins, PI, C.N. Dahm, W.T. Pockman, K. Vanderbilt and M.E. Litvak, co-Pis (+ 17 non-signatory co-Pis); Long Term Ecological Research (LTER) Program, Division of Environmental Biology, National Science Foundation; $5,040,000, October 1, 2006–September 30, 2011.

LOKER, E.S.

"Center of Biomedical Research Excellence (COBRE): Center for Evolutionary and Theoretical Immunology"; E.S. Loker, PI; National Center for Research Resources P20 RR018754, National Institutes of Health; $10,141,000, September 30, 2003–June 30, 2008.

"Evo-epidemiology of Schistosoma mansoni in Western Kenya"; E.S. Loker, PI; National Institutes of Health; $1,497,748, April 1, 2004–March 31, 2009.

"Biology of Trematode–Snail Associations"; E.S. Loker, PI; National Institutes of Health; $1,125,000, March 1, 2006–February 28, 2011.

LOWREY, T.K.


MARSHALL, D.L.


MILLER, K.B.

"Building Taxonomic Expertise in Cucujoidea: Monographic and Phylogenetic Studies of the Cerylonid Series"; J.V. McHugh, K.B. Miller and M.E. Whiting, co-PIs; Division of Environmental Biology, National Science Foundation; $749,388, January 1, 2004–December 31, 2008.

"Collaborative Research: Phylogeny, Behavior, and Silk Evolution of Webspinners (Embioptera), A Little-known Insect Order"; K.B. Miller, M.E. Whiting, PI; Division of Environmental Biology, National Science Foundation; $260,001, July 1, 2005–June 30, 2008.

"Survey of the Aquatic Insects of Northern Venezuela with an emphasis on Coleoptera"; A. Short and K.B. Miller, PI; National Science Foundation; $55,656, November 1, 2008–October 31, 2011.

MILLER, R.D.


"Marsupial Immunobiology"; R.D. Miller, PI; National Science Foundation; $605,000; May 1, 2007–April 30, 2011.

MILNE, B.T.


NATVIG, D.O.


"Does Drought Exacerbate Damage Caused by Bark-Beetle-associated Fungi in Piñon-Juniper Woodland Ecosystems?"; D.O. Natvig, PI; U.S. Forest Service; $27,000, April 30, 2006–May 1, 2008.

"Renovations to Increase Residence Capacity at the UNM Sevilleta Field Station"; S.L. Collins, PI, M. Friggens, W.T. Pockman, T.K. Lowrey and D.O. Natvig, co-PIs; National Science Foundation; $250,000, December 1, 2007–November 30, 2010.

NELSON, M.A.

"Functional Analysis of a Model Filamentous Fungus: ESTs"; J. Dunlap (Dartmouth Medical School), PI, M.A. Nelson, co-PI, and PI on Project 4; National Institute of General Medical Sciences (NIGMS) Program Project Grants, National Institutes of Health; Year 3: UNM portion ~$90,000 (direct plus indirect costs), April 1, 2004–March 31, 2009.
“Undergraduate Biomedical Research Training at UNM: Minority Access to Research Careers (MARC) Program”; M.A. Nelson, PI; National Institutes of Health; $1,625,000, June 1, 2006–May 31, 2011; $325,000/year.

POCKMAN, W.T.


“Renovations to Increase Residence Capacity at the UNM Sevilleta Field Station”; S.L. Collins, PI, M. Friggens, D.O. Natvig, T.K. Lowrey and W.T. Pockman, co-PIs; NSF Division of Biological Infrastructure (DBI) Field Stations and Marine Labs; $250,000; September 1, 2007–August 30, 2010.

SINSABAUGH, R.L.


SMITH, F.A.

“The Impact of Late Quaternary Climate Change on Mammals along an Elevational Gradient”; E.A. Smith, PI, E.L. Charnov, co-PI; Division of Environmental Biology 0844620, National Science Foundation; $315,000, April 2004–March 2008.

“Interdisciplinary Biomedical Sciences (PIBS): Applications of Mathematics, Physics and Computer Science for Investigating the Structure and Dynamics of Complex Biological Systems”; J.H. Brown, PI, E.A. Smith, S. Forrest and V.M. Kenkre, co-PIs; Howard Hughes Medical Institute; $1,000,000, January 2006–December 2008.

SNELL, H.L.
“Distribution of New Mexico’s Amphibians and Reptiles”; H.L. Snell and J.T. Giermackowski, PIs; Share with Wildlife Program, N.M. Department of Game and Fish; $15,000, May 2007–June 2008, Year 1: $2,700, Year 2: $12,300.

TAKACS-VESBACH, C.D.
“RCN: Geothermal Biology and Geochemistry in Yellowstone National Park”; W. Inskeep (Montana State University), PI, C. Takacs-Vesbach, co-PI; Research Coordination Networks, National Science Foundation; $0 (no funds for UNM), September 2004–September 2009.

THORNHILL, R.
“Genetic Conflicts of Interest, Fluctuating Asymmetry and MHC”; S. Gangestad, PI, R. Thornhill, co-PI; National Science Foundation; $340,000, July 2003–February 2008; $40,000/year.

TURNER, T.F.
“CAREER: Museum-based Approaches to Ecology and Evolution of Aquatic Systems: An Integrated Research and Educational Program”; T.F. Turner, PI; National Science Foundation; $500,000, May 1, 2002–April 30, 2008, $100,000/year.

“New Mexico Share-with-Wildlife Program: Baseline Genetic Data for the Threatened Pecos Bluntnose Shiner (Notropis simus pecosensis)”; T.E Turner, PI, M. Osborne, co-PI; New Mexico Department of Game and Fish, $24,000, January 1, 2006–June 30, 2009, $8,000/year.

“Dissertation Research: Local Adaptation and Gene Flow in a Fragmented Host System: Crepidostomum farionis (Digenea) and Oncorhynchus clarki virginalis (Salmonidae) in New Mexico”; T.F. Turner, PI, W. Wilson, co-PI; National Science Foundation; $11,958, May 30, 2006–April 30, 2008; $6,000/year.


“Undergraduate Research Mentoring (URM): Undergraduate Nurturing Opportunities (UNO)”; J.A. Cook, PI, T.E Turner and five others, co-Pis; National Science Foundation; $1,010,000 ($276,384 F&A), August 1, 2007–August 1, 2012.

WAIDE, R.B.

"Promoting Synthesis in the LTER Network," supplement to the Long Term Ecological Research (LTER) Network Cooperative Agreement; R.B. Waide, PI; National Science Foundation; $150,000, October 1, 2006–February 29, 2009.

"A Proposal for Travel Support to the 2006 LTER All Scientists Meeting," supplement to the Long Term Ecological Research (LTER) Network Cooperative Agreement; R.B. Waide, PI; National Science Foundation; $293,755, May 1, 2006–February 29, 2009.


"Long-Term Ecological Research in the Luquillo Experimental Forest IV"; R.B. Waide, PI; sub-award from the University of Puerto Rico–Rio Piedras, National Science Foundation; $150,000, December 1, 2006–November 30, 2012; $25,000/year.

WERNER-WASHBURNE, M.

"Compendium of Gene Expression in Stationary-Phase Yeast"; M. Werner-Washburne, PI; National Institute of General Medical Sciences (NIGMS), National Institutes of Health, RO1 GM67593; July 1, 2002–June 30, 2008, a no-cost extension.

"SACNAS Genomics Program" (for graduate student and faculty fellowships in genomics); L. Haro, PI, M. Werner-Washburne, co-PI; T-32, Society for Advancement of Chicanos and Native Americans in Science (SACNAS); $1,000,000; September 1, 2004–August 31, 2008, $250,000/year (direct costs).

"UNM–IMSD 5R25GM060201"; M. Werner-Washburne, PI; Division of Minority Opportunities in Research (MORE), National Institutes of Health; January 1, 2005–December 31, 2008, $550,000/year direct.

"UNM–Initiatives to Maximize Student Diversity (IMSD)"; M. Werner-Washburne, Co-PI; National Institute of General Medical Sciences (NIGMS), National Institutes of Health; $2,000,000, February 1, 2005–January 31, 2009, $535,000/year (direct + indirect costs).

"Genomic Analyses of Quiescent and Non-quiescent Cells in Yeast Stationary-phase Cultures"; M. Werner-Washburne, PI; Division of Molecular and Cellular Biosciences (MCB) 0445631, National Science Foundation; $130,000, June 1, 2005–May 31, 2008.

"The Biogenesis and Survival of Vegetative, Quiescent Yeast Cells"; M. Werner-Washburne, PI; Division of Molecular and Cellular Biosciences (MCB) 0645854, National Science Foundation; $660,000, March 1, 2007–February 28, 2010.

WITT, C.C.

"The Phylogenetic and Biogeographic History of High Altitude Adaptation in Hummingbirds: Selection on Hemoglobin Proteins as a Function of Oxygen Supply and
Demand"; J.A. McGuire, PI, written and carried out by C.C. Witt, co-PI; National Science Foundation; $100,340 awarded in 2007 to University of California–Berkeley.

WOLF, B.O.

"A Preliminary Investigation of the Use of Wildlife Water Developments by the Bird and Bat Community on the Kofa National Wildlife Refuge"; Arizona Game and Fish Department; $55,900, June 1, 2007–February 1, 2008.

"Linking Nutrient Flux in a Desert Food Web to the Allocation Dynamics in Lizards: Combining Stable Isotopes and Ecological Stoichiometry"; R. Warne and B.O. Wolf, co-PIs; Doctoral Dissertation Improvement Grant, Division of Environmental Biology 0710128, National Science Foundation; $11,987, June 15, 2007–May 31, 2009.

B. Other.

COUCH, L.

Coccidia research and continued work with Coccidia of the World database and web page (http://biology.unm.edu/biology/coccidia/home.html).

NATVIG, D.O.

Served as Principal Investigator and coordinator for the $6 million award from the U.S. Fish and Wildlife Service to construct the Sevilleta Education and Research Facility.

Joint Genome Institute sequencing of Neurospora discreta and Neurospora tetrasperma. Principal Investigators: J.W. Taylor and N.L. Glass (University of California–Berkeley), D.J. Jacobson (Stanford University), and D.O. Natvig (UNM).

IV. ACTIVITIES IN LEARNED AND PROFESSIONAL SOCIETIES.

A. Invited or Plenary Talks at Professional Meetings, Workshops, Etc.

ADEMA, C.M.


BROWN, J.H.

Invited Symposium talk, “Human Macroecology,” Human Macroecology Symposium, 83rd Annual Multidisciplinary Meeting of the American Association for the Advancement of Science (AAAS) and Southwestern and Rocky Mountain (SWARM) Division, UNM, Albuquerque NM, April 9-12.

Invited Plenary Address, the Gordon Conference on the Metabolic Basis of Ecology, Biddeford ME, July 6-11.
Invited plenary address, Fifth International Meeting on Plant Litter Processing in Freshwaters, Coimbra, Portugal, July 22-25.

DAHM, C.N.

Plenary talk, CALFED Science Conference, Sacramento CA, October 22.

Plenary talk, Conference on Water Management in Mediterranean Climate, L'Institut Català de Recerca de l'Aigua (ICRA), Girona, Catalonia, Spain, November 24.

Invited talk, Fifth Annual California Climate Change Conference, Sacramento CA, September 10.


HANSON, D.T.


LITVAK, M.E.

Biogeochemistry and Ecohydrology in Complex Terrain, Biennial Science Meeting, The Consortium of Universities for the Advancement of Hydrologic Science (CUAHSI), Boulder CO, July 14-16.

LOWREY, T.K.


MILLER, R.D.


MILNE, B.T.

"Policies to Embrace with the Carbon-neutral Foodshed in New Mexico," Southwest Marketing Conference, Santa Fe NM, May 5.


NELSON, M.A.


POCKMAN, W.T.


SINSABAUGH, R.L.


SMITH, F.A.


STRICKER, S.A.

Invited talk, "Oocyte Maturation and the Cell Cycle" Symposium, Kyoto, Japan March.
Invited talk, Florida Institute of Technology, Melbourne FL, February.
Invited talk, Truman State University, Kirksville MO, October.

TAKACS-VESBACH, C.D.

"A Microbial Inventory of Yellowstone Thermal Features," Yellowstone Research Coordination Network Workshop, Mammoth Hot Springs, Yellowstone National Park, WY, January.

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**THORNHILL, R.**


Workshop on Evolutionary Approaches to War, Institute of Cognitive and Decision Sciences, University of Oregon, "Parasites and Civil Conflict," Eugene OR, October.

**TURNER, T.F.**


**WAIDE, R.B.**


**WEARING, H.J.**

Invited talk, "Are There Dynamical Signatures of Waning Immunity to Pertussis?", LAAZ ASUNM Daze 2008 (annual applied math workshop between University of Arizona, Arizona State University, Los Alamos National Laboratory and UNM), UNM, February 29–March 1.

**WERNER-WASHBURNE, M.**

Declined invitations at University of Kentucky, Morehouse, and University of Texas–El Paso.

**WITT, C.C.**

B. Contributed Talks at Professional Meetings, Workshops, Etc.

ADEMA, C.M.

BERGTHORSSON, U.

BROWN, J.H.
One co-authored paper, Desert Fishes Council, Cuatro Cienegas, Coahuila, Mexico, November 12-16.

COLLINS, S.L.
An author or co-author on five contributed presentations at the Ecological Society of America Annual Meeting.

One presentation at the British Ecological Society Annual Meeting.

Two presentations at the American Geophysical Union Annual Meeting.

COOK, J.A.


Dawson, N. and J. A. Cook. Pleistocene Refugia and Post Glacial Expansion along the North Pacific Coast; Genetic Signatures in Mustelidae. Minneapolis, June.


DAHM, C.N. 56th Annual Meeting of North American Benthological Society (NABS), Salt Lake City UT, May 27.


KODRIC-BROWN, A.


LITVAK, M.E.


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LOKER, E.S.


LOWREY, T.K.

NATVIG, D.O.

POCKMAN, W.T.


SINSABAUGH, R.L.


SMITH, F.A.

American Society of Mammalogists, Brookings ND, June.
Paleontological Society, Houston TX, October.

TAKACS-VESBACH, C.D.

"Microbial Communities of Terrestrial Springs in Extensional Settings of the Western U.S.A.,” Fall Meeting of the American Geophysical Union, San Francisco CA, December 15-19.
TURNER, T.F.


WITT, C.C.


WOLF, B.O.


C. Attendance at Professional Meetings, Workshops, Etc.

ADEMA, C.M.
Next Generation Sequencing Symposium, National Center for Genome Resources, Santa Fe NM, March 6-7.

11th Simposio Internacional sobre Esquistossomose/International Symposium on Schistosomiasis, Salvador Bahia, Brazil, August 20-21.

BERGTHORSSON, U.

BROWN, J.H.

Working group “Body Size,” Integrating Macroecological Pattern and Processes Across Scales (IMPPS), National Science Foundation.

83rd Annual Multidisciplinary Meeting of the American Association for the Advancement of Science (AAAS) and Southwestern and Rocky Mountain (SWARM) Division, UNM, Albuquerque NM, April 9-12.


Fifth International Meeting on Plant Litter Processing in Freshwaters, Coimbra, Portugal, July 22-25.

COLLINS, S.L.
Annual LTER Science Council Meeting, Baltimore MD, May 7-8.
Annual Meeting of the Ecological Society of America, Milwaukee WI, August 3-8.
Annual Meeting of the American Geophysical Union, San Francisco CA, December 15-19.

COOK, J.A.

COUCH, L.
42nd Annual Meeting of the Southwestern Association of Parasitologists, Lake Texoma OK, April 19-21.

83rd Annual Meeting of the American Society of Parasitologists, Arlington TX, June 27-30.
CRIPPS, R.M.

CLUNNINGHAM, C.
Second Biennial National IDeA Symposium of Biomedical Research Excellence (NISBRE), Washington DC, August 6-8.

DAHM, C.N.

56th Annual Meeting of North American Benthological Society (NABS), Salt Lake City UT, May 27.

CALFED Science Conference, Sacramento CA, October 22.

Conference on Water Management in Mediterranean Climate, L'Institut Català de Recerca de l'Aigua (ICRA), Girona, Catalonia, Spain, November 24.

FARNSWORTH, P.
Learning Outcomes Workshop, Office of Support for Effective Teaching (OSET), UNM, February 4.

Assessing Work with Rubrics, OSET, UNM, March 3.

Enhancing Courses with WebCT, OSET, UNM, March 19.

Freshman Learning Communities Faculty Institute, UNM, May 20-21.

Designing Courses for Effective Learning, OSET, UNM, May 22.

Teaching with Clickers, OSET, UNM, November 8.

HANSON, D.T.
CO2 Assimilation in Plants: Genome to Biome, Gordon Research Conference, Biddeford ME, August 17-22.

KODRIC-BROWN, A.

40th Annual Meeting of the Desert Fishes Council, Quatro Cienegas, Mexico, November 12-16.

LITVAK, M.E.
The Fundamental Instrument Unit (FIU), The National Ecological Observatory Network (NEON), Boulder CO, March 10-11.
The Consortium of Universities for the Advancement of Hydrologic Science (CUAHSI), Boulder CO, July 14-16.

Sustainability of semi-Arid Hydrology and Riparian Areas (SAHRA) Annual Meeting, National Science Foundation, Tucson AZ, October 15.

LOKER, E.S.
Institutional Development Award (IDeA) Advisory Meeting, Kansas City MO, January 20-21.

Vector Biology Study Section, National Institutes of Health, San Francisco CA, February 13.

NCGR Sequencing Symposium, Santa Fe NM, March 7.

Second Biennial National IDeA Symposium of Biomedical Research Excellence, Washington DC, August 6-8.

Tenth European Multicolloquium for Parasitology, Paris, France, August 24-28.

LOWREY, T.K.

New Mexico Rare Plant Technical Council, UNM, November.

MILLER, R.D.

MILNE, B.T.
Kellogg Good Food Conference, Phoenix AZ, April 29-May 1.

NATVIG, D.O.
Cyberinfrastructure (CI) Days Conference, Las Vegas NM, March 10.

2008 Annual Meeting of the Mycological Society of America, State College PA, August 9-13.

NELSON, M.A.

35th Annual Meeting of the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS), Salt Lake City UT, October 9-12.

POCKMAN, W.T.
93rd Annual Meeting of the Ecological Society of America, Milwaukee WI, August 3-8.
Joint Assembly of the American Geophysical Union, Ft. Lauderdale FL, May 27-30.

SMITH, F.A.

Annual Meeting of the American Society of Mammalogists, Brookings SD, June.

Joint Meeting of the Paleontological Society and the Geological Society of America, Houston TX, October.

Integrating Macroecological Pattern and Process Across Scales (IMPPS), Research Coordination Network, Santa Fe NM, April and October.


TAKACS-VESBACH, C.D.
China-U.S. Geomicrobiology Workshop, Beijing, China, October 22-26.

Fall Meeting of the American Geophysical Union, San Francisco CA, December 15-19.

THORNHILL, R.

Institute of Cognitive and Decision Sources, University of Oregon, Eugene OR, October.

TURNER, T.F.

40th Annual Meeting of the Desert Fishes Council, Cuatro-Cienega, Mexico, November 15-18.

Annual Meeting of the American Fisheries Society, Ottawa, Canada, August 17-21.

CalFED, Sacramento CA, July 24.


WAIDE, R.B.
93rd Annual Meeting of the Ecological Society of America, Milwaukee WI, August 3-8.

WEARING, H.J.
Sixth Annual Conference on the Ecology and Evolution of Infectious Diseases, Colorado State University, Fort Collins CO, June 5-7.
Inference For Mechanistic Models Working Group, National Center for Ecological Analysis and Synthesis (NCEAS), Santa Barbara CA, June 16-20.

WERNER-WASHBURNE, M.
Annual Meeting of the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS), Salt Lake City UT, October 9-12.

Flybase Meeting, Harvard University, Cambridge MA, October.

Minority Action Plan (MAP) Meeting, National Human Genome Research Institute (NHGRI), National Institutes of Health, California Institute of Technology, Pasadena CA, November.

WITT, C.C.

American Ornithologists’ Union, the Cooper Ornithological Society and the Society of Canadian Ornithologists/Société des ornithologistes du Canada PDX2 2008 Joint Meeting, Portland OR, August 4-8.

WOLF, B.O.
Annual Meeting of the Society of Integrative and Comparative Biology, San Antonio TX, January 2-6.


D. Service as Editor of Scholarly Journal.

DAHM, C.N.
Associate editor, Bulletin of the Geological Society of America

LOWREY, T.K.

MILLER, R.D.
Associate Editor, Immunogenetics.

NATVIG, D.O.
Editor-in-Chief, Mycologia

NELSON, M.A.
Associate Editor, Fungal Genetics and Biology, 1998–present.

SMITH, F.A.
Subject Editor, Ecology.
Associate Editor, *Paleobiology*.

**WOLF, B.O.**
Associate Editor, *Oecologia*.

**E. Service on Editorial Board of Scholarly Journal.**

**BROWN, J.H.**
*Proceedings of the National Academy of Sciences (PNAS)*

**COLLINS, S.L.**
*BioScience and Oecologia*.

Member, Editorial Committee, *EcoTrends*, an LTER/USFS/USDA effort to publish and provide access to long-term ecological data sets.

**COOK, J.A.**

**CUNNINGHAM, C.**
*Developmental and Comparative Immunology*

**DAHM, C.N.**
Member, Editorial Review Board, Aquatic Ecology Series, University of California Press

**KODRIC-BROWN, A.**
*Ecology Ethology and Evolution of Fishes*

**LOKER, E.S.**
*Journal of Helminthology*

**NELSON, M.A.**
*Functional & Integrative Genomics*, 1999–present
*Applied Mycology and Biotechnology*, 2002–present

**SINSABAUGH, R.L.**
*Soil Biology and Biochemistry*

**SNELL, H.L.**
Chair, Publication Committee, Museum of Southwestern Biology, UNM.

**THORNHILL, R.**
*Proceedings of the Royal Society of London, Biology*
TURNER, T.F.
Contributing Editor, Aquatic Biology, Springer Publishers

Occasional Papers of the Museum of Southwestern Biology

F. Service as Officer of Professional Organization (indicate whether Elected or Appointed).

COLLINS, S.L.
Chair, Long-Term Studies section, Ecological Society of America
Chair, Publications Committee, Ecological Society of America

COOK, J.A.
Member, Board of Directors, American Society of Mammalogists, 2007–10 (elected).

COUCH, L.
Chair, Education Committee, American Society of Parasitologists (appointed).
Co-chair, Auction Committee, American Society of Parasitologists (appointed).

DAHM, C.N.
Advisory Board, L’Institut Català de Recerca de l’Aigua (ICRA, Catalonia, Spain) (appointed)

FARNSWORTH, P.
Exam Grader, National Beer Judge Certification Program (appointed).

HANSON, D.T.
Vice-Chair of the 2011 Gordon Conference on CO₂ Assimilation in Plants, and Chair of the 2014 conference (elected).

LOWREY, T.K.
Member, Collections Committee, American Society of Plant Taxonomists (appointed).

MILLER, R.D.
Editorial Advisory Board, Developmental & Comparative Immunology

MILNE, B.T.
Founding ad-hoc president, Alliance for the Carbon-neutral Foodshed in New Mexico, renamed FoodPrint NM (www.FoodPrintnm.org)

NATVIG, D.O.
Ex-Officio member, Executive Council, Mycological Society of America (appointed).

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NELSON, M.A.
Member, N.M. Computational Biology Committee, 1994–present (appointed).
Member, Fungal Genome Initiative Advisory Board, 2001–present (appointed).
Network member, N.M. Nanoscience Education Initiative (NEI), 2007–present (appointed).

POCKMAN, W.T.
Member, Meetings Committee, Ecological Society of America (appointed).

SMITH, F.A.
Member, fourth term, Board of Directors, American Society of Mammalogists, 1999–present (elected).
Chair, Alfred Russel Wallace Award Committee, International Biogeography Society, 2006–present (appointed).
Ombudsperson, American Society of Mammalogists, 2002–present (appointed).

V. OTHER PROFESSIONAL ACTIVITIES.

A. Seminar Presentations, UNM and Elsewhere.

ADEMA, C.M.
“Molecular and Cellular Biology of Host-pathogen Interactions,” Department of Biology, UNM, February 7.

BROWN, J.H.


Department seminar, Environmental, Population and Organismic Biology Department, University of Colorado–Boulder.
E.P. Odum Lecture, Institute of Ecology, University of Georgia
Ecology and Evolutionary Biology Department, Rutgers University

Three seminar presentations, Population Biology graduate program, University of California–Davis

Biology Department, University of Texas–Arlington

COLLINS, S.L.
University of Rhode Island, Kingston RI
W.K. Kellogg Biological Station, Hickory Corners MI
Elroy Rice Lecture, University of Oklahoma, Norman OK

COOK, J.A.
“Advocating for Animals,” Freshman Learning Class, UNM

CRIPPS, R.M.
Dept. of Biology, UNM.

DAHM, C.N.
University of Girona, Catalonia, Spain, November 26.

LOKER, E.S.
University of California, Merced CA, January.
University of Alberta, April.

MILLER, K.B.
University of Georgia, March.
Texas A&M University, September.

MILLER, R.D.
“Evolution and Early Developmental Expression of T Cell Receptors in a Marsupial,” Department of Biology, George Washington University, Washington DC, February 8.


“Evolution of T Cell Receptors: What Mice and Humans Couldn’t Tell Us, But the Possum and Platypus Knew All Along,” Department of Infectious Disease, College of Veterinary Medicine, University of Georgia, Athens GA, November 17.

MILNE, B.T.
Invited Panelist, N.M. Higher Education Sustainability Forum, UNM, March 31.

“Sustainability at UNM,” N.M. Graduates of Color, UNM, Sept. 10.
NATVIG, D.O.
Some about the Sevilleta NWR, LTER program and the Field Station, plus a little research.

NELSON, M.A.
Scientific Research Ethics, Institute for Ethics, HSC, UNM, February 17.

SMITH, F.A.
Presentation on the Program in Interdisciplinary Biological and Biomedical Science (PiBBs),
Howard Hughes Medical Institute, Washington DC, September.

Presentation on my research to Undergraduate Nurturing Opportunities (UNO) students, Fall.

THORNHILL, R.
Colloquium, “Parasites and Human Values,” Department of Psychology, UNM, April.

WEARING, H.J.
Invited graduate seminar, Department of Mathematics & Statistics, UNM, March.

Invited seminar, Department of Mathematical Sciences, New Mexico State University, Las Cruces NM, April.

Graduate student orientation (joint seminar with students Etsuko Nonaka and Alex Washburne),
Department of Mathematics & Statistics, UNM.

Invited seminar, Disease Ecology Group, School of Ecology, University of Georgia, Athens GA, October.

WERNER-WASHBURN, M.
Several talks on mentoring.

“Computational Analysis of Yeast Quiescence,” Computer Science Department, UNM, January.

WOLF, B.O.
“Pulsed Resources and Carbon Flow Through a Desert Food Web: the Influence of Short and Long-term Climate Variability,” Division of Biology, Kansas State University, Manhattan KS, September.

B. Testimony in a Scholarly Capacity at Hearings of Commissions, Legislative Committees, Etc.

DAHM, C.N.
Delta Vision Task Force, State of California, August 21 (appointed by Calif. Governor A. Schwarzenegger)
LOKER, E.S.
Presented UNM Biology's case for $3.78M for the Phase II building construction to the Higher Education Capital Outlay meeting, Santa Fe NM, September 4.

LOWREY, T.K.
Invited Presentation, N.M. Board of Regents, UNM, February.

MILLER, R.D.
NSF BIO Directorate presentation to the National Science Board, National Science Foundation, Washington DC, February 6.

SNELL, H.L.
Represented UNM Faculty Senate at 2008 sessions of New Mexico Legislature, Santa Fe NM.

C. Presentation to General Audience in a Scholarly Capacity.

BROWN, J.H.
Research presentation to UNM Foundation.

KODRIC-BROWN, A.
Presentation and tour of laboratory facilities to high-school students at the Bosque School, Albuquerque NM.

Panel presentation on “animal cognition” at the Law School Forum organized by Marcia Baum.

LITVAK, M.E.


LOWREY, T.K.


MILLER, R.D.


MILNE, B.T.

Sustainability Studies Program outreach event, La Montanita Coop Earth-day Festival, Albuquerque NM, April 26.


Sustainability Studies Program outreach event, Albuquerque Q-jam, May 24.

Foodshed panel discussion, Peace Fair, UNM, September 17.


"Green Collar Economy," Parents’ Weekend, UNM, October 2.

SMITH, F.A.

"Evolve—Body Size," filmed segments for 13-part History Channel series on evolution and body size, broadcast October 2008. Also served as scientific consultant to producers of series.

WITT, C.C.


"How Hummingbirds Thrive in the High Andes of South America," Mesilla Valley Audubon Society, Las Cruces NM, July 16.

D. Service in a Scholarly Capacity as Member of Local, State or National Panel, Committee, or Commission, for Purpose of Reviews of Public Policy Issues, Scientific Evaluations, Awards of Grants or Fellowships or Prizes, Etc.

BROWN, J.H.

Science Steering Committee, Santa Fe Institute, Santa Fe NM

Scientific Advisory Board, Malpais Borderlands Group

Board of Trustees, Nature Conservancy of New Mexico

COUCH, L.

Invited participant, a two-day NSF symposium entitled “NSF Conversation in Undergraduate Biology/AIBS Biology Education Summit,” co-hosted by the American Institute of Biological
Sciences (AIBS) and the American Association for the Advancement of Science (AAAS), Washington DC, September.

COOK, J.A.
One-week workshop on Tongass National Forest Conservation, Audubon/Nature Conservancy Scientific Review, Juneau AK, June.

Arctic Researcher and Mentor, Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) Conference for International Polar Year Event, Salt Lake City UT, October 9-12.

Panel Member, Undergraduate Research and Mentoring (URM) in Biological Sciences Conference, National Science Foundation, October.

Ad hoc reviewer of proposals, National Science Foundation (3)

CRIPPS, R.M.
Member, Skeletal Muscle Biology and Exercise Physiology study section, National Institutes of Health.

Member, American Heart Association National Review Committee 3B.

CUNNINGHAM, C.
Member, European Commission Aquaculture Panel FP7-KBBE-2007-2A, Food, Agriculture and Fisheries, and Biotechnology: Sustainable Production and Management of Biological Resources from Land, Forest and Aquatic Environments.


Member, USDA Animal Protection Panel A

Ad hoc reviews for:
National Science Foundation (2)
French National Research Agency (2)

DAHM, C.N.
External reviewer, IGERT Program: Genes to Ecosystems, Northern Arizona University, August 29-30.

External reviewer, H.J. Andrews LTER Program, Oregon State University, October 8-10.

Advisory Committee Member, Adaptive Management and the Bay Delta Conservation Plan, Sacramento CA, December 17-19.

HANSON, D.T.
Proposal reviewer, National Science Foundation

KODRIC-BROWN, A.
Reviewer, Population Biology and Animal Behavior Panels, National Science Foundation, one proposal for each panel.


LOWREY, T.K.
Member, N.M. Rare Plant Technical Council

MILLER, R.D.
Program Director, Physiological and Structural Systems Cluster, Division of Integrative Organismal Systems, Directorate for Biological Sciences, National Science Foundation, August 6, 2007–August 4, 2008.

Program Director, Ecology of Infectious Diseases working group, Division of Emerging Frontiers, Biological Sciences Directorate, National Science Foundation, August 6, 2007–August 4, 2008.


Ad Hoc reviewer, NSF International Research Fellows Program, Fall.

NELSON, M.A.
Two research proposals, National Science Foundation

POCKMAN, W.T.
Ad hoc reviewer:
- Program in Ecosystem Research, DOE (2)
- IOS–Environmental and Structural Systems Cluster, NSF (1)
- National Institute for Climate Change Research, DOE (1)

Site review team member: NSF Center for Embedded Network Sensing, University of California–Los Angeles, May 11-13.

SHANER, M.G.M.
Poster Judge, 17th Annual Research Day, Department of Biology, UNM, April 11.
SINSABAUGH, R.L.
Proposal review, Ecosystems Program, NSF (1)

SMITH, F.A.
Reviewed numerous grants (12-20) for National Science Foundation.
Panel Member, Directorate of Environmental Biology Research Coordination Network Panel (cross-directorate panel), National Science Foundation, Fall.

SNELL, H.L.
Member, Species Recovery Team for Boreal Toads, N.M. Dept. of Game and Fish.
Member, Species Recovery Team for Grey-banded Kingsnakes, N.M. Dept. of Game and Fish.
Conservation Fellow of the Saint Louis Zoo.
Member, General Assembly of the Charles Darwin Foundation.
Reviewed one proposal, National Science Foundation.

STRICKER, S.A.
Reviewed NSF proposal (1)

TURNER, T.F.
Grant proposals, National Science Foundation (7)
Panelist, Grant proposals, U.S. Bureau of Reclamation (1)

WAIDE, R.B.
Editorial Committee for the EcoTrends volume examining long-term ecological patterns at Long-Term Ecological Research (LTER), U.S. Dept. of Agriculture (USDA) and Agricultural Research Service (ARS) sites in the United States, 2006–present.

Long-Term Ecological Research (LTER) Executive Board, UNM, 2006–present.
Steering Committee, Research Coordination Network for the National Phenological Network, 2007–12.
Executive Advisory Board, Earth and Sky, radio and online, 2006–present.
Public Policy Committee, American Institute of Biological Sciences. The LTER Network has a seat on this committee as a member of American Institute of Biological Sciences (AIBS).
WEARING, H.J.
Reviewer, Advancing Theory in Biology program, National Science Foundation

WERNER-WASHBURNE, M.
Keystone Advisory Committee, 2008–present
FlyBase Coordinating Committee (PI group)
California Institute of Reproductive Medicine (CIRM) panel to review proposals.
Organizer, Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) Genome Committee
Collaborative Studies on Systems Biology of Complex Phenotypes Panel, National Institutes of Health
Keystone Advisory Panel
Declined invitation for NSF IGERT panel
Unable to attend Course, Curriculum, and Laboratory Improvement Panel, NSF

WITT, C.C.
Review of grant proposal, Population and Evolutionary Processes Cluster, Division of Environmental Biology, National Science Foundation, February.
Panel member and reviewer, Environmental Health Signature Program (EHSP) Pilot grant program, Health Sciences Center, UNM (Matthew Campen, Lovelace Respiratory Research Institute, panel chair), December.

WOLF, B.O.
Invited participant, Rapid Directional Environmental Change Workshop, National Science Foundation, December.


ADEMA, C.M.
Advances in Parasitology (1)
Developmental and Comparative Immunology (1)
Fish and Shellfish Immunology (2)
Journal of Immunology (1)
Journal of Invertebrate Pathology (3)
Journal of Molecular Biology (1)
Journal of Molluscan Studies (1)
Journal of Parasitology (2)
Parasitology (1)
Parasitology Research (1)
PLoS Neglected Tropical Diseases (1)

BERGTHORSSON, U.
Genetics (1)

BROWN, J.H.
Approximately 200 papers as a member of Proceedings of the National Academy of Sciences (PNAS) editorial board.

Five papers for five different journals.

COLLINS, S.L.
African Journal of Range and Forage Science
BioScience (2)
Ecological Applications
Ecological Monographs
Ecology (2)
Ecology and Society
Ecosystems
Frontiers in Ecology and the Environment
Global Change Biology
Journal of Arid Environments
Journal of Geophysical Research
Journal of Rangeland Ecology
Journal of Vegetation Science (2)
Oikos
Science
Soil Biology and Biochemistry

COOK, J.A.
Journal of Mammalogy (1)
Molecular Ecology (1)

CRIPPS, R.M.
Development (5)
Developmental Biology (1)
Genome Biology (1)
Molecular and Cellular Biology (1)
Physiological Genomics (2)

CUNNINGHAM, C.
Developmental and Comparative Immunology (11)
Fish and Shellfish Immunology (2)
DAHM, C.N.

Freshwater Biology (1)
Geological Society of America (2)
Journal of Geophysical Research—Biogeosciences (1)
Journal of the North American Benthological Society (1)

HANSON, D.T.

Aquatic Botany (1)
Functional Ecology (1)
Reviewed textbook chapter in biology published by McGraw-Hill (1)

KATJU, V.

Genetics (1)

KODRICH-BROWN, A.

American Naturalist (2)
Behavioral Ecology and Sociobiology (1)
Biology Letters (2)
Ethology (1)
Evolution (1)
Evolutionary Applications (1)
Journal of Evolutionary Biology (2)
Journal of the Royal Society Interface
PLoS ONE (2)
Proceeding Royal Society London B (2)

LITVAK, M.E.

Journal of Geophysical Research (JGR) Biogeosciences (3)
Biogeochemistry (1)
Canadian Journal of Forest Research (1)
Ecology (1)
Global Change Biology (1)
Soil Biology and Biochemistry (1)

LOWREY, T.K.

American Journal of Botany (2)
Journal of Biogeography (1)
Molecular Ecology (1)
Molecular Phylogeny and Evolution (1)
New Zealand Journal of Botany (1)
Sida (2)
Systematic Botany (1)
Taxon (3)
University of New Mexico Press (1)
MARSHALL, D.L.
Annals of Botany (2)
American Journal of Botany (2)
American Naturalist (1)
International Journal of Plant Sciences (1)
New Phytologist (2)

MILLER, K.B.
Biological Journal Linnean Society (1)
Insect Systematics and Evolution (1)
Systematic Entomology (2)
Zootaxa (3)

MILLER, R.D.
BMC Genomics (2)
Developmental and Comparative Immunology (3)
Genome Research (1)
Immunogenetics (8)
Journal of Immunology (4)
Veterinary Immunology and Immunopathology (1)

MILNE, B.T.
Environment and Planning (1)

NATVIG, D.O.
Fungal Genetics and Biology (1)
Mycologia (4)

NELSON, M.A.
Fungal Genetics and Biology (5)
Mycology (1)

POCKMAN, W.T.
International Journal of Plant Sciences (1)
Journal of Arid Environments (1)
New Phytologist (1)
Oecologia (2)
Plant Cell and Environment (2)
Tree Physiology (1)

POE, S.
Copeia (1)
Journal of Herpetology (2)
Proceedings of the Royal Society of London (1)
SINSABAUGH, R.L.

Applied and Environmental Microbiology (1)
Biogeochemistry (1)
Ecology (1)
Ecology Letters (1)
Ecosystems (1)
Global Change Biology (2)
Journal of Arid Environments (2)
Journal of Geophysical Research (1)
Microbial Ecology (1)
New Phytologist (1)
Oecologia (2)
Soil Biology and Biochemistry (4)

SMITH, F.A.

Biological Journal of the Linnean Society (1)
Ecography (1)
Ecology (1)
Ecology Letters (1)
Evolution (1)
French Research Agency-ANR (Agence Nationale de la Recherche) (1)
Global Ecology and Biogeography (1)
Journal of Biogeography (1)
Nature (1)
Paleobiology (1)
Public Library of Science (1)
Quaternary Research (1)
Science (1)

SNELL, H.L.

Galapagos Research (2)

STRICKER, S.A.

Biological Bulletin (1)
Cell Tissue Research (1)
Marine Biology (1)
Molecular Research and Development (4)
Proceedings National Academy of Sciences (1)

TAKACS-VESBACH, C.D.

Applied and Environmental Microbiology (1)
Molecular Ecology (1)

TURNER, T.F.

Animal Conservation (1)
Conservation Biology (1)
Journal of Applied Ecology (1)
Molecular Ecology (2)
Transactions of the American Fisheries Society (1)

WEARING, H.J.
American Naturalist (2)
Ecology (1)

WERNER-WASHBURN, M.
Aging (2)
Genome Biology (1)
Genome Research (1)

WITT, C.C.
The Anh (2)
Ecography (1)
Genome Research (1)
Ornithologia Colombiana (2)

WOLF, B.O.
BioScience (1)
Ecology (1)
Loxipes (1)
The Anh (2)
The Condor (1)

VI. NON-TEACHING UNIVERSITY, COLLEGE AND DEPARTMENT SERVICE.

A. Symposia, Workshops, Conferences, Etc., Sponsored, Hosted, Organized.

COLLINS, S.L.
Hosted and sponsored a mini-workshop at the Sevilleta of SEEDS Chapters from Northern Arizona University and University of Texas–El Paso, Albuquerque NM, ??.

Hosted and organized the “treeless” six-site LTER symposium with more than 100 participants (faculty, postdocs, staff, students) from the Sevilleta, Central Arizona Phoenix, Jornada, Niwot Ridge, Shortgrass Steppe and Konza LTER sites, Albuquerque NM, ??.

DAHM, C.N.
CALFED Science Conference, Sacramento CA, October 21-24.

MILNE, B.T.
Organized a 350.org event in Spruce Park Neighborhood, Albuquerque, to educate about excessive atmospheric carbon dioxide.

K-120
NATVIG, D.O.
Ecological Genomics and Climate Change Summit (EGCCS), Sevilleta Long Term Ecological Research (LTER) Field Station, Socorro NM, June 12-13.

SMITH, F.A.
Organized and conducted two meetings of the Research Coordination Network IMPPS: Integrating Macroecological Patterns and Processes. This is a group of ~15 paleontologists and ecologists from around the world who meet in Santa Fe, NM twice a year to work on common research projects, an edited volume to be published by the University of Chicago Press, and the development of a virtual course in Macroecology to be taught with UNM as the lead institution.

Co-organized a symposium on Extinction for the Fourth Annual Meeting of the International Biogeography Society, Mérida, Yucatán, México, January 8-12.

TAKACS-VESBACH, C.D.

WERNER-WASHBURN, M.
Initiatives to Maximize Student Diversity (IMSD)/Minority Access to Research Careers (MARC) Summer Symposium

Visits by several distinguished scientists during Biol. 402/502, Biology: Discovery and Innovation.

B. Distinguished Departmental Visitors You Hosted.

ADEMA, C.M.
Dr. Guillaume Oliveira, Rene Rachou Research Center, Belo Horizonte, MG Brazil (Center for Evolutionary & Theoretical Immunology [CETI] visitor)

BROWN, J.H.
Lev R. Ginsburg, Ecology and Evolution, Stony Brook University, Stony Brook NY

Leslie Real, Population Biology, Ecology and Evolution, Emory University, Atlanta GA

COLLINS, S.L.
Co-hosted Prof. Anthony Joern, Division of Biology, Kansas State University, Manhattan KS

COOK, J.A.
Dr. Eric P. Hoberg, Curator, U.S. National Parasite Laboratory, ARS, USDA, Beltsville MD.

Dr. Enrique P. Lessa, Professor of Evolution, Universidad de la República, Montevideo, Uruguay.

K-121
DAHM, C.N.
Dr. Lynn Margulis, Professor, Dept. of Geosciences at the University of Massachusetts, Amherst MA, February 22 (co-hosted with D.E. Northup)

Dr. Eugenia Marti, Scientific Manager, Stream Reach Management: An Expert System, Catalonia, Spain, March 24.

Dr. Wade Hadwen, Research Fellow, Australian Rivers Institute, Nathan, Queensland, Australia, June 20.

HANSON, D.T.
John Marshall, Professor, Forest Resources, University of Idaho, September 11.

KODRIC-BROWN, A.
John L. Koprowski, Professor, Wildlife & Fisheries Science, University of Arizona, Tuscon AZ

LOKER, E.S.
Dr. Anlong Xu, Guangzhou, China, February 15.

Gui Oliveira, FIOCRUZ, Brazil, October 12.

Monica Medina, University of California–Merced, November 21.

MILNE, B.T.
Phillip Pohl, Technical Staff, Sandia National Laboratories, Albuquerque NM.

Jack Mizner, Environmental Planning Dept., Sandia National Laboratories, Albuquerque NM.

SMITH, F.A.
Dr. Douglas H. Erwin, Department of Paleobiology, Smithsonian National Museum of Natural History

Dr. Fred Janzen, Department of Biology, Iowa State University

Dr. Robert Guraleick, Department of Ecology and Evolutionary Biology, University of Colorado–Boulder

Dr. Maryrose Franko, Office of Grants and Special Programs, Howard Hughes Medical Institute

Dr. Richard A. Baird, Director, Division of Interdisciplinary Training, National Institute of Biomedical Imaging and Bioengineering, National Institutes of Health

Dr. Julia Cole, Department of Geosciences, University of Arizona

Dr. Sree Kanthaswamy, Department of Anthropology and the California National Primate Research Center, University of California–Davis

K-122
Dr. Robert Walker, Max Planck Institute

Dr. Jessica Flack, Santa Fe Institute

Dr. Douglas Altshuler, Department of Biology, University of California–Riverside

Dr. Jayanth Banavar, Department of Physics, Pennsylvania State University

Dr. Daniel Rothman, Department of Earth, Atmospheric, and Planetary Science, and Professor of Geophysics, Massachusetts Institute of Technology

SINSABAUGH, R.L.

Dr. Donald R. Zak, School of Natural Resources and Environment, University of Michigan, Ann Arbor MI, September 5-7.

Dr. Katherine N. Suding, Ecology and Evolutionary Biology, School of Biological Sciences, University of California–Irvine, December 16.

TAKACS-VESBACH, C.D.

Charles Fischer, Professor of Biology, Pennsylvania State University (17th Annual Research Day Keynote Speaker), April 11.

Yuri Gorby, J. Craig Venter Institute, San Diego CA.

TURNER, T.F.

Dr. David Walters, Ecosystem Dynamics, U.S. Geological Survey, Ft. Collins CO

WEARING, H.J.

Dr. Leslie Real, Asa Griggs Candler Professor of Biology, Emory University, December.

WERNER-WASHBURNE, M.

Dr. Scott E. Baker, Pacific Northwest National Laboratory, Richland WA

Dr. Stan Fields, Department of Genome Sciences, University of Washington, Seattle WA (National Academy)

Dr. William M. Gelbart, Department of Molecular and Cell Biology, Harvard University,

Dr. Thomas Kaufman, Distinguished Professor, University of Indiana–Bloomington (National Academy)

Dr. Brian Oliver, National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda MD

Dr. Frank Rosenzweig, Division of Biological Sciences, University of Montana, Missoula MT

K-123
WOLF, B.O.
Dale DeNardo, Associate Professor, School of Life Sciences, Arizona State University
Jon E Harrison, Professor, School of Life Sciences, Arizona State University

C. Committee Service.

1. Departmental committees served on in 2008 (indicate chair with asterisk).

ADEMA, C.M.
2008 17th Annual Research Day Committee

BERGTHORSSON, U.
Graduate Student Selection Committee

BROWN, J.H.
Promotion and Tenure Committee

CHARNOV, E.I.
Graduate Student Advisor, year-long
* Departmental Chair Selection Process Committee

COLLINS, S.L.
Tenure and Promotions Committee
BGSA Faculty Advisor, 2008–09
Ecological Society of America's Strategies for Ecology, Education, Development and Sustainability (SEEDS) Chapter Faculty Advisor
Sevilleta Long Term Ecological Research (LTER) Director

COOK, J.A.
Member, Executive Committee, Museum of Southwestern Biology (MSB)
Member, Editorial Board, MSB Publications Series (one manuscript managed/edited)

COUCH, L.
Display Case Committee
Publicity Committee

CUNNINGHAM, C.
Annual Research Day Committee
Biology/Chemistry Synergistic Search Committee
* Undergraduate Policy Committee

DAHM, C.N.
Salary Committee
FARNSWORTH, P.
Co-chair, Graduation Committee

FRIDRICK, C.O.
Department Review/Outcomes Committee, Spring and Fall.
* Biology Graduation Committee, Fall.

HANSON, D.T.
* Seminars Committee (sole member)
Greenhouse Committee

HOFKIN, B.V.
Research Day Committee

As Pre-Vet Student Advisor, administrated and awarded Thelma Evans Trust Scholarship for current and former pre-veterinary and veterinary students.

HOWE, K.A.
Graduation Committee
* Research Day Committee

KATJU, V.
New Graduate Student Orientation, Fall

KODRIC-BROWN, A.
Graduate Policy Committee

LITVAK, M.E.
Graduate Student Selection Committee

LOWREY, T.K.
Tenure and Promotion Committee

MARSHALL, D.L.
* Greenhouse Committee
* Coordinator of Outcomes Assessment for the Biology Core
Tenure and Promotions Committee

MILLER, K.B.
Undergraduate Student Advisor

MILLER, R.D.
Unpaid leave-of-absence, Spring
MILNE, B.T.
Graduate Student Selection Committee

NATVIG, D.O.
Tenure and Promotion Committee

NELSON, M.A.
Molecular Biologist Search Committee
Tenure and Promotion Committee

POCKMAN, W.T.
Promotion and Tenure Committee, Spring
Faculty sponsor, Biology Graduate Student Association (BGSA), Spring
Research Day Committee, Fall
Greenhouse Committee, Spring and Fall

SHANER, M.G.M.
Academic Advising Committee
* Graduation Committee

SINSABAUGH, R.L.
Department Vehicle Committee, Spring and Fall
* Graduate Student Selection Committee, Spring.
Grove Fellowship Selection Committee, Spring

SMITH, F.A.
*Graduate Student Selection Committee, Fall 2008–present.
Undergraduate Student Advisor, 2007–08.

SNELL, H.L.
* Salary Committee
MSB Executive Committee
* MSB Publications Committee
* Undergraduate Policy Committee

STRICKER, S.A.
Scholarship Committee
Space Committee
Undergraduate Policy Committee

SWAN, J.
Graduation Committee
Undergraduate Policy Committee
TAKACS-VESBACH, C.D.
Cell Biologist Faculty Search Committee

THORNHILL, R.
Graduate Policy Committee, Spring
* Graduate Policy Committee, Fall

TOOLSON, E.C.
* Computer Committee (co-chair with Nancy Davis)

TURNER, T.F.
* MSB Executive Committee, 1998-present

WEARING, H.J.
Cell Biology Faculty Search Committee, 2007-08
Computational Applied Mathematics Hiring Committee, 2007-08
Statistics Hiring Committee, 2008-09

WERNER-WASHBURNE, M.
Library Liaison
Undergraduate Student Advisor Search Committee

WITT, C.C.
Research Day Committee, Spring
Graduate Policy, Fall

2. College/University committees served on in 2008 (indicate chair with asterisk).

ADEMA, C.M.
Institutional Biosafety Committee

BERGTHORSSON, U.
Radiation Safety Committee

COLLINS, S.L.
Executive Research Advisory Committee (ERAC), 2008-09

CRIPPS, R.M.
College Assessment Review Committee

CUNNINGHAM, C.
Secretary, Ethics & Advisory Committee, Faculty Senate, UNM
A&S Junior Tenure and Promotion Committee, UNM

K-127
FARNSWORTH, P.
Member, Faculty Senate Curriculum Committee

HANSON, D.T.
Member, External Advisory Board, Mass Spectrometry Center, UNM, 2003–present.

KODRIC-BROWN, A.
Research Allocation Committee

LOKER, E.S.
* UNM Biosafety Committee (co-chair)

LOWREY, T.K.
* Academic Freedom and Tenure Committee
Library Committee, UNM Faculty Senate
Policy Committee, UNM Faculty Senate

MARSHALL, D.L.
Arts & Sciences Scholarship Committee
* Noyce Scholarship Steering Committee

MILLER, R.D.
Unpaid leave-of-absence, Spring.

MILNE, B.T.
UNM Sustainability Council
UNM Carbon-neutral Task Force
Committee to Organize Town Hall for Green Jobs, City of Albuquerque and UNM President's Office.
Committee to Organize Lincoln's and Darwin's Birthday Celebration, UNM President's Office.

NELSON, M.A.
SEC Program Committee
AHPCC Associated Faculty Group (charter member)
Genomics Facility User Group, School of Medicine, UNM
Member, Action Team for Science, Technology, Engineering and Mathematics (STEM)
Member, Steering Committee, Southwest Graduate Coalition Bridges to the Doctorate Program

UNM Advance Committee for Faculty Diversity in STEM

POCKMAN, W.T.
Proposal Development Software Evaluation group, Summer (weekly meetings)

SMITH, F.A.

SNELL, H.L.
President-Elect, Faculty Senate, UNM, through June.
President, Faculty Senate, UNM, July–present
* Faculty Senate Operations Committee
UNM Scholarship Committee
Faculty Advisor, President Schmidly’s Task Force on Costs of Administrative Growth, Summer.

STRICKER, S.A.
Animal Research Facility Advisory Committee
Microscopy Oversight Committee

TAKACS-VESBACH, C.D.
President’s Committee of 15 (to comment on research at UNM)

TOOLSON, E.C.
B.A./M.D. Curriculum Committee

TURNER, T.F.
A&S Council of Chairs & Directors
A&S Student Access Committee
* Science Subcommittee, UNM Museum Collection Management Committee

WAIDE, R.B.
Research Allocation Committee, UNM, 2000–present

WEARING, H.J.
B.A./M.D. Curriculum Committee, 2008–09

WITT, C.C.
Panel member and reviewer, Environmental Health Signature Program (EHSP) Pilot grant program, Health Sciences Center, UNM (Matthew Campen, Lovelace Respiratory Research Institute, panel chair), December.

K-129
WOLF, B.O.
Animal Care and Use Committee

D. Other.

COLLINS, S.L.
Member, ESA Rapid Response Team–Grassland Ecosystems, 2004–present.

COOK, J.A.
Visited UNM–Gallup Branch and Diné Tribal College in Tsaile AZ and Shiprock NM to recruit Navajo students to UNM Biology Program and establish collaborative ties.

Peer Evaluation of Promotion File for Dr. Winston P. Smith, USDA Forest Service.

Peer Evaluation of Promotion File for Dr. Sandy Talbot, DOI USGS.

External Peer Review for Promotion of Ernest P. Keeley, Idaho State University.

External Review of Dr. Robert Wayne, Promotion to Distinguished Professor, UCLA.

Member, Resolutions Committee, American Society of Mammalogists

Member, Latin American Scholarship Committee, American Society of Mammalogists

Member, Systematics Collections Committee, American Society of Mammalogists

FRIDRICK, C.O.
Assessment Coordinator, Department of Biology, UNM, Spring–Fall:

As assessment coordinator, I coordinated the assessment efforts within our department for each of the UNM General Education Core Curriculum Courses taught in the Department of Biology: Biol.110, Biol.112L, Biol. 123 and Biol.124L. This involved facilitating meetings and other communications between the faculty teaching these courses to ensure that assessments were conducted according to the department’s assessment plan, as well as collecting and collating the data for the assessments conducted during Spring and Fall semesters. I also prepared our department’s “Annual Progress Report on General Education Course Assessment of Student Learning.” This report, submitted in June 2008, described our assessment activities and results during Fall 2007 and Spring 2008.

MARSHALL, D.L.
Mentor for Cristina Takacs-Vesbach, Helen Wearing, Marcy Litvak and Jamesina Simpson.

Director, Departmental Academic Program Review Process: wrote departmental self-study, organized review team visit, worked on follow-up.

Departmental Outcomes Assessment: developed assessment procedures and conducted assessment in Biology 204, Plant and Animal Form and Function.
SNELL, H.L.
Reader, 2008 Spring Commencement, UNM.

Additional faculty mentor for Dr. Steve Poe; activity consists of some advisement and reporting regarding teaching.

WITT, C.C.
Maintained Museum of Southwestern Biology's (MSB) responsibilities under a five-year Convenio that I established in 2007 between the MSB and the Centro de Ornitolg'a y Biodiversidad, Lima-Peru: Convenio de Cooperacion Interinstitucional Entre El Centro de Ornitolg'a y Biodiversidad (Corbidi) Lima, Peru, y El Museo de Southwestern Biology, University of New Mexico6, Albuquerque, Nuevo Mexico, E.E.U.U., para Desarrollar la Investigacion en las Adaptaciones de las Aves Silvestres a las Condiciones de los Altos Andes.

VII. ADVANCED STUDY AND NEW SCHOLASTIC HONORS, FELLOWSHIPS, ETC.
None.

VIII. SABBATICALS, LEAVES OF ABSENCE, SUMMER TEACHING ELSEWHERE, TRAVEL, ETC., DURING THE PERIOD.

DAHM, C.N.
Completed sabbatical at the Australian Rivers Institute in mid-January, 2008.

Leave of absence from July–December, 2008, to serve as lead scientist to the CALFED Science Program in Sacramento, CA.

On loan to the U.S. Geological Survey to serve as the CALFED lead scientist.

LITVAK, M.E.
Maternity Leave, Fall.

LOWREY, T.K.
Field Botany Course for K-12 Teachers, Science Education Institute of the Southwest, Sevilleta Field Station, Socorro NM, June.

MILLER, R.D.
Unpaid leave-of-absence while an National Science Foundation Program Director, Spring.

POE, S.
Sabbatical Leave, Fall.

SNELL, H.L.
Extensive fieldwork in New Mexico, Colorado, Nevada, and Northern California.
IX. PUBLIC SERVICE.

BROWN, J.H.

COLLINS, S.L.
Chair, U.S.G.S. GAP Analysis Review Committee (organized through the Ecological Society of America)

Member, Millennium Conference Organizing Committee, Ecological Society of America

COUCH, L.
Treasurer—Placitas Homesteads Homeowners Association, Placitas NM

First Responder/Volunteer Firefighter, Placitas Volunteer Fire Brigade, Placitas NM

DAHM, C.N.
Judge, Regional Science Fair, March 21.

Judge, State Science Fair, April 5.

HOFKIN, B.V.
Continued to write, produce and broadcast radio programs as "Today's BioCast," on KANW, 89.1FM. The program airs three mornings weekly and is underwritten by the Department of Biology, UNM.

HOWE, K.A.
Member, Board of Directors, ALS (Atherolateral Sclerosis) Association

Co-Chair, Board of Directors, La Puerta de los Niños Childcare Center

LOKER, E.S.
Participated with Los Alamos National Laboratory and Ilya Nemenman in submission of Interface of Mathematical and Biological Sciences (CIMBS) Quantitative Biology (Q-Bio) National Science Foundation (NSF) pre-proposal.

LOWREY, T.K.
Plant identification for the general public in the UNM Herbarium, Museum of Southwestern Biology, Department of Biology, UNM.

MILNE, B.T.
Ad-hoc president, Alliance for the Carbon-neutral Foodshed in New Mexico, renamed FoodPrint NM (www.FoodPrintnm.org)
Committee to Organize Town Hall for Green Jobs, City of Albuquerque and UNM President’s Office.

Steering Committee for the Aldo Leopold Centennial Celebration 2009 (http://www.leopoldcelebration.org/).

**NATIVIG, D.O.**

Participated in the National Radio Astronomy Observatory (NRAO)-sponsored Strategic Planning Meeting for the International Year of Astronomy.

Served as board member for Amigos de la Sevilleta (a Sevilleta National Wildlife Refuge friends group).

**POCKMAN, W.T.**

Support for exhibit development:

- EXPLOR! Science Center (various staff), Albuquerque NM, Transpiration exhibit, June.

**SMITH, F.A.**

Assisted producers of the 13-part History Channel series with story development; participated in three days of filming at UNM and at the Valle Caldera; answered many scientific queries.

**SNELL, H.L.**

Member, N.M. Dept. of Game and Fish Species Recovery Board.

Conservation Fellow of the Saint Louis Zoo.

Member, General Assembly of the Charles Darwin Foundation.

Service with the City of Albuquerque Councilors and City administrators on Urban Biological Diversity initiatives.

Public education and access to information within the Division of the Amphibians and Reptiles, Museum of Southwestern Biology, UNM.

Worked with Japanese television production company, reviewing and advising on Galápagos programming.

**TAKACS-VESBACH, C.D.**

“Exploring for Life in Extreme Environments,” M.S. Education, Montana State University, Bozeman MT, July.

**THORNHILL, R.**

Advisor, New Mexicans for Science and Reason

Assisted with the BBC TV program on my research.
Numerous interviews with the media about my research (*Nature*, *Science*, *Economist*, *Search*, *Atlantic Monthly*, *New Scientist*, etc.)

WERNER-WASHBURNE, M.

In addition to my lab and teaching, I run the (Initiatives to Maximize Student Diversity) IMSD program at UNM.

WITT, C.C.

Three talks for general audiences; 11 collection tours; one specimen-showing event; one bird-watching field trip; and one newsletter sent to more than 200 members of the public; and one front-page feature article on my research in the *Albuquerque Journal*.

WOLF, B.O.

Coordinator, Searchable Ornithological Research Archive (SORA).
APPENDIX L

DEPARTMENT

CORE ASSESSMENT RESPONSES
Narrative Format

Academic Year: Fall 2008
Department: Biology
Gen Ed. Course(s): Subj Number Short Title
A. Biol 110 Biology for Non-majors
B. Biol 112L Biology for Non-majors Lab
C. Biol 123 Biology for Health-related Sciences
D. Biol 124L Biology for Health-related Sciences Lab

Person preparing report: Kelly Howe
Date submitted: February 15, 2009

1. List the student learning outcomes (SLOs) that were assessed during the academic year, including those for which data were gathered as well as those for which developmental work was done, such as the creation or piloting of assessment measures.

   A. SLO1: Students will be able to explain the basic mechanism of inheritance.
      Addresses UNM/HED Area III, Competency 3
   B. SLO1: Students will be able to analyze and interpret graphical data.
      Addresses UNM/HED Area III, Competency 4
   C. SLO1: Students will be able to explain the basic mechanism of inheritance.
      Addresses UNM/HED Area III, Competency 3
   D. SLO1: Students will be able to analyze and interpret graphical data.
      Addresses UNM/HED Area III, Competency 4

2. For each learning outcome, describe a) the measures used (at least one-half of the measures used are to be direct measures, and at least one direct measure must be used for each SLO), b) the sample of students from whom data were collected, c) the timetable for the collection, and d) the setting in which the measures were administered.

   A. SLO 1 was assessed in the Fall of 2008 in all sections of Biol 110. Students were provided a question (below) and asked to provide a written answer. Students constructed their answers independently, in class, with no notes or texts provided. The students had completed the units on inheritance and protein synthesis. Instructors were allowed to give the question as a Classroom Assessment Technique (CAT) or as an exam question. Instructors scored at least 30% of students’ responses using the included scoring rubric. The data for all sections has been collated and is included below (Section 3A).

   Question: Explain how a gene controls a phenotype. Please answer the question to the best of your ability, and as completely as possible. You may include an example if you wish.

   Rubric for scoring:
Student’s response should include the following points:
-A gene is an inherited segment of DNA.
-The gene contains protein-building instructions.
-The nucleotide sequence of the gene is copied into a sequence of mRNA nucleotides during the process of transcription, producing an mRNA transcript.
-The matures mRNA transcript associates with a ribosome.
-During the process of translation, the sequence of mRNA nucleotides comprising the mRNA transcript dictates assembly of a specified series of amino acids into a polypeptide chain.
-tRNAs deliver the appropriate amino acid to the ribosome during translation, based upon complementary binding between tRNA anticodon and mRNA codon.
-Completed polypeptide chains fold up into a specific 3-dimensional structure, may undergo further modifications, and/or may join with other polypeptide chains, resulting in a final functional protein.
-The protein will dictate some aspect of the organism’s structure of function, which is its phenotype.
-The process of a gene producing a protein is gene expression.
-Not all genes are expressed in all cells, which results in cellular differentiation.

Exemplary — Will be given for a student who includes at least seven of these points in his/her response.
Satisfactory — Will be given for a student who includes at least five of these points in his/her response.
Unsatisfactory — Will be given for a student who includes less than five of these points in his/her response.

B. SLO1 was assessed in all sections of Biol 112L in the Fall of 2008 as a part of a homework assignment based upon the Population Growth and Regulation laboratory exercise that the students had done in class. Following is an extract from the lab manual:

“You have been following the growth of a population of *Lemna* for several weeks... Plot the data for the growth of your *Lemna* colony on the graph paper provided in lab... Use your graph and the data you recorded to answer the questions below about population growth... Also, compare your results to the results of other groups to see how much variation there can be between populations that started with approximately the same number of individuals and the same amount of nutrients.”

This assessment was conducted with the designated laboratory assignment. The lab TAs scored 100% of the responses from each of their sections, using the scoring rubric below. The data for all sections was collated and is included below (Section 3B).

Rubric for scoring:

Exemplary — Student’s response meets all of the criteria for a “satisfactory” response and the student’s written responses demonstrate particularly insightful interpretation of the data.
Satisfactory
Student’s report meets all of the following criteria:
- Student’s data table is complete and growth rates were accurately calculated.
- Student’s graph correctly and clearly represents data from the table, with number of individuals indicated on the y axis and time on the x axis.

**Unsatisfactory**
Student’s data table is incomplete and/or growth rates were not accurately calculated
OR
Student did not properly graph data from chart and/or graph is difficult to interpret due to lack of neatness
OR
Student’s responses to questions on pages 41-42 demonstrate an inability to properly interpret the data and/or are difficult to understand due to unclear language, lack of neatness, or prevalence of grammatical and/or spelling errors.

C. SLO 1 was assessed in the Fall of 2008 in all sections of Biol 123. Students were provided a question (below) and asked to provide a written answer. Students constructed their answers independently, in class, with no notes or texts provided. The students had completed the units on inheritance and protein synthesis. Instructors were allowed to give the question as a Classroom Assessment Technique (CAT) or as an exam question. Instructors scored at least 30% of students’ responses using the included scoring rubric. The data for all sections has been collated and is included below (Section 3C).

Question: Explain how a gene controls a phenotype. Please answer the question to the best of your ability, and as completely as possible. You may include an example if you wish.

**Rubric for scoring:**
Student’s response should include the following points:
- A gene is an inherited segment of DNA.
- The gene contains protein-building instructions.
- The nucleotide sequence of the gene is copied into a sequence of mRNA nucleotides during the process of transcription, producing an mRNA transcript.
- The matures mRNA transcript associates with a ribosome.
- During the process of translation, the sequence of mRNA nucleotides comprising the mRNA transcript dictates assembly of a specified series of amino acids into a polypeptide chain.
- tRNAs deliver the appropriate amino acid to the ribosome during translation, based upon complementary binding between tRNA anticodon and mRNA codon.
- Completed polypeptide chains fold up into a specific 3-dimensional structure, may undergo further modifications, and/or may join with other polypeptide chains, resulting in a final functional protein.
- The protein will dictate some aspect of the organism’s structure of function, which is its phenotype.
- The process of a gene producing a protein is gene expression.
- Not all genes are expressed in all cells, which results in cellular differentiation.
Exemplary – Will be given for a student who includes at least seven of these points in his/her response.
Satisfactory – Will be given for a student who includes at least five of these points in his/her response.
Unsatisfactory – Will be given for a student who includes less than five of these points in his/her response.

D. SLO1 was assessed in all sections of Biol 124L in the Fall of 2008. Students were asked to write a scientific paper, as a homework assignment, based on experiments done in class during the Enzymes laboratory exercise. During the laboratory exercise, the students conducted a series of experiments investigating the effects of 4 different variables on enzyme activity. This assessment was conducted concurrently with the designated laboratory assignment. The assessment considers only the portion of the scientific paper in which students were required to generate graphs of the data collected during their experiments. The lab TAs scored 100% of the responses from each of their sections, using the scoring rubric below. The data for all sections was collated and is included in a table below (Section 3D).

Scoring rubric:

Exemplary
Student’s paper meets all of the criteria described for a “satisfactory” paper and the student demonstrates particularly insightful interpretation of the data.

Satisfactory
Each of the student’s data tables is complete, including a title, labeled columns and rows, and units if applicable.
AND
Student’s graphs include a title, are completely labeled, have dependent and independent variables on the proper axes, and include all data from the experiments.
AND
Student demonstrates correct interpretation of his/her data in the discussion portion of the paper.

Unsatisfactory
Student’s data tables are incomplete and/or incompletely or improperly labeled.
OR
Student did not properly graph data from tables.
OR
Student was unable to properly interpret the data and/or the student’s interpretation was difficult to understand due to unclear language, or prevalence of grammatical and/or spelling errors.
3. Describe the results of the assessment. (What do they tell you about student learning? What did you learn about strengths and weaknesses of your program?) If specific results are not available, describe the progress that has been made on the initiatives included in the approved assessment plan.

A. Biol 110 Fall 2008 assessment results

<table>
<thead>
<tr>
<th>Percent of student responses scored as</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exemplary</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>23%</td>
<td>52%</td>
</tr>
</tbody>
</table>

B. Biol 112L Fall 2008 assessment results

<table>
<thead>
<tr>
<th>Percent of student responses scored as</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exemplary</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>47%</td>
<td>42%</td>
</tr>
</tbody>
</table>

C. Biol 123 Fall 2008 assessment results

<table>
<thead>
<tr>
<th>Percent of student responses scored as</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exemplary</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>10%</td>
<td>51%</td>
</tr>
</tbody>
</table>

D. Biol 124L Fall 2008 assessment results

<table>
<thead>
<tr>
<th>Percent of student responses scored as</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exemplary</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>20%</td>
<td>42%</td>
</tr>
</tbody>
</table>

Generally, our instructors are unhappy with the number of “unsatisfactory” responses given. Specifically, it is discouraging to see so many of these responses from students in the lab course designed for students pursuing health-related careers (Biol 124L). The percent of responses falling into the “exemplary” and “satisfactory” categories are comparable to the results obtained in the Fall of 2007.

4. Describe the departmental process by which faculty reviewed the assessment procedures and results and decided on the actions and/or revisions that were indicated by them.

Our departmental assessment plan for our General Education courses dictates that all instructors teaching any of the Biology Core Curriculum courses will meet not later than the second week of the Fall semester to discuss the assessment data from the previous Fall semester. The Fall 2008 assessment data will be analyzed in the Fall of 2009 at a meeting of all instructors teaching Biol 110, 112L, 123, and 124L. Our analysis will be used to instruct changes to the assessment plans, the pedagogical techniques employed by instructors, or both, in order to achieve improvements in student learning. Specifically, we will discuss the method
of assessment delivery. We have informally discussed whether or not our questions are specific enough to require the answers given in the scoring rubric. Once the Spring 2009 (assessment of SLO2) assessment results have been delivered, we will also be discussing whether or not to assess SLO1 in a multiple-choice format, as we have decided for SLO2.

5. Describe the actions and/or revisions that were implemented in response to the assessment processes and results.

Our instructors have not yet reviewed the Fall 2008 results and this narrative (due February 15, 2009) only includes those results. At our meeting in the Spring of 2008, instructors agreed to switch from open-ended assessment questions to multiple-choice format for the lecture courses (Biol 110 and Biol 123) and we are eager to see whether assessment results improve with that format (see Narrative dated 6/13/09).

6. Given the assessment activities and results to date, describe your assessment plans for the next year (2008-09). If significant changes have been made to degree program SLOs or to the general assessment strategy, please clearly describe.

SLO2 will be assessed during the Spring 2009 semester and SLO1 will again be assessed during the Fall 2009 semester. At the meeting during the Fall 2009 semester, we will determine whether or not to make significant changes to our SLO1 assessment process.
Report on 2008-2009 Assessment Activities

A. College, Department and Date

1. Arts & Sciences
2. Biology
3. 7/6/2009

B. Academic Program of Study
B.S. Biology

C. Contact Person

D. Broad Program Goals & Measurable Student Learning Outcomes

1. Understand basic biological principles, and appreciate the breadth of modern biology
   - apply understanding of cell biology, genetics, ecology, evolution and physiology on examinations and laboratory exercises
   - be able to read scientific papers from the primary literature and provide interpretation.

2. Understand and apply the scientific principle to conceptual or experimental problems in biology
   - be able to interpret new data
   - be able to form a hypothesis based upon that data
   - be able to design a follow-up experiment based upon that data
   - be able to carry-out the experiment and interpret the data

3. Present biological data, and interpretations of the data, in written and oral formats
   - be able to analyze data and arrange it into an appropriate visual form (bar graph, scatter plot, pie chart, diagram, etc)
   - be able to apply basic statistical tests to the data to determine robustness
   - be able to organize presentation of the topic
   - be able to write coherently about the topic
   - be able to create a computer-based presentation (e.g., in PowerPoint format) and give a clear oral presentation in front of an audience of peers.

4. Be familiar with the intersection of modern biology with modern society
   - be scientifically informed on a global biological issues, such as climate change, cloning, etc.
   - understand and be able to discuss the ethical issues arising from particular modern biological studies

5. Be prepared to enter the next career stage for which a Biology degree is preparation
   - meet with a biology advisor
   - develop scientific literacy and be aware of modern biological issues
   - understand the opportunities presented when receiving a biology degree, and how to achieve those opportunities
6. Have received significant exposure to research or professional experience
- participation in Honours Program
- advanced laboratory and/or field studies
- independent study in a laboratory
- attended Departmental and other relevant research seminars

E. Assessment of Student Learning Three-Year Plan

1. Student Learning Outcomes

<table>
<thead>
<tr>
<th>University of New Mexico Student Learning Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program SLOs</strong></td>
</tr>
<tr>
<td>1. Be able to summarize data and arrange it into an appropriate visual form</td>
</tr>
<tr>
<td>2. Be able to interpret new data</td>
</tr>
<tr>
<td>3. Be able to read scientific papers from the primary literature and provide interpretation</td>
</tr>
<tr>
<td>4. Advanced laboratory and/or field studies</td>
</tr>
</tbody>
</table>

2. How Will Learning be Assessed?

*SLO 1 and 2.*

- These will be assessed by analysis of student performances in Biology 204L. This course marks the conclusion of the Biology Core, which all of our majors and minors have to take. The laboratory portion of this course comprises in-depth mini-projects that the students work on during the semester. These projects require the students to design experiments, carry out those experiments, collect the data, interpret the data, and finally to write-up and present the data for evaluation. Grading rubrics exist for this class already, and we shall extract the data from the existing rubric for analysis (see attached extract).

  The completed grading rubric for each student will be copied prior to returning to the student. The copies will be analyzed for assessment purposes. For each item on the grading rubric, a bar chart will be created summarizing the performances of all students for each rubric item. Also, the average score for each rubric will be calculated.

- These measures are direct.
- Criteria for success are that we reach our performance target. Our performance target is that the average score for each criterion should be at least 70% of the
total points for that item. Further, we expect that 15% of responses for each rubric item score 80% or better.

- The samples will be assessed at the end of our Biology majors core course, Biol 204 (Plant & Animal Form and Function). All Biology majors must take this course, and we shall analyze all students taking the class during the Fall semester (approximately 160 students). We do not anticipate any semester-to-semester differences in student performance, thus our evaluation will be once per year. We believe that analysis of 160 students will obviate any problems associated with small sample sizes.

Actual assessment activities – see attached report

1. Grading rubrics were used for Biol 204L papers on plants and animals each semester. Thus, we analyzed data from 4 papers, not one.
2. The items that pertain to the learning goals had scores about 80% in the final paper of the year – so we met our goal. However, interpreting the data and presenting clear tables and figures were two of the lower scoring items. Scores are generally rather high because these are group papers, not individual papers. Our goals should probably be set higher.
3. Consistently, items related to statistics scored very low. We need to address this as a department.
4. Results were presented to the teaching assistants and lab coordinator during the semester. The lab coordinator has made some changes in the lab materials and directions for TA’s as a result.

SLO 3.

- This will be assessed by analysis of student performances in Biology 202L, in a module termed the Annotated Bibliography. This course marks the half-way point of the Biology Core, which all of our majors and minors have to take. Students planning on enrolling in many other programs (such as Pharmacy) take this course, and this might be the last Biology course that they take. At this point in their training, students will have developed a knowledge base in Cell Biology and Genetics, and they will be beginning to have an appreciation of how scientific data is generated. The Annotated Bibliography builds on that basis, and requires the students to research and write a summary of a research topic that they have chosen. This involves in-depth reading of primary research papers, and writing a short abstract for each. A grading rubric exists for this assignment, and we shall extract the data from the existing rubric for analysis (see attached). For each item on the grading rubric, the student’s response will be marked Unsatisfactory, Satisfactory, or Outstanding as a measure of attainment. For each rubric item, we shall total the numbers in each attainment category.
- These measures are direct.
- Criteria for success are that we reach our performance target. Our performance target is that 80% of the students perform at the Satisfactory level or better on each rubric item, and that 20% of our students perform at the Outstanding level on each rubric item.
• The samples will be assessed at the end of Biology Biol 202 (Genetics). All Biology majors must take this course, and we shall analyze all students taking the class during the Spring semester (approximately 250 students). We do not anticipate any semester-to-semester differences in student performance, thus our evaluation will be once per year. We believe that analysis of 250 students will obviate any problems associated with small sample sizes.

Actual assessment activities

Because we worked hard on doing a thorough job with Biol 204L, there was no time to obtain the materials to assess Biol 202L. That is, grading rubrics were not copied and data were not entered. The number of lab sections and courses supervised by the lab coordinator were an impediment to progress. We intend to add this analysis in Fall 2009.

SLO 4.

• These will be assessed by analysis of our Biology majors via the Annual Faculty Data Reports. The Faculty Data Reports will be modified to require the following information: number of undergraduates who performed research under your supervision in the last year; number of undergraduates who attended local or national scientific conferences in the last year; number of undergraduates who received local or national awards (travel awards, scholarships, presentation awards); number of undergraduates graduating with Biology Honours based upon a project under your supervision; number of undergraduates who published peer-reviewed papers in the last year. These numbers will be totaled and will be presented as a single number for each criterion.

• These measures are indirect.

• Criteria for success are that we observe a yearly increase in each of the values that we measure. Our performance target is that each of the values we measure increase by a value of one each year (this is so retarded).

• The samples will be assessed in the Spring by a staff member once all of the Faculty Data Reports have been submitted. It is not practical to evaluate this information more than once a year, and given the amount of time involved in the effective development of a scientific idea from concept to publication, it would not be worth doing this more than once a year. To obviate this complication (time of development of a research study), we shall collect data from all of the faculty in our Department each year.

Actual assessment activities

1. Appropriate questions were added to the annual faculty data reports and the data were collated by Anne Rice.

2. Results

   1. Number of undergraduates who performed research under your supervision in the last year.

   181
2. Number of undergraduates who attended local or national scientific conferences in the last year.
   56

4. Number of undergraduates who received local or national awards (travel awards, scholarships, presentation awards).
   21

5. Number of undergraduates graduating with Biology Honors based upon a project under your supervision.
   8

6. Number of undergraduates in your program who were co-authors on peer-reviewed papers in the last year.
   8

These represent baseline numbers that we will use for comparison in the next few years.

3. When Will Learning be Assessed? When and in What Forum with the Results of the Assessment be Discussed?
4. What is the Unit’s Process to Analyze/Interpret Assessment Data and Use Results to Improve Student Learning?

Data from Biol 204L have already been presented to the TA’s and lab coordinator, all data will be presented to the faculty in Fall 2009.
1. Goal- perform item analyses of the grading rubric used in this course to detect patterns in student ability to write scientific papers. Students, in groups write two papers each semester. Assessment was performed on each paper.

2. Nature of assignment – The projects are partially student designed. The plant paper is constrained to a consideration of environmental effects on C3 and C4 photosynthesis and possible treatments are constrained by greenhouse space. The projects for the animal paper are more varied. Students spend about 3 wks, designing the experiment, taking data, writing the paper and giving an oral presentation.

3. Methodology
   a. Teaching assistants copied the grading rubrics for all papers completed. The sample size was 45-58 papers. Students perform the study and write the paper in groups of 3-4.
   b. In the spring semester, data were entered by the TA’s for individual scores on major categories and the first level of subcategories (see attached grading rubric).
   c. Analysis
      i. Means for all variables were calculated, percent of the possible score for each variable was also calculated.
      ii. ANOVA was used to compare means among Teaching Assistants and, in some cases sections within Teaching Assistants.
   d. TA’s are the same for first and second papers within a semester, and some of the TA’s were the same between semesters.

4. Results

Table 1. Means for percent of possible score for each category and subcategory on the Biology 204 paper grading rubric.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>Format</td>
<td>92</td>
<td>92</td>
<td>93</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>Followed general requirements</td>
<td>90</td>
<td>88</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Followed format</td>
<td>97</td>
<td>99</td>
<td>1.0</td>
<td></td>
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<tr>
<td></td>
<td>Introduction</td>
<td>94</td>
<td>91</td>
<td>88</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Logical flow from general observations or concepts to</td>
<td>94</td>
<td>85</td>
<td>91</td>
<td></td>
</tr>
<tr>
<td>specifics</td>
<td>Developing ideas in depth</td>
<td>91</td>
<td>90</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------</td>
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<td>----</td>
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</tr>
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<td></td>
<td>Hypothesis</td>
<td>93</td>
<td>96</td>
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<td>Predictions defined</td>
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<td>Conclusion of introduction</td>
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<td>Methodology described</td>
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</tr>
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<td>sufficiently to be duplicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clear distinction between measurements and calculations</td>
<td></td>
<td>84</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Explanation of analysis to be done</td>
<td></td>
<td>48</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>Results</td>
<td></td>
<td>82</td>
<td>89</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prose and description of results adequate and interesting</td>
<td></td>
<td>94</td>
<td>91</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statistical analysis</td>
<td>49</td>
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<td>74</td>
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<td>Discussion</td>
<td></td>
<td>85</td>
<td>84</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Integration with questions or observations set out in introduction</td>
<td></td>
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<td>95</td>
<td></td>
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<tr>
<td></td>
<td>Hypotheses/speculation as to meaning of results</td>
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<td>82</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>Literature cited</td>
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<td>92</td>
<td>90</td>
<td>87</td>
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<tr>
<td>Tables and figs</td>
<td></td>
<td>80</td>
<td>91</td>
<td>83</td>
<td></td>
</tr>
<tr>
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<td>Do the tables and figures stand alone with clear and concise captions</td>
<td></td>
<td>82</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Are units and legends clearly marked</td>
<td></td>
<td>97</td>
<td>93</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Does each table and figure add to the understanding of the overall project</td>
<td></td>
<td>96</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>Total score</td>
<td></td>
<td>86</td>
<td>88</td>
<td>85</td>
<td></td>
</tr>
</tbody>
</table>

5. Presentation of results to the appropriate audience

a. Each semester, within a few weeks of receiving the data, an analysis was performed, a summary was written and a meeting was held with the Bio 204 TA's and Cara Lea Council-Garcia. We discussed the results and talked about strategies to improve teaching. We talked particularly about
the problems in describing statistics, about differences among TA's in scoring, and about using the writing manual that comes bundled with the textbook.

6. Interpretation

a. Overall mean scores are high form 85-88. This may occur because the papers are written in groups. Scores improve from the first to the second paper in each semester, regardless of the order in which the plant and animal papers are written. My experience with students in Botany suggests that these scores are fairly generous.

b. The most substantial and consistent area of weakness is the students ability to describe and interpret the statistical procedures that they use. However, there is substantial improvement both within and across semesters. Within semesters would represent improvement in students and teaching. Across semesters I think this is a result of talking with the TA's about this issue and their subsequent actions to improve teaching.

c. As might be expected in students at this level, interpreting the meaning of the results was a challenge. In the spring there was a bit of improvement in this area from the first to the second area this spring.

d. Two of the department's learning goals were to be assessed in this analysis

<table>
<thead>
<tr>
<th>University of New Mexico Student Learning Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program SLOs</strong></td>
</tr>
<tr>
<td>1. Be able to summarize data and arrange it into an appropriate visual form</td>
</tr>
<tr>
<td>2. Be able to interpret new data</td>
</tr>
</tbody>
</table>
papers. This is also a subscore that correlates strongly with the total score. Stronger students do better in this area.

7. Other issues

a. There were typically significant differences among TA's in several of the subscores and the total scores. There are not, however, differences in scores of the sections each TA taught. This suggest this is a difference in TA scoring, not student performance. We talked with the TA's about this and I think that discussing expectations before the papers are graded would help.

8. Recommendations

a. The department needs to address when and how undergraduates can gain the necessary expertise in statistics.

b. There should be an emphasis on using the writing manual available to the students in Bio 201-204 and Cara Lea is already implementing this.
ATTACHMENTS.

SLO 1&2: 204 Rubric

RESULTS (3pt.):
Prose and description of results adequate and interesting (2.5)

a. Are all the results presented and in a logical order? (.25)

b. Does the narrative stand alone without need for tables and figures? (.75)

c. Are all tables and figures cited? (.25)

d. Do the tables and figures help in the understanding of the data? (.2)

e. Is the narrative limited to just results? (.1)

f. Do all reported data have metric units? (.2)

g. Is narrative interesting w/o lists and repetitive words & phrases? (.75)

h. Statistical analysis reasonable (.5)

i. Are statistical results explained clearly? (.25)

j. Any claim to significance explained clearly? (.25)

SLO 3: Biol 202 rubric.
For each of the three papers in the Annotated Bibliography, provide an aggregate evaluation (Unsatisfactory, Satisfactory, Outstanding) for the following criteria:

1. A clear statement of the puzzle to be solved.
2. Adequate background to understand the significance of the study.
3. Summary of main methods and results.
4. Summary of the main conclusions of the paper, including solution to the 'puzzle' stated at the beginning.
A. College, Department and Date
1. Arts & Sciences
2. Biology
3. 7/06/2009

B. Academic Program of Study
MS Biology

C. Contact Person

D. Broad Program Goals & Measurable Student Learning Outcomes

1. Develop cutting-edge research skills in chosen field
   - carry out controlled experiments to address identified gaps in biological knowledge
   - interpret data and generate follow-up experiments and data
   - organize data for oral and written presentation
   - organize data and generate peer-reviewed publications based upon the data
   - experience peer-review process (submission, review, modification, rejection, etc)
   - attend and present data at scientific conferences

2. Acquire a significant and deep-rooted knowledge of their chosen discipline
   - take appropriate coursework
   - know everything in the scientific literature about the topic
   - identify significant gaps in our knowledge of the area
   - design and carry out experiments to address these gaps

3. Develop a general appreciation of the breadth of biology research
   - attend departmental seminars
   - meet with visiting scientists
   - invite and host departmental seminar speakers

4. Identify and address additional skills to help support degree or future career
   - develop a training plan involving supportive skills to be acquired
   - take and pass classes in supportive courses/techniques
   - develop professional skills and people skills while working as part of a team

5. Be prepared to enter the next career stage for which a Biology MS will prepare you
   - understand the opportunities presented when receiving a biology degree, and how to achieve those opportunities
   - self-identify additional training that might be required for future careers
   - take initiative to contact future employers and arrange visits or interviews

E. Assessment of Student Learning Three-Year Plan

1. Student Learning Outcomes
University of New Mexico Student Learning Goals

<table>
<thead>
<tr>
<th>Program SLOs</th>
<th>Knowledge</th>
<th>Skills</th>
<th>Responsibility</th>
<th>Program SLO is different from goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Organize data and generate peer-reviewed publications based upon the data</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Take and pass appropriate coursework</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Take initiative to contact future employers and arrange visits or interviews</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. How Will Learning be Assessed?

Our SLOs will be determined using three main sources of information: student records, to assess progress in coursework; annual faculty data reports, which we shall modify from the usual format, to permit ready access to information we need; and an exit questionnaire, which the student will be required to fill out before their final paperwork is taken to OGS.

**SLO 1.**
- This will be assessed by analysis of faculty data reports. We are required to generate these long reports which form part of the annual departmental report and also form one of the criteria for merit raises, if we are ever allotted enough money. Nobody ever really looks at them outside the department, so this plan might actually make them mildly worthwhile. We shall modify the reports to include the following two queries:
  - For each of your graduate students (current and past), indicate the number of primary and the total number of middle author papers published in the last year. We define primary as either first-author or senior author.

These data will be collected by the assessment coordinator and assembled into a summary for the entire Department.
- These measures are direct.
- Criteria for success are that we reach our performance target. Our performance target is 2 primary author papers per year, and 4 middle author papers per year.
- The data will be collected during Spring Break, by which time most of our faculty will have submitted their annual reports.

Actual assessment activities

1. Appropriate questions were added to the annual faculty data report and the results were collated by Anne Rice
2. Results

For each of your M.S. students (current and past), indicate the number of primary and the total number of middle-author papers based on work done in our graduate program that were published in the last year. We define "primary" as either first-author or senior author.

This number exceeds our goal of 6 total papers per year. However, the question was not worded clearly enough to get separate numbers for primary and secondary authors. So, next year, we will divide this into two questions.

- This will be assessed by analysis of student records at the end of the Spring semester. The graduate program coordinator in collaboration with the assessment coordinator will determine the class grades for all first-year PhD students achieved in formal lecture or laboratory courses. We shall focus upon these ~15 students per year since (1) this is a suitable sample size and the total graduate student population of ~100 is too large to sample in this way; (2) most of the coursework is taken by graduate students in their first year or so; and (3) it allows us to assess the first-year progress of our incoming pool of students. The overall GPA for all of our graduate student pool will be calculated.
  - These measures are direct.
  - Criteria for success are that we reach our performance target. Our performance target is that the GPA is 3.50.
  - The samples will be assessed at the end of the Spring semester.

Actual assessment activity

None. This was meant to be done in the summer by someone paid by the College of Arts and Sciences. No one was paid to do this.

- This will be assessed based upon the information from our student exit survey. A draft form of this survey is attached, and we hope in the future to fully develop this and to make it web-accessible. We shall require this questionnaire to be filled out as a condition of graduation. For the SLO listed, we shall survey all of the responses to the final highlighted question (see attached questionnaire).
  - These measures are indirect, I think, because they are a bit wooly.
  - Criteria for success are that we observe a yearly increase in the number of students that graduate the program directly into jobs that are commensurate with their education and level of degree.
  - The samples will be assessed once a year at the end of the Fall semester by the assessment coordinator.

Actual assessment activity
1. The graduation survey was administered first as a paper copy, but was not given as an absolute requirement.
2. The survey has now been put into electronic format which will make future use and modification easier.
3. Results - Only one MS student completed the survey. He did not know what his next career step would be.

3. When Will Learning be Assessed? When and in What Forum with the Results of the Assessment be Discussed?

Data will be discussed with the faculty in Fall, 2009

ATTACHMENTS.

DRAFT Graduate exit questionnaire

SURVEY FOR BIOLOGY GRADUATE STUDENTS UPON COMPLETION OF THEIR DEGREE PROGRAMS

PLEASE CIRCLE THE CHOICE THAT MOST ACCURATELY APPLIES TO YOU WITH RESPECT TO YOUR EXPERIENCE IN OUR GRADUATE PROGRAM. THE RESULTS ARE FOR THE INTERNAL USE OF THE BIOLOGY DEPARTMENT ONLY.

Gender

a. female
b. male

Age

a. 20-24
b. 25-28
c. 29-32
d. 33-36
e. >37

Degree completed

a. Masters Plan I
b. Masters Plan II
c. PhD
How many years did you take to complete your degree?

   a. 1-2
   b. 3-4
   c. 5-6
   d. 7-8
   e. 9-10
   f. >10

Subject Area

   a. cell/molecular
   b. genetics
   c. genomics
   d. immunology
   e. phylogenetics
   f. ecology
   g. evolution
   h. other (specify) ____________________

Which of the following best describes the research project you did?

   a. primarily lab
   b. primarily field
   c. mixture of both

Which of the following best describes the nature of the salary support you received during your degree program?

   a. no support provided
   b. departmental TA support
   c. RA support from grant by advisor
   d. RA support from your own grant
   e. RA support from government agency
   f. Combination of TA and RA

Which of the following best describes the extent of your summer salary support?

   a. there was none
   b. there was sometimes summer salary support, either as TA or RA
   c. there was always summer salary support, either as TA or RA

Which of the following most accurately describes your overall comfort level with respect to meeting your living expenses?

   a. never enough money based on what I earned
b. enough to live modestly based on what I earned
c. no problems based on what I earned

Which of the following best describes your experience with formal classroom teaching that you did?

a. Did none
b. Did some and it was a valuable experience
c. Did some but it was not helpful to my development
d. Did way too much but it was helpful to my development
e. Did way too much and it was not helpful to my development

Which of the following best describes your attitude about the amount of formal classroom course requirements for your degree?

a. not enough course work
b. just about the right amount
c. way too much course work

Which of the following best describes your attitude about the nature of the formal classroom course requirements for your degree?

a. Too little specialized content for my program
b. Too much specialized content for my program
c. Just about right

Which of the following best describes your attitude about the nature of the formal classroom course requirements for your degree?

a. Not enough hands-on practical courses
b. Too many hands-on practical courses
c. Just about right

Which of the following best describes your circumstances with respect to materials and supplies needed for your research?

a. never enough, major limiting factor
b. some difficulties, but generally not a big problem or a limiting factor
c. no difficulties, not a major problem

Which of the following best describes your circumstances with respect to access to needed expensive equipment or facilities?

a. never enough, major limiting factor
b. some difficulties, but generally not a big problem or a limiting factor
c. no difficulties, not a major problem
Which of the following best describes your access to travel for professional reasons?

a. never enough, major limiting factor
b. some difficulties, but generally not a big problem or a limiting factor
c. no difficulties, not a major problem

Which of the following best describes your attendance at departmental research seminars?

a. regularly attended all
b. regularly attended only those in my field
c. rarely attended
d. never attended

Did you host any visitors/speakers from outside UNM?

a. yes, frequently
b. yes, rarely
c. no

Did you interact professionally with other UNM scholars not in the Biology Department?

a. yes, frequently
b. yes, rarely
c. no

Which of the following best describes your grant writing?

a. did not write any proposals
b. wrote proposals for sources from within UNM
c. wrote proposals for sources external to UNM

How many papers in peer-reviewed journals did you publish (or are in press)?

a. 0
b. 1
c. 2
d. 3
e. >3
At how many national or international professional society meetings (not local meetings) did you present talks or posters?

f. 0  
g. 1  
h. 2  
i. 3  
j. >3

Which of the following best defines your long-term career aspirations?

a. Soft money grant-funded research position  
b. tenure track college/university position at mostly teaching institution  
c. tenure track college/university position at mostly research institution  
d. medical profession  
e. law profession  
f. government research job  
g. government administrative job  
h. other (specify) _____________________________

Please describe what you liked the most about your graduate experience?

Please describe what you liked the least?

Please provide us your recommendations for how to improve our program.

Please provide your forwarding address so we can keep in touch with you.

Which of the following best describes your next career step?

a. uncertain  
b. postdoctoral research position  
c. temporary college/university position  
d. tenure track college/university position at mostly teaching institution  
e. tenure track college/university position at mostly research institution  
f. additional professional school training  
g. government research job  
h. government administrative job  
i. other (specify) _____________________________
A. College, Department and Date
1. Arts & Sciences
2. Biology
3. 7/6/2009

B. Academic Program of Study
PhD Biology

C. Contact Person

D. Broad Program Goals & Measurable Student Learning Outcomes

1. Develop cutting-edge research skills in chosen field
   - carry out controlled experiments to address identified gaps in biological knowledge
   - interpret data and generate follow-up experiments and data
   - organize data for oral and written presentation
   - organize data and generate peer-reviewed publications based upon the data
   - experience peer-review process (submission, review, modification, rejection, etc)
   - attend and present data at scientific conferences

2. Acquire a significant and deep-rooted knowledge of their chosen discipline
   - know everything in the scientific literature about the topic
   - identify significant gaps in our knowledge of the area
   - design and carry out experiments to address these gaps

3. Develop a general appreciation of the breadth of biology research
   - attend departmental seminars
   - meet with visiting scientists
   - invite and host departmental seminar speakers

4. Identify and address additional skills to help support degree or future career
   - develop a training plan involving supportive skills to be acquired
   - take and pass classes in supportive courses/techniques
   - develop professional skills and people skills while working as part of a team

5. Participate in student training and/or education
   - act as a Teaching Assistant for undergraduate classes
   - assist in the training and development of junior laboratory personnel
   - participate in undergraduate instruction

6. Be prepared to enter the next career stage for which a Biology PhD will prepare you
   - understand the opportunities presented when receiving a biology degree, and how to achieve those opportunities
   - self-identify additional training that might be required for future careers
   - take initiative to contact future employers and arrange visits or interviews
7. Have exposure to grant skills
   - have prepared a research proposal in the format of a grant application
   - have submitted an application to a funding source
   - have received and carried out grant-funded research
   - have reported on the research (progress or final reports)

E. Assessment of Student Learning Three-Year Plan

1. Student Learning Outcomes

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<th>University of New Mexico Student Learning Goals</th>
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<td>Program SLOs</td>
</tr>
<tr>
<td>Knowledge</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>1. Organize data and generate peer-reviewed publications based upon the data</td>
</tr>
<tr>
<td>2. Have submitted an application to a funding source</td>
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<tr>
<td>3. Take and pass appropriate coursework</td>
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<td>4. Take initiative to contact future employers and arrange visits or interviews</td>
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2. How Will Learning be Assessed?
Our SLOs will be determined using three main sources of information: student records, to assess progress in coursework; annual faculty data reports, which we shall modify from the usual format, to permit ready access to information we need; and an exit questionnaire, which the student will be required to fill out before their final paperwork is taken to OGS.

SLO 1 and 2.
- These will be assessed by analysis of faculty data reports. We are required to generate these long reports which form part of the annual departmental report and also form one of the criteria for merit raises, if we are ever allotted enough money. We shall modify the reports to include the following two queries:
  - For each of your graduate students (current and past), indicate the number of primary and the total number of middle author papers published in the last year. We define primary as either first-author or senior author.
For each of your graduate students, indicate the number of grants for which they applied, and list the number of grants awarded. Please limit your responses in this category to granting agencies outside of UNM.

These data will be collected by the assessment coordinator and assembled into a summary for the entire Department.

- These measures are direct.
- Criteria for success are that we reach our performance target. Our performance target is 25 primary author papers per year, and 40 middle author papers per year. Further, we aim for 40 grant applications submitted per year, and ten grants awarded.
- The data will be collected during Spring Break, by which time most of our faculty will have submitted their annual reports.

Actual assessment activity

1. The annual faculty data report was modified to include appropriate questions. The results were collated by Anne Rice.
2. Results:

For any of your Ph.D. students (current and past), indicate the number of primary and the total number of middle-author papers based on work done in our graduate program that were published in the last year. We define “primary” as either first-author or senior author.

55

The question was not worded clearly enough to separate primary and middle author papers and will be revised for next year. Nonetheless, this does not meet our goal of 65 papers from graduate students each year.

For each of your current Ph.D. students, indicate the number of grants for which they applied, and list the number of grants awarded. Please limit your responses in this category to granting agencies outside of UNM.

21

Once again, the question needs to be broken down into categories. This number represents the number of grants awarded, which exceeds our target, but does not represent the number of grants submitted.

This will be assessed by analysis of student records at the end of the Spring semester. The graduate program coordinator in collaboration with the assessment coordinator will determine the class grades for all first-year PhD students achieved in formal lecture or laboratory courses. We shall focus upon these ~15 students per year since (1) this is a suitable sample size and the total graduate student population of ~100 is too large to sample in this way; (2) most of the coursework is taken by graduate students in their first
year or so; and (3) it allows us to assess the first-year progress of our incoming pool of students. The overall GPA for all of our graduate student pool will be calculated.

- These measures are direct.
- Criteria for success are that we reach our performance target. Our performance target is that the GPA is 3.50.
- The samples will be assessed at the end of the Spring semester.

Actual assessment activity

None. We cannot do this until someone is paid by the college to work on these data in the summer.

**SLO**

- This will be assessed based upon the information from our student exit survey. A draft form of this survey is attached, and we hope in the future to fully develop this and to make it web-accessible. We shall require this questionnaire to be filled out as a condition of graduation. For the SLO listed, we shall survey all of the responses to the final highlighted question (see attached questionnaire).
- These measures are indirect, I think, because they are a bit wooly.
- Criteria for success are that we observe a yearly increase in the number of students that graduate the program directly into jobs that are commensurate with their education and level of degree.
- The samples will be assessed once a year at the end of the Fall semester by the assessment coordinator.

Actual assessment activity

1. Paper surveys were given to graduating students. About ½ completed the survey.
2. The survey has now been developed as an Opinio survey so that future graduates can fill out the survey electronically.
3. Of the 4 students who filled out the survey, 3 will be going directly into postdoctoral positions and all of these want to eventually obtain positions at research universities. The 4th is accepting a position at a mostly teaching institution.

4. When Will Learning be Assessed? When and in What Forum with the Results of the Assessment be Discussed?

_data will be discussed at a faculty meeting in Fall, 2009_

**ATTACHMENTS.**

**DRAFT Graduate exit questionnaire**

**SURVEY FOR BIOLOGY GRADUATE STUDENTS UPON COMPLETION OF THEIR DEGREE PROGRAMS**
PLEASE CIRCLE THE CHOICE THAT MOST ACCURATELY APPLIES TO YOU WITH RESPECT TO YOUR EXPERIENCE IN OUR GRADUATE PROGRAM. THE RESULTS ARE FOR THE INTERNAL USE OF THE BIOLOGY DEPARTMENT ONLY.

Gender

a. female
b. male

Age

a. 20-24
b. 25-28
c. 29-32
d. 33-36
e. >37

Degree completed

a. Masters Plan I
b. Masters Plan II
c. PhD

How many years did you take to complete your degree?

a. 1-2
b. 3-4
c. 5-6
d. 7-8
e. 9-10
f. >10

Subject Area

a. cell/molecular
b. genetics
c. genomics
d. immunology
e. phylogenetics
f. ecology
g. evolution
h. other (specify) ___________________
Which of the following best describes the research project you did?

a. primarily lab  
b. primarily field  
c. mixture of both

Which of the following best describes the nature of the salary support you received during your degree program?

a. no support provided  
b. departmental TA support  
c. RA support from grant by advisor  
d. RA support from your own grant  
e. RA support from government agency  
f. Combination of TA and RA

Which of the following best describes the extent of your summer salary support?

a. there was none  
b. there was sometimes summer salary support, either as TA or RA  
c. there was always summer salary support, either as TA or RA

Which of the following most accurately describes your overall comfort level with respect to meeting your living expenses?

a. never enough money based on what I earned  
b. enough to live modestly based on what I earned  
c. no problems based on what I earned

Which of the following best describes your experience with formal classroom teaching that you did?

a. Did none  
b. Did some and it was a valuable experience  
c. Did some but it was not helpful to my development  
d. Did way too much but it was helpful to my development  
e. Did way too much and it was not helpful to my development

Which of the following best describes your attitude about the amount of formal classroom course requirements for your degree?

a. not enough course work  
b. just about the right amount  
c. way too much course work
Which of the following best describes your attitude about the nature of the formal classroom course requirements for your degree?

a. Too little specialized content for my program
b. Too much specialized content for my program
c. Just about right

Which of the following best describes your attitude about the nature of the formal classroom course requirements for your degree?

a. Not enough hands-on practical courses
b. Too many hands-on practical courses
c. Just about right

Which of the following best describes your circumstances with respect to materials and supplies needed for your research?

a. never enough, major limiting factor
b. some difficulties, but generally not a big problem or a limiting factor
c. no difficulties, not a major problem

Which of the following best describes your circumstances with respect to access to needed expensive equipment or facilities?

a. never enough, major limiting factor
b. some difficulties, but generally not a big problem or a limiting factor
c. no difficulties, not a major problem

Which of the following best describes your access to travel for professional reasons?

a. never enough, major limiting factor
b. some difficulties, but generally not a big problem or a limiting factor
c. no difficulties, not a major problem

do not add any new lines

Which of the following best describes your attendance at departmental research seminars?

a. regularly attended all
b. regularly attended only those in my field
c. rarely attended
d. never attended

Did you host any visitors/speakers from outside UNM?

a. yes, frequently
b. yes, rarely
c. no

Did you interact professionally with other UNM scholars not in the Biology Department?

a. yes, frequently
b. yes, rarely
c. no

Which of the following best describes your grant writing?

a. did not write any proposals
b. wrote proposals for sources from within UNM
c. wrote proposals for sources external to UNM

How many papers in peer-reviewed journals did you publish (or are in press)?

a. 0
b. 1
c. 2
d. 3
e. >3

At how many national or international professional society meetings (not local meetings) did you present talks or posters?

f. 0
g. 1
h. 2
i. 3
j. >3

Which of the following best defines your long-term career aspirations?

a. Soft money grant-funded research position
b. tenure track college/university position at mostly teaching institution
c. tenure track college/university position at mostly research institution
d. medical profession
e. law profession
f. government research job
g. government administrative job
h. other (specify) _____________________
Please describe what you liked the most about your graduate experience?

Please describe what you liked the least?

Please provide us your recommendations for how to improve our program.

Please provide your forwarding address so we can keep in touch with you.

Which of the following best describes your next career step?

a. uncertain
b. postdoctoral research position
c. temporary college/university position
d. tenure-track college/university position at mostly teaching institution
e. tenure-track college/university position at mostly research institution
f. additional professional school training
g. government research job
h. government administrative job
i. other (Specify)
ANNUAL REPORT

DEPARTMENT OF CHEMISTRY AND
CHEMICAL BIOLOGY
July 1, 2008 - June 30, 2009

David G. Bear, PhD
Professor and Interim Chair
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</table>
Summary

The Department of Chemistry and Chemical Biology faced significant challenges during the 2008-2009 academic year, including a failed Chair search, loss of faculty through attrition and administrative reassignment, and the continued deterioration of the research and teaching facilities. The number of active tenured and tenure-track faculty numbers dropped to the lowest level since the early 1960s. Due to faculty losses, several upper-division courses could not be offered and some lower-division courses were taught by marginally qualified part-time instructors. Departmental instructional and research facilities, which were declared unsafe in 1988 by an external review committee, continued to deteriorate to the point where parts of the chemistry building are presently non-functional and uninhabitable. Abandoned research laboratories were turned into makeshift classrooms to accommodate increasing enrollments until the remodeling of Mitchell Hall is completed in 2010 and the first phase of the Science and Math Learning Center is completed in 2011. The organic chemistry instructional laboratory, which could not be accommodated in the first phase of the SMLC, suffered from degraded plumbing and ventilation capabilities and lack of appropriate laboratory equipment, making the facility educationally ineffective and unsafe. Despite these challenges, all research-active tenured and tenure-track faculty (9.5 FTEs) received external research grant support, and several of the faculty members received significant external recognition for their research accomplishments. The department served over 6,000 undergraduate and graduate students, and generated over 16,000 student credit hours. Presently, faculty morale is quite low with several productive members actively searching for positions at other institutions. If the needs of the Department of Chemistry and Chemical Biology are not addressed in the near future, it is quite likely that the Department will lose its capacity to function as an academic unit.
I. Significant Developments in 2008-2009

Department Chair Search
After the retirement Department Chair Cary J. Morrow, on June 30, 2008, Professor Martin Kirk was selected as Interim Chair effective August 1, 2008. During the ensuing academic year, the search for a permanent Chair, which had been initiated in 2007 under the direction of Dr. John Geissman, Professor and Chair of Earth and Planetary Sciences, formally continued, although no candidates were interviewed. In Spring 2008 the decision was made to select an Interim Chair from inside UNM to lead the department for the next two years with the goal of stabilizing the department faculty numbers and infrastructure. Dr. David Bear, Professor of Cell Biology and Physiology, who is also the Assistant Dean for Admissions in the School of Medicine, was selected. Dr. Bear had previously served as Director of Graduate Studies for the School of Medicine (1989-1994) and Chair of the Department of Cell Biology and Physiology (1997-2004). Dr. Bear was to assume the duties as Interim Chair as a 50% FTE in the Department on August 1, 2009. Professor Kirk will serves as Associate Chair during this period.

New Faculty
No new faculty searches were initiated during 2008-2009.

Loss of Faculty
One faculty member resigned, and three others were reassigned to administrative positions outside the department, bringing the total of tenured chemistry faculty lost to the central administration to four; one of these professors has no further teaching responsibilities within the department, and the other three have minimal teaching loads. Professor Mark Ondrias was permanently assigned to the College of Arts and Sciences as Assistant Dean. Professor Stephen Cabiness was permanently assigned to University College Program in Water Resources. Associate Professor Deborah Evans was permanently assigned to the College of Engineering to become a co-director of educational efforts in the Program in Nanoscience and Microsystems (NSMS). Professor Richard Holder continued to serve as the Deputy Provost.
Undergraduate Program

Efforts continued on the restructuring of the undergraduate program that had been initiated during the 2007-2008 academic year. It became apparent that the original plan will not work with the diminished faculty numbers. The number of students enrolled as chemistry majors rose significantly by more than 5% in 2008-2009. The number of students enrolled in a Chemistry major or minor in each semester of the 2007-2008 academic year is summarized in the following table:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Major 07-08</th>
<th>Minor 07-08</th>
<th>Major 08-09</th>
<th>Minor 08-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer 2007</td>
<td>213</td>
<td>229</td>
<td>311</td>
<td>389</td>
</tr>
<tr>
<td>Fall 2007</td>
<td>219</td>
<td>593</td>
<td>326</td>
<td>367</td>
</tr>
<tr>
<td>Spring 2008</td>
<td>229</td>
<td>661</td>
<td>332</td>
<td>394</td>
</tr>
</tbody>
</table>

More importantly, the Department continued to serve a vast population of undergraduate students from outside the department. The number of non-chemistry students that completed service courses in the Department of Chemistry and Chemical Biology was estimated to be more than 6,000 students.

<table>
<thead>
<tr>
<th>Course</th>
<th># of Students who Completed Course for Summer 2008, Fall 2008, Spring 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chem 111 Intro Chem for Health Sciences</td>
<td>441</td>
</tr>
<tr>
<td>Chem 212 Organic &amp; Biochem for Health Sciences</td>
<td>105</td>
</tr>
<tr>
<td>Chem 121/122 Freshman Chem</td>
<td>1748</td>
</tr>
<tr>
<td>Chem 123/124 Freshman Chem Lab</td>
<td>1748</td>
</tr>
<tr>
<td>Chem 301/302 Organic Chem</td>
<td>1269</td>
</tr>
<tr>
<td>Chem 303/304 Organic Chem Lab</td>
<td>802</td>
</tr>
<tr>
<td>Chem 253 Quantitative Analysis</td>
<td>151</td>
</tr>
<tr>
<td>Chem 315</td>
<td>144</td>
</tr>
<tr>
<td>Physical Chem</td>
<td></td>
</tr>
<tr>
<td>Total Number of Students Completing Courses</td>
<td>6,408</td>
</tr>
</tbody>
</table>

Graduate Program

The number of students enrolled in the MS and Ph.D. programs in each semester of the 2008-2009 academic year is summarized in the following table:
Recruiting of high quality graduate students remains a considerable challenge for the Department of Chemistry and Chemical Biology with some significant obstacles to overcome. With the faculty number below critical mass, the number of graduate courses that can be successfully mounted is small. In addition, the graduate student stipend levels are well below the national average for Tier 2 institutions (approximately $2,000 to $4,000 per year lower). In the last two decades many graduate programs in the US have fiercely recruited domestic students and now rely heavily on foreign students to make up first-year graduate classes in chemistry. Due to competition for the high quality domestic graduate program applicants, UNM has had to accept an ever-increasing number of foreign applicants in order to keep the level of graduate students in the department at critical mass. The entering graduate student classes in The Department of Chemistry and Chemical Biology at UNM have been comprised of more than 50% students from China for more than a decade. This presents an especially important challenge because first-year graduate students are expected to function as teaching assistants in freshman and organic chemistry laboratory courses. The head instructors have had to take significant measures to ensure the safety and educational quality of the undergraduate laboratory student population by recording laboratory demonstrations and lectures using native speakers.

The Department has continued to put a significant effort into graduate recruitment under the leadership of Graduate Recruitment Committee Chair, Professors Hua Guo, and Wei Wang. A number of other faculty members have worked hard on this effort. Of particular note, the committee put more effort into recruiting international students from countries other than China. This effort has resulted in a broader representation of home countries for our foreign students in recent classes. Countries in Africa, especially Tanzania, have been especially well represented. It is hoped that the planned increases in faculty
numbers and increasing external grant support over the next few years will provide a greater attraction for high-quality domestic and foreign students.

Student Awards and Recognition
Nearly $27,000 in awards was made to undergraduate and graduate students in Chemistry at the spring 2009 departmental graduation and awards ceremony. The funds for these awards are taken from the interest on endowments made to the Department. A table of those receiving awards follows appears in the APPENDIX.

Faculty Awards and Recognition
Dr. Hua Guo received a New Direction Award from the American Chemical Society/Petroleum Research Fund and also served as member of the National Science Foundation Panel on Theoretical and Computational Chemistry. He was also an invited speaker at several universities, the National Science Foundation Workshop on Chemical Dynamics: Challenges and Approaches, the University of Texas at Austin Conference at on Computational Molecular Structure and Dynamics, and the 10th Workshop on Quantum Reactive Scattering in China. Dr. Guo was also selected as the Vice-Chair of the Dynamics of Molecular Collisions conference for 2011. Dr. Debra Dunaway Mariano presented an invited lecture at the 21st Annual Enzyme Mechanisms meeting in Tucson, Arizona. She also was an invited plenary speaker at the Repligen Award Symposium at the Meeting of the American Chemical Society. Dr. Richard Kemp's and Dr. Martin Kirk's groups presented several papers at the Annual Meeting of the American Chemical Society. Dr. Martin Kirk also presented an invited paper at the International Conference on Inorganic Chemistry. He also presented a seminar at Osaka University and served as the co-chair of the Gordon Conference on Molybdenum and Tungsten Chemistry in Italy. Dr. Joe Ho presented two papers at the 20th Biennial Chemical Education Conference. Dr. Wei Wang presented an invited talk at the Singapore Catalysis Forum. One of Dr. Wang's papers published in 2006 was recognized by the journal Tetrahedron Letters as one of the 50 most cited publications for 2006-2009.
Separations/Hires of Staff and Faculty

Associate Professor David Tierney resigned his faculty position and left the Department on June 30, 2009. He departed with an outstanding overage on his grant expenditures of nearly $40,000, which was primarily due to internal departmental accounting errors directly related to the lack of staff to monitor the account. Ms. Katherine Grey, Fiscal Services Tech, went on catastrophic leave in Fall of 2008 and did not return to work. During this period, the College of Arts and Sciences would not permit a temporary replacement.
II. Sponsored Projects

Despite the significant challenges that have been outlined above, all of the tenured and tenure-track members of the faculty of the Department of Chemistry and Chemical Biology maintained active research programs.

Grants Funding Received in FY2009

<table>
<thead>
<tr>
<th>PI</th>
<th>Funds</th>
<th>Index</th>
<th>Dates</th>
<th>Amt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabaniss</td>
<td>DoE/AAA/UFL</td>
<td>889261</td>
<td>6/15/09 - 6/14/10</td>
<td>122,225.00</td>
</tr>
<tr>
<td>Deck</td>
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<td>889285</td>
<td>3/01/09 - 1/24/10</td>
<td>756.00</td>
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<tr>
<td>Dunaway</td>
<td>NIH/Boston</td>
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<td>Mariano</td>
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</tr>
<tr>
<td>Dunaway</td>
<td>LANL</td>
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<td>3/23/09 - 10/01/09</td>
<td>99,000.00</td>
</tr>
<tr>
<td>Mariano</td>
<td>UMD</td>
<td>889292</td>
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<td>Grey</td>
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<td>8/01/08 - 7/31/09</td>
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<tr>
<td>Guo</td>
<td>ACS/PRF</td>
<td>889278</td>
<td>3/01/09 - 8/31/11</td>
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<tr>
<td>Guo</td>
<td>NIH</td>
<td>889295</td>
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<td>Kemp</td>
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<td>1/26/09 - 8/31/09</td>
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<td>Kirk</td>
<td>NSF</td>
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<td>Kirk</td>
<td>NIGMS</td>
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<td>Ho/Mariano</td>
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<td>Mariano</td>
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<td>2/01/09 - 1/31/10</td>
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<tr>
<td>Paine</td>
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<td>889248</td>
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<tr>
<td>Tierney</td>
<td>NSF</td>
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<td>Wang</td>
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<td>889232</td>
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<tr>
<td>Wang</td>
<td>GAP</td>
<td>889342</td>
<td>12/08 - 12/09</td>
<td>25,000.00</td>
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</table>

$3,259,684.00
III. Plans and Recommendations

As of Fall 2009, the Department of Chemistry and Chemical Biology is on the brink of academic catastrophe. Faculty morale is extremely low, with several members actively searching for positions at other institutions. Several faculty research laboratories in Clark Hall are in such disrepair that they have become uninhabitable, and now serve as temporary undergraduate instructional rooms. A number of graduate students originally recruited by the department's graduate program are choosing academic advisors outside the Department. If these problems are not addressed, in less than five years the undergraduate major and the graduate program will no longer be viable. If the most productive faculty in the Department were to leave the institution over the next few years, it is estimated that it would take more than $20,000,000 in equipment, salary increases, and research start-up costs to rebuild the department.

The other critical issue is the safety and quality of the undergraduate student laboratories. The organic chemistry instructional laboratory has several unrepairable plumbing and ventilation problems - these have been attempted to be addressed on several occasions over the past two decades without success. The physical environment and lack of proper equipment make the undergraduate organic chemistry laboratory unsafe, and if left unaddressed this situation could result in student and instructor injuries.

The following measures are currently being taken to head off the impending collapse of the department:

1. **Faculty Recruitment and Retention**: The recruitment of three tenure-track faculty (two for 2010 and one in 2011) and one Visiting Faculty member 2010-2011) have been approved by the administration. The areas of emphasis for the recruitments are in biological chemistry, nanoscience, and organic chemistry for the tenure-track appointments and in analytical chemistry for the visiting appointment. These areas are critical to both the instructional and the research components of the Department. The salaries of several key faculty members are being examined to determine if their levels are competitive.
2. **Reconstruction of the Chemistry Facilities:** Funds were approved for the remodeling of the Department of Chemistry and Chemical Biology administrative offices and for the remodeling of the laboratory space on the Reibsomer 3rd floor for the tenure track faculty members to be hired in 2010. Two large proposals have been submitted to the Federal and State government. $10,000,000 for the remodel of the research facilities on basement and first floor of the Riebsomer wing of Clark Hall was submitted to the National Institutes of Health in September 2009 and a $10,000,000 general obligation bond request for reconstruction of the undergraduate and graduate educational space in Clark Hall was submitted to the New Mexico Department of Health and Education in October 2009. The first phase of the Science and Mathematics Learning Center (SMLC) is expected to be complete in 2011. However, the organic chemistry instructional laboratories were not included in the first phase; this is quite unfortunate, as these facilities are in even greater need of repair than the freshman chemistry laboratories. The Department will launch an effort to secure funding for the second phase of the SMLC construction over the next year.

3. **Reassessment of Undergraduate and Graduate Curricula:** The Undergraduate Curriculum Committee (UCC) and the Graduate Program Steering Committee (GPSC) have been reconstituted and will focus on key issues during 2009-2010. The UCC will focus its attention on devising a strategy to offer the complete set of courses that are currently listed in the catalog. It will also address the very high drop/withdrawal/failure (DWF) rate among freshman and organic chemistry students. The DWF rate is currently between 25-50%, which significantly decreases graduation rates and severely impacts those academic programs that rely on chemistry courses as prerequisites and co-requisites for their course offerings. The GPSC will attempt to address problems with graduate student recruitment and in the difficulties in early student assessment that leads to the failure to detect student academic difficulties in a timely and effective manner.

4. **Encouragement of Interdepartmental Collaborations:** An important challenge that the Department of Chemistry and Chemical Biology must meet to become a more successful academic unit is to become more collaborative with other parts of the UNM academic community. The number of outside teaching and research
collaborations is currently quite minimal, and in some cases there have been counter-productive interactions. Two initiatives will be mounted to address these issues: First, the Department will enter into a partnership with the College of Education to develop a Masters Program in Chemical Education that focuses on improving the quality of high school chemistry education. Second, the Department will reassess its management practices for shared facilities and develop a strategy for increasing their effectiveness for the New Mexico scientific community. In particular, the Mass Spectrometry/Proteomics facility will undergo a significant reorganization. This facility, which only opened a few years ago to significant publicity, lost two of the three faculty members associated with the laboratory to retirement and other institutions, and is on the brink of collapse.
IV. 2008-2009 Faculty Publications

Deborah Dunaway-Mariano


The Akt C- Terminal Modulator Protein (CTMP) is an Acyl-CoA Thioesterase of the Hotdog-fold Family. Hong Zhao, H., Martin, B. M., Bisoffi, M., and Dunaway-Mariano, D. (2009) Biochemistry, 48, 5507-09.

Deborah Evans


John Grey


Hua Guo


S. Lin, D. Xie, and H. Guo, J. Chem. Phys., 129, 154313 (2008), Ab initio potential energy surfaces for both the ground (X^1A') and excited (A^1A") electronic states of HGeCl and the absorption and emission spectra of HGeCl/DGeCl.

S. Y. Lin and H. Guo, J. Phys. Chern. A (invited article in the Schatz Festschrift), 113, 4285 (2009), Adiabatic and non-adiabatic state-to-state quantum dynamics for $O(^1D) + H_2(X^1Σ^+_g, v_i = j_i = 0) \rightarrow OH(X^2Π, v_f, j_f) + H(^2S)$ reaction.


S. Lin, D. Xie, and H. Guo, J. Phys. Chem. A (invited article in the Gerber Festschrift), 113, 7314 (2009), Ab initio potential energy surfaces for the ground ($\tilde{X}^1A'$) and excited ($\tilde{A}^1A''$) electronic states of HGeBr and the absorption and emission spectra of HGeBr/DGeBr.


Richard Kemp


**Martin Kirk**


Patrick Mariano


“Human Symbiont Bacteroides thetaiotamicron Synthesizes 2-Keto-3-deoxy-D-glycero-Dgalacto-nononic Acid (KDN) for Host Habitation,” Liangbing Wang; Debra Dunaway-Mariano; Zhibing Lu; Karen N Allen; Patrick S Mariano, Chemistry & Biology, 15, 893-897 (2008).

“Biochemical Characterization of Arginine Deiminase from Giardia Lamblia”, Debra Dunaway-Mariano; Ling Li; Andrey Galkin; Zhiming Zhao; Markus Knipp; Theodore Nash; Patrick S. Mariano; Liudmila Kulakova; Osnat Herzberg; Zhimin Li, J. Mol. Biol. (submitted) 204. Mechanisms of Catalysis and Inhibition Operative in the Arginine Deiminase from the Human Pathogen Giardia lamblia,” Li Z, Kulakova L, Li L, Galkin A, Zhao Z, Nash TE, Mariano PS, Herzberg O, Dunaway-Mariano D, Bioorg. Chem. (in press).

Robert T. Paine


Wei Wang


Luo, G.; Zhang, S.; Duan, W.; Wang, W.* “Chiral Primary Amine Catalyzed Enantioselective Conjugate Addition of N-Heterocycles to a,b-Unsaturated Ketones” Synthesis, 2009, 1564-1572, invited Special Topics.


V. Appendices

Appendix 1. Major Equipment Purchases

<table>
<thead>
<tr>
<th>Asset Status Desc</th>
<th>Model</th>
<th>Manufacturer</th>
<th>Sum Of Asset Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>G3246A-5975C</td>
<td>VL MSD/6850</td>
<td>Agilent Technologies</td>
<td>$47,295.20</td>
</tr>
<tr>
<td>Differential Scanning Calorimeter</td>
<td>DSC1 500C</td>
<td>Mettler Toledo Inc</td>
<td>$34,985.96</td>
</tr>
<tr>
<td>Optical Bench &amp; UV Probe</td>
<td>PC UV-2450 &amp; TCC-240A 115V, UV</td>
<td>Shimadzu</td>
<td>$13,986.90</td>
</tr>
</tbody>
</table>

Appendix 2. Number of Students Enrolled in Degree Plans – By Semester

<table>
<thead>
<tr>
<th>Semester</th>
<th>Minor</th>
<th>BA</th>
<th>BS</th>
<th>MS</th>
<th>PhD</th>
</tr>
</thead>
<tbody>
<tr>
<td>SU 08</td>
<td>389</td>
<td>138</td>
<td>173</td>
<td>4</td>
<td>50</td>
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<tr>
<td>FA 09</td>
<td>367</td>
<td>145</td>
<td>181</td>
<td>5</td>
<td>48</td>
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<tr>
<td>SP 09</td>
<td>394</td>
<td>140</td>
<td>192</td>
<td>2</td>
<td>44</td>
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</table>

Appendix 3. Undergraduate and Graduate Enrollment – By Courses

<table>
<thead>
<tr>
<th>Undergraduate Courses</th>
<th>Summer 2008</th>
<th>Fall 2008</th>
<th>Spring 2009</th>
</tr>
</thead>
<tbody>
<tr>
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<td>242</td>
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<tr>
<td>121 Enrollment</td>
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<td>564</td>
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<td># of Sections</td>
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</tr>
<tr>
<td># Labs</td>
<td></td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>122 Enrollment</td>
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<td>69</td>
<td>231</td>
</tr>
<tr>
<td># of Sections</td>
<td></td>
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</tr>
<tr>
<td># Labs</td>
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</tr>
<tr>
<td>Chem 131L</td>
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<td>Chem 132L</td>
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Appendix 6. Masters and PhD Graduates Fall 2008 and Spring 2009

<table>
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Appendix 7. Undergraduate and Graduate Student Awards and Scholarships

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Appendix 8. Graduate Recruitment Report Fall 2008 and Spring 2009

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30
Appendix 9. New Graduate Students Fall 2008 and Spring 2009

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Appendix 10. Assistantship Report by Semester

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31
Appendix 11. Grant Awards to Faculty

Chemistry and Chemical Biology Grant Awards 2008-2009

Cabaniss, Steve
University of Florida $57,523
Novel Sensor for the In Situ Measurement of Uranium Fluxes

Deck, Lorraine
Arizona State University $756
Synthesis of Natural Product Analogues

Deck, Lorraine
Arizona State University $756
Design and Synthesis of Therapeutics for Cancer

Dunaway Mariano, Debra
University of Maryland Biotechnology Institute $73,673
Structure-Function Studies of Human Hyaluronidases

Dunaway Mariano, Debra
Los Alamos National Laboratory $99,000
LANL Standard Research Contract 70137-001-08

Dunaway Mariano, Debra
Boston University $225,000
Mechanism and Function in HSD Phosphotransferases

Dunaway Mariano, Debra/Mariano, Patrick
National Institutes of Health $494,832
Enzymes: Structure, Mechanism, Function, Inhibition

Grey, John
Oak Ridge Associated Universities $5,000
Mapping Structure-Function Relationships in Molecular Photovoltaic Devices

Grey, John
American Chemical Society $100,000
Uncovering and Understanding Morphology-Dependent Charge Transport and Trapping in Polymer Photovoltaic Materials

Guo, Hua
Department of Energy $122,999
Wave Packet Based Statistical Approach to Complex-Forming Reactions

Guo, Hua
National Institutes of Health $75,000
Mechanism and Inhibition of Arginine Deiminase

Guo, Hua
American Chemical Society $100,000
Catalytic Mechanisms for Hydrogen Production by Methanol Steam Reforming

Kemp, Richard
Sandia National Laboratories $24,927
Materials Synthesis
Kemp, Richard
Sandia National Laboratories $52,214
Conversion of CO2 into Useful Chemicals and Fuels

Kemp, Richard
Sandia National Laboratories $3,688
High-Throughput Reactor Setup

Kemp, Richard
American Chemical Society $100,000
TT-Bonded Cationic Ligands as Catalysts and Precursors

Kirk, Martin
National Science Foundation $125,000
Electronic and Magnetic Studies of Heterospin Inorganic/Organic Molecular Materials

Kirk, Martin
National Institute of General Medical Sciences/NIH/DHHS $29,384
Spectroscopic Studies of Molybdoenzymes and Models

Kirk, Martin
National Institute of General Medical Sciences/NIH/DHHS $264,456
Spectroscopic Studies of Molybdoenzymes and Models

Mariano, Patrick
University of Maryland $216,487
Giardia Drug Targets: Structure Function and Inhibitors

Paine, Robert
Department of Energy $135,000
Preorganized and Immobilized Ligands for Metal-Ion Separations

Paine, Robert
Department of Energy $141,005
Design and Development of Selective Extractants for An/Ln Separations

Paine, Robert
Washington State University $100,000
Advanced Aqueous Separation Systems for Actinide Partitioning

Tierney, David
National Science Foundation $95,857
Integrated Paramagnetic Resonance of High-Spin Co (II) Systems

Wang, Wei
National Science Foundation $133,000
Bifunctional Organic Molecule-Mediated Catalysis
### Appendix 12. Departmental Seminar Schedules – Fall 2008 and Spring 2009

#### Fall 2008

**August 29, 2008**  
Professor Binghe Wang  
Department of Chemistry  
Georgia State University  
"Going after the "sweet spot" in selecting DNA aptamers for glycoproteins"  
(Wang)

**September 5, 2008**  
Professor Mike Heinekey  
Department of Chemistry  
University of Washington  
"Coordination Chemistry of Dihydrogen: Activation and Storage"  
(Kemp)

**September 12, 2008**  
Professor Ohyun Kwon  
Department of Chemistry  
University of California – Los Angeles (UCLA)  
"Phosphine-Catalyzed Annulations and Their Applications"  
(Wang)

**September 19, 2008**  
Professor David Johnson  
Department of Chemistry  
University of Oregon  
"New Nanostructured Solids with Unprecedented Properties"  
(Evans)

**September 26, 2008**  
Professor Xuefei Huang  
Department of Chemistry  
Michigan State University  
"Carbohydrates, Sweet Molecules of Life"  
(Wang)

**October 3, 2008**  
NO SEMINAR

**October 10, 2008**  
Professor Scott Weinert  
Department of Chemistry  
Oklahoma State University  
"Synthesis, Structures and Properties of Linear and Branched Oligogermanes"  
(Paine)

**October 17, 2008**  
NO SEMINAR – Fall Break

**October 24, 2008**  
Professor Charles Perrin  
Department of Chemistry & Biochemistry  
University of California – San Diego  
"Symmetry of Hydrogen Bonds"  
(Kemp)

**October 31, 2008**  
Riley Schaeffer Endowed Lecture, Dr. Carlos Bustamante  
Department of Chemistry  
University of California – Berkeley  
"Grabbing the Cat by the Tail: Following the Packaging of DNA by a Tailed Phage, One Virus at a Time"  
(Paine)

**November 7, 2008**  
Professor Jon Rainier  
Department of Chemistry  
University of Utah  
"Targeting Heterocyclic Natural Products at 4700 Feet Above Sea Level"  
(Wang)

**November 14, 2008**  
Dr. Andrew Phillips  
Department of Chemistry & Biochemistry
University of Colorado at Boulder
"From Targets to Strategies and Back Again: Some Examples from Complex Molecule Synthesis"
(Whalen)

November 21, 2008
Professor Wei Yang
Department of Chemistry and Biochemistry
Florida State University
"Generalized Ensemble based Free Energy Simulation Methods Towards Quantitative Biomolecular Simulations"
(Guo)

November 28, 2008
NO SEMINAR – Thanksgiving Break

December 5, 2008
Professor Scott A. Snyder
Department of Chemistry
Columbia University
"Achieving Synthetic Control When Nature Avoids Selectivity"
(Wang)

December 12, 2008
Professor David Shultz
Department of Chemistry
North Carolina State University
"Semiquinone Complexes: Magneto-structural Correlations, New Electronic Structures, and Photochemistry"
(Kirk)

Spring 2009
January 23, 2009
Professor Art Nozik
Department of Chemistry & Biochemistry
NREL/Colorado University, Boulder
"Kahn Lecture"
"Multiple Exciton Generation: Silicon QDS, Group IV-VI QD Arrays, QD Solar Cells, and Controversy"
(Grey)

January 30, 2009
Professor Haw Yang
Department of Chemistry
University of California at Berkeley
"Revealing Protein Dynamics Energy Landscape Using High-Resolution Single-Molecule Spectroscopy"
(Grey)

February 6, 2009
Professor Nathanael S. Gray
Biological Chemistry & Molecular Pharmacology
Harvard University Medical School
"Tackling the Kinome with ATP and non-ATP Competitive Kinase Inhibitors"
(Wang)

February 13, 2009
Professor Edwin Lewis
Department of Chemistry
Mississippi State University
"Deconvoluting the Structural Diversity in G-Quadruplex and i-Motif DNA’s Formed in Oncogene Promoter Regions"
(Kemp)

February 20, 2009
Professor Bradley Holliday
Department of Chemistry & Biochemistry
University of Texas at Austin
"Functional Conducting Metallopolymer Materials"
(Grey)

February 27, 2009
Professor Peng Zhang
Department of Chemistry
New Mexico Institute of Mining & Technology
"Applications of photon upconverting nanoparticles"
March 6, 2009
Professor Eli Chapman
Department of Molecular Biology
The Scripps Research Institute
"Using chemistry and genetics to study GroEL function"
(Whalen)

March 13, 2009
Professor Dmitri Babikov
Department of Chemistry
Marquette University
"Quantum origin of anomalous isotope effect in ozone formation"
(Guo)

March 20, 2009
SPRING BREAK – NO SEMINAR

March 27, 2009
Professor Liming Zhang
Department of Chemistry
University of Nevada at Reno
"Golden Gate' for Organic Synthesis"
(Wang)

April 3, 2009
Professor Xiaosong Li
University of Chemistry
University of Washington
"Theoretical Investigations of Diluted Magnetic Semiconductor Nanocrystals"
(Grey)

April 10, 2009
Professor Brian Frost
Department of Chemistry
University of Nevada, Reno
"A new twist on an old ligand: Recent developments in the coordination chemistry and reactivity of PTA"
(Kemp)

April 17, 2009
Professor Sara Thrall
GlaxoSmithKline
"Lessons Being Learned About Drug Discovery for Thiol Proteases"
(DDM)

April 24, 2009
Professor Lei Zhu
Department of Chemistry
Florida State University
"Fluorescent Heteroditopic Ligands for Zinc Ion"
(Wang)

May 1, 2009
Professor Steven L. Castle
Department of Chemistry & Biochemistry
Brigham Young University
"New Strategies for the Synthesis of Unusual Peptides and Alkaloids"
(Wang)

May 8, 2009
Professor Wei Kong
Department of Chemistry
Oregon State University
"On the origin of the photostability of nucleic acid bases: a lesson from gas phase spectroscopy"
(Guo)
Annual Report

Combined BA/MD Program
College of Arts and Sciences

Fall 2008 through Summer 2009

Philip T Ganderton
Director, Undergraduate BA/MD Program
Combined BA/MD Undergraduate Program, College of Arts and Sciences

The College of Arts and Sciences and School of Medicine have collaborated through the Combined BA/MD Program to help address the need for physicians in rural and underserved areas of New Mexico. This program admitted its first cohort of students in August of 2006. It is funded by the New Mexico State Legislature and admits and promotes students who are broadly diverse and who are committed to practicing medicine in New Mexico’s medically under-served communities. The BA/MD program is an eight-year, two-stage dual degree program in which participating students first complete a Baccalaureate degree in the College of Arts and Sciences, and then complete an MD at the School of Medicine.

During the 2008-09 year, efforts of Program staff and faculty were split between recruiting and admitting the fourth year class comprising 28 New Mexico high school seniors, and continuing efforts to ensure the success of the previous three cohorts. The School of Medicine has primary responsibility for the recruitment and admission of high school seniors into the BA/MD program. The College of Arts and Sciences has primary responsibility for the curriculum, program advisement, scholarships, and other components of the undergraduate program of the BA/MD Program.

Directorship duties of the BA/MD Program are a partnership between the College of Arts and Sciences and the School of Medicine. Administrative duties are shared by directors in each respective unit. In the School of Medicine, Valerie Romero-Leggott, Vice President for Diversity, serves as the Director of the BA/MD Program. In the College of Arts and Sciences, Professor Philip Ganderton, Associate Dean for Research, serves as Director of the undergraduate part of the Program. The BA/MD Undergraduate Program reports to the Dean of the College of Arts and Sciences.

Major accomplishments during this third year of the undergraduate component of the program include:

The Health, Medicine, and Human Values (HMHV) Curriculum: The curriculum continues to be developed as cohorts of students move through the program. All cohorts successfully completed the required courses and gave positive feedback on the HMHV Seminars. The Seminar in Contours of Health in New Mexico (HMHV 101) offered to first year students, normally taught by Distinguished Professor Howard Waitzkin, was taught by a team comprising Dr Ben Daitz and Dr Meredith Martin. The Literature and Medicine (HMHV 201) seminar offered to second year students was taught by Dr Greg Martin of the English Department. This year two HMHV seminars, Health Economics, Politics and Policy (HMHV 301) taught by Dr Richard Santos of the Economics Department and Health and Cultural Diversity (HMHV 310) taught by Dr Nagesh Rao of the Department of Communications and Journalism were offered for the first time. All
the HMHV seminars were given high praise by students in their formal evaluations and
informal feedback to program faculty and staff.

The Faculty Senate approved two new HMHV one credit hour course numbers. These
are HMHV 298, the academic advisors’ freshman class, offered in both semesters every
year, and HMHV 398, the sophomore spring preparatory class for the summer practicum.

A joint proposal from the Program’s Committee on Continuing Eligibility and the
Curriculum Committee was approved and will shift the first two years of the program
into a “milestone” or first phase: student progress evaluation policy. All students must
successfully complete their pre-med core through Chem 301 with a 3.0 GPA, or be
released from the program. Current students may choose to follow this policy, or the
current one. The Program will be developing a subsequent milestone policy shortly.

Faculty Hiring and Support in the Undergraduate Program: Last year the College of Arts
and Sciences was able to complete two successful hires partially funded by the BA/MD
Program: Professor Nagesh Rao was hired as a Professor in the Department of
Communication and Journalism, and Paul Katsafanas was hired as an Assistant Professor
in the Department of Philosophy. Both professors have joined the faculty and have
begun to contribute to the Program. Professor Rao taught the HMHV 310 seminar and
served on the Curriculum Committee, while Professor Katsafanas does not teach until
Fall 2009, but is serving on the Committee on Continuing Eligibility. Other College
faculty taught seminars and the Program supported Departments offering classes to our
students. The Program expanded its financial support of graduate TAs who teach in these
departments. Other College faculty served in various capacities to the program, primarily
as members of Program committees such as Curriculum, Evaluation, Continuing
Eligibility and Student Support.

Program Administrative Support and Advising Support: Karen McGillivray continued to
be the senior student advisor to participating students, and Joyce Krantman made great
contributions to the administration of the Program. Larry Grobecker continued to
provide valuable faculty support on a part-time basis. Bryn McCabe-Kelly has settle in
well as our second student advisor to the 2008 cohort as well as provide critical
administrative support as the Program grows with each new cohort. The BA/MD
program also worked with the Center for Academic Program Support to contract for
summer tutorial services for the incoming first year class, and supplemental instruction
during the 2008-09 academic year.

Other Student Support Services: Faculty and staff associated with the undergraduate
program worked closely with other units (living and learning communities, housing,
minority student services, academic departments, and scholarship office) to provide
housing, scholarship, and special sections of course offerings for the incoming students
selected for admission. We also arranged with the Mathematics Department to offer a
Summer Bridge mathematics program of Math 121 for students admitted to the program
with a ACT math score of below 25 to prepare them for Math 180 in the Fall.
Although Associate Dean Mark Ondrias stepped down as chair of the Student Support Committee, English Professor Chuck Paine joined Dr. Sheila Hickey from the SOM as a co-chair of this committee. During the year the mentoring program was redesigned. Cohorts 06 and 07 only will have the option to keep their faculty mentors. Starting with fall 08, the 06 cohort will mentor the 08 cohort, juniors will mentor freshmen. Sophomores and juniors will have medical student mentors, so 06 and 07 will be mentored by medical students. Seniors will also have a pool of faculty mentors to call upon.

All but one Program student successfully completed their academic years, some with supplemental study in Summer of 2009. One student was separated from the Program due to inability to maintain the required academic standards for matriculation to SOM. The program received 201 applicants for the 2009 cohort. The fourth cohort of 28 students was oriented and welcomed to the program through various activities in the spring and summer and began classes in Fall of 2009.

Two students from the 2006 cohort graduated early, earning their Bachelor’s degree in three years. They will begin at the UNM School of Medicine in Fall of 2009.
ANNUAL REPORT
Department of Communication & Journalism
AY 2008-2009 (July 1, 2008-June 30, 2009)
John Oetzel, Chair

Significant Developments

This academic year met with several developments. The first significant development was the completion of the assessment of the graduate program. We found that the assessment of the undergraduate programs was very helpful in enhancing and clarifying curriculum and student services. As a result, we decided to engage in a similar type of assessment of the communication program. Assessment tools included the following: (a) tabulating student publications and conference presentations; (b) assessing a graduate student presentation to ensure the meeting of key learning goals; (c) examination of time to degree; and (d) review of teaching evaluations. Data were collected in AY08-09 and analyzed during Summer 2009. The final results will be presented to the faculty in early Fall 2008 and the faculty will identify changes to make to the program to enhance student success.

A second significant development was the revision of the communication undergraduate program as a result of the assessment of learning conducted in the previous academic year. We found that student learning exceeded our criteria, but that awareness about the student learning outcomes for both students and instructors was low. We created and published a curriculum map to illustrate how the required courses addressed the learning outcomes. Additionally, we move the mass media concentration from the mass communication major to the communication major because the core learning outcomes fit better in the communication major.

A second significant development was continued work toward our strategic plan. In AY05-06, we decided that we had four goals for the department: a) to meet the needs of the diverse undergraduate students that we serve, b) to improve our research reputation of the department (including having a strong graduate program), c) to enhance our interdisciplinary and community relationships, and d) create a department climate where we recruit people from different intellectual perspectives and cultural backgrounds, and help them thrive. Each year, the department crafts action plans to specifically address
these four goals. These plans are reviewed annually and committees provide a report to the faculty about progress (and change) towards goals. There is a committee associated with each goal and charged with developing and carrying out the action plan (and three different committees for the undergraduate goal since we have three majors—communication, journalism, and mass communication). Some of the work accomplished in each area includes the following:

a) Undergraduate: Completed the feedback loop related the assessment.

b) Research Reputation and Graduate Program: Focused on three areas of research emphasis in the graduate program: intercultural communication, mass communication and culture, and health communication; program in intercultural communication is ranked 3rd in the country; completed review curriculum to create a strong program—major revision of curriculum to be implemented during AY09-10

c) Interdisciplinary/community relations: Met with our advisory board twice; participated in grant proposal by the Latin American & Iberian Institute to strengthen the international component of our curriculum—the grant was funded and we will teach four courses in AY07-09 that have significant international aspects; worked to strengthen ties with the Robert Wood Johnson Health Policy Center and BA/MD program—a faculty member is focuses work on communication for the RWJ center (White) and another is a senior fellow of the Center (Oetzel); has a faculty member with significant teaching and service responsibilities in the BA/MD program (Rao); and developed concentrations associated with the Interdisciplinary Film and Digital Media program.

d) Diversity—The department created a new committee that is charged with addressing diversity; committee created a diversity plan that identifies activities for recruiting, retaining, and helping faculty, students, and staff from diverse backgrounds; graduation rates for students of color are higher than that of the university, but slightly below those of Whites (ranging from 68-79%);

The Department's strategic plan dovetails nicely with the newly initiated UNM strategic plan and the Department was one of nine programs/departments featured at a Town Hall organized by the President's office is May 2008.

A third significant development was the strengthening of relationships with media organization. We reached out to 10 different organizations to find out better ways to prepare students for a career in media and/or journalism. We held a meeting to review our
curriculum and decided that we need to revamp our journalism offerings. Specifically, we are going to move toward a multimedia journalism concentration rather than the traditional print and broadcast concentrations.

A final significant development was to strengthen our enrollment management efforts. We identified savings of $30,000 to the part-time instructor budget (tied to the budget rescission from the state) without impacting student credit hours. We did this by raising caps on our public speaking courses and a few other lecture classes. We also updated and publicized a five year plan of undergraduate courses so that students are aware of when we teach required courses. This is especially critical because all of our concentrations have sequences of courses over at least three semesters; students who get off track delay graduation.

**Significant Plans and Recommendations**

The future plans include plans associated with the four core goals of our strategic plan and developing resources for the department.

For undergraduate education, we will continue a three year cycle of assessment is appropriate for our programs. The next cycles of assessment will be the following: Journalism and Mass Communication: (Spring 2010); and Communication and Public Speaking (Spring 2011).

For graduate/research, we will be undertaking a coordinating of the curriculum. We are going to organize the curriculum around learning objectives to strengthen the program. We are also taking steps to enhance the research productivity of graduate students. Our students produce many conference papers, and we want to help them turn these into published research. Finally, the faculty have decided that we need to strengthen our public relations efforts around the research that we do. The faculty as a whole is quite productive, but we have done a poor job of communicating these results to the outside world (university, Albuquerque/New Mexico, and our discipline).

For community relations/interdisciplinary relations, we are going to continue our relationship with our advisory board. We are also going to consider ways to develop workshops that benefit the department and community. For example, we are going to
continue the success of the 2009 Career Fair when 20 companies and 200 students attended.

For diversity, we are going to continue are participation in recruiting fairs for high school students and consider visiting high school programs for recruiting students. We are one of six departments that received a Mellon Foundation grant proposal that created dissertation fellowships for underrepresented students in six social sciences and humanities (anthropology, sociology, history, linguistics, American studies, and communication & journalism). We have one student receive a two-year fellowship from Mellon. We also have two students who have received fellowships from the Robert Wood Johnson Health Policy center on campus.

Finally, we are committed to enhancing the resources of the department to meet our strategic plan. We have three approaches. First, we are continuing efforts on fundraising. We have a development committee that has identifying two goals for the coming year: raising money to name an endowed scholarship in honor of Karen Foss who is retiring soon and continue strengthening relationships with alumni. Second, we have made efforts to increase grant writing and rewards are evident in the list below. Third, we are developing our on-line offerings to offer the organizational concentration completely on-line as part of a revenue sharing plan with the Extended University.

**Appointments to Faculty/Staff (started AY08-09)**

Karma Chavez, Assistant Professor
Saumya Pant, Assistant Professor
Nagesh Rao, Associate Professor

**Separations of Faculty/Staff**

None
PUBLICATIONS

Karma Chávez:


Mary Jane Collier:


Janet Cramer:


**Patricia Covarrubias:**

**Karen Foss:**


**Dirk Gibson:**


**Pamela Lutgen-Sandvik:**


**Virginia McDermott:**


http://www.bhc.state.nm.us/BHQualityEvaluations/Surveys.html
Tema Milstein:


John Oetzel:


Ilia Rodriguez:


Richard Schaefer:


Janice Schuetz:


Olaf Werder:


GRANTS

Patricia Covarrubias:
Project: Enfoque Mexico. Study to investigate the political priorities of leaders of Mexican heritage living and working in the United States.

$1,000 travel grant from the Instituto de Mexicanos en el Exterior (IME) of the Secretaria de Relaciones Exteriores (Secretariat for Foreign Affairs in Mexico City).
Karen Foss:
Project: Investigating fertility tourism in India
Received at $500.00 travel grant from the Feminist Research Institute at UNM

Virginia McDermot:
Project: Cultural meanings of behavioral health and behavioral health stigma in New Mexico. Funded by New Mexico Behavior Health Collaborative/Human Service Department ($75,000). Role: Co-primary investigator. Purpose of this grant is to (a) explore cultural meanings of mental health and stigma and (b) conduct a baseline survey of attitudes about mental health in New Mexico.

Project: Understanding mental health disparities among Native Americans: The potential role of stigma, culture, and communication with health care providers. Role: Primary Investigator. Funding Source: Blue Cross Blue Shield ($5,250). The purpose of the study is to explore Native American’s cultural meanings associated with mental illness and barriers to treatment.

Tema Milstein:
Project: Research funding for Connecting Community Voices, a large collaborative research project for which Dr. Milstein is Principal Investigator. $8,250 to support research expenses granted from Conservation Voters of New Mexico, The Wilderness Society, and the UNM Resource Center for Raza Planning in the School of Architecture and Planning.

John Oetzel:
Project: Baseline Survey of Mental Health Attitudes. Principal Investigator: John Oetzel. The purpose of the project is to conduct a survey of randomly sample adults in New Mexico about their attitudes about interacting with people who have mental health disorders. $65,000. Funding Agency: NM Human Services Department. July 1, 2008-September 30, 2009.

Project: Narch III: Listening to Each Other. Principal Investigator: Nina Wallerstein. The purpose of the project is to adapt a family based curriculum for substance abuse prevention in two American Indian communities. 4-year project. $600,000. Role: Co-
investigator. Funding Agency: Native American Research Centers for Health (NIH). October 1, 2005-September 20, 2009

Project: Community-Based Participatory Research. Principal Investigator: Nina Wallerstein. The purpose of this project was to identify key characteristics of the CBPR process and create of model of this process. 3-year project. $450,000. Role: Co-investigator. Funding Agency: Native American Research Centers for Health (NIH)/Indian Health Service. October 1, 2007-September 30, 2009.

Saumya Pant:
Project: Revisiting the Multidimensional Health Beliefs Inventory (MHBI): How do American Indian, Hispanic/Latino, and Caucasian participants in New Mexico define good health? Principal investigator(s): Nagesh Rao and Saumya Pant. Funding organization: Blue Cross Blue Shield Grant. Starting and stopping dates: May, 2009 to January, 2010. Amount awarded for the period listed (direct costs and indirect costs): $4750

Nagesh Rao:
Project: Revisiting the Multidimensional Health Beliefs Inventory (MHBI): How do American Indian, Hispanic/Latino, and Caucasian participants in New Mexico define good health?
Principal investigator(s): Nagesh Rao and Saumya Pant
Funding organization: Blue Cross Blue Shield Grant
Starting and stopping dates: May, 2009 to January, 2010
Amount awarded for the period listed (direct costs and indirect costs): $4750

Ilia Rodriguez
Project: Teaching grant to attend intensive training session on multimedia journalism at The Poynter Institute in St. Petersburg, FL. Awarding agency: UNM TAS Teaching Grant. Amount: $2,274, Period: 1/1/09-12/31/09

Richard Schaefer
Project: FIPSE: VITAL Exchange Program Grant (2008-2011). PI on Federal Fund for Improvement in Post-Secondary Education Grant to bring Canadian and Mexico students to the University of New Mexico and send UNM students to Canada and Mexico to study
water issues, in conjunction with the University of Iowa: $189,000 of total funding, with approximately $50,000 dispersed by PI Richard J. Schaefer.

**Project:** Cross-Border Issues summer journalism exchange program. Center for Regional Studies research grant of $5,725 to support Cross-Border Issues Group research activities in 2009. CJ393: University of New Mexico Office of the Vice President for Student Services Grant of $2,000 to support the CJ 393: Cross-Border Issues: In-depth journalism exchange program; UISFL (Dept. of Education) grant of $3,820 administered through Latin-American Iberian Institute to support CJ 393: Cross-Border Issues: In-depth journalism exchange program.

**Janice Shuetz**  
*Project:* Pioneer Women in Communication (2008-2009). This documentary project tells the stories of women in the communication discipline who have been pioneers in the discipline, funded by UNM’s Feminist Research Institute ($800) and the National Communication Association ($5,000). The project is being done with Glenda Balas at Sam Houston University.

**Olaf Werder:**  
Project Title: Adolescents Committed To Improvement of Nutrition and physical activity (ACTION). Project Description: Cooperative project between various main campus and HSC campus departments within UNM. The major goal of this project is to create, implement and evaluate a culturally relevant and age-appropriate obesity intervention for School-Based Health Centers to help decrease the risk of adolescent metabolic syndrome development. Awarding Agency: NIH/NHLBI (Grant #: 1 R21 HL092533-0) Amount: $175,000, Project Period: 4/1/08-3/31/10 Principal Investigator: Alberta Kong, M.D., M.P.H. Co-Investigator, 5% effort

Project Title: Evaluating the NM Mental Health Stigma Reduction Campaign  
Project Description: Cooperative project between Dept. of C&J faculty and UNM HSC campus departments. The primary goal of the proposed study was to design the evaluation and analyze the data of a planned mental health stigma campaign the Behavioral Health Services Division of the NM Human Service Department is preparing. Awarding Agency: New Mexico Human Service Department Amount: $75,000, Project Period: 7/1/08-9/30/08 Principal Investigator: John Oetzel, PhD, M.P.H. Co-Investigator, 10% effort
THE ANNUAL REPORT
OF THE
DEPARTMENT OF EARTH AND
PLANETARY SCIENCES

July 1, 2008 to June 30, 2009
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Department of Earth and Planetary Sciences

Annual Report

July 1, 2008 – June 30, 2009

John W. Geissman, Chair
I. GENERAL DEPARTMENTAL INFORMATION
FACULTY AND STAFF

PROFESSORS:

Yemane Asmerom, Ph.D., University of Arizona, 1988.
Adrian J. Brearley, Ph.D., University of Manchester, (United Kingdom), 1984.
John W. Geissman, Ph.D., University of Michigan, 1980.
David Gutzler, Ph.D., Massachusetts Institute of Technology, 1986. (Regents Lecturer)
Karl E. Karlstrom, Ph.D., University of Wyoming, 1981.
Barry S. Kues, Ph.D., Indiana University, 1974.
Leslie D. McFadden, Ph.D., University of Arizona, 1982.
Jane Selverstone, Ph.D., Massachusetts Institute of Technology, 1985. (Regents Lecturer)
Gary Smith, Ph.D., Oregon State University, 1986.

ASSOCIATE PROFESSORS:

Peter Fawcett, Ph.D., Pennsylvania State University, 1994.
Tobias Fischer, Ph.D., Arizona State University, 1999.
Rhian H. Jones, Ph.D., University of Manchester, Great Britain, 1986.
Grant Meyer, Ph.D., University of New Mexico, 1993.
Mousumi Roy, Ph.D., Massachusetts Institute of Technology, 1997.
Louis A. Scuderi, Ph.D., University of California, Los Angeles, 1984.
Gary Weissmann, Ph.D., University of California, Davis, 1999

ASSISTANT PROFESSORS:

Joseph Galewsky, Ph.D., University of California, Santa Cruz, 1996

SENIOR RESEARCH PROFESSORS:

Cornelis ("Kase") Klein, Ph.D., Harvard University, 1965.
Wolfgang E. Elston, Ph.D., Columbia University, 1953.

RESEARCH PROFESSORS:

Horton Newsom, (Institute of Meteoritics), Ph.D., University of Arizona, 1981.
Charles K. Shearer, Jr., (Institute of Meteoritics), Ph.D., University of Massachusetts, 1983.
David Draper, (Institute of Meteoritics), Ph.D., University of Oregon, 1991
Penny King, (Institute of Meteoritics), Ph.D., Arizona State University, 1999.
LECTURERS:

Amy Ellwein, Lecturer III (Natural Sciences Program)
Matthew Nyman, Lecturer III (Natural Sciences Program), Ph.D., Virginia Tech University
Paula Watt, Lecturer III, Ph.D., 1996, University of New Mexico
Timothy F. Wawrzyniec, Lecturer III, Ph.D., University of New Mexico
Aurora Pun, Lecturer III, Ph.D., University of New Mexico

PROFESSOR EMERITUS:

Wolfgang Elston, Ph.D., Columbia University, 1953
Rodney C. Ewing, Ph.D., Stanford University, 1974.
James J. Papke, Ph.D., University of Minnesota, 1964. (Regents Professor).

RESEARCH STAFF:

Viorel Atudorei, Research Scientist III, Ph.D., University of Lausanne, Switzerland, 1998.
James Connolly, Research Scientist II, M.S., University of New Mexico, 1981.
Jed Frechette, Research Scientist III, M.S., University of New Mexico, 2007.
Shenghong Huang, Research Scientist I, Ph.D., University of New Mexico, 2007.
Alexandra Kirk, Research Scientist I, B.S. University of New Mexico, 2008
David T. Lescinsky, Research Scientist III, Ph.D., University of Arizona.
Peng Li, Senior Research Scientist I, Ph.D., University of Virginia, 2003.
Victor Polyak, Senior Research Scientist I, Ph.D., Texas Tech University, 1998.
Ying-Bing Jiang, Ph.D. Sr. Research Scientist II, Ph.D., University of New Mexico, 2005

POST-DOCTORAL RESEARCH SCIENTISTS:

Jamie Barnes, Ph.D., University of New Mexico, 2006
Joya Tetreault, Ph.D., University of Colorado, 2007

ADJUNCT PROFESSORS:

Bruce Allen, University of New Mexico, 1993.
Warren S. Baldridge, Ph.D., Caltech University, 1978.
M. Susan Barger, Ph.D., Pennsylvania State University, 1982.
Mark B. E. Boslough, Ph.D. Cal Tech.
Corey Fincher, M.S., University of New Mexico, 2005
Fraser E. Goff, Ph.D., University of California, Santa Cruz, 1977.
Grant H. Heiken, Ph.D., University of California, Santa Barbara, 1972.
Claudia Lewis, Ph.D., Harvard University, 1994.
Sean McKenna, Ph.D., Colorado School of Mines, 1994.
Duane M. Moore, Illinois State Geological Survey
Claudia Mora, Ph.D., University of Wisconsin,
Donald Peterson, Ph.D., Stanford University, 1961.
Aurora Pun, Ph.D., University of New Mexico, 1996.
Walter C. Riese, Ph.D., University of New Mexico, 1980.
John Shomaker, Ph.D., University of Birmingham (United Kingdom), 1995.
Gregory Valentine, Ph.D., University of California, Santa Barbara, 1988.
Erik Webb, Ph.D., University of Wisconsin, Madison.
Thomas Williamson, Ph.D., University of New Mexico, 1993.
Yifeng Wang, Ph.D., Indiana University, 1993.
Jolante van Wijk

STAFF:

Mary Bennett, Accountant II
Mabel T. Chavez, Editorial Technician
Shannon Clark, Program Coordinator, Institute of Meteoritics
Eileen Embid, Editorial Specialist
Mark Fleharty, System Administrator
Gilbert E. Griego, Harding Mine Maintenance Mechanic
Cindy Jaramillo, Administrative Assistant III
Peter Kindilien, Systems Analyst 3
LeaAnn Lloyd, Administrative Assistant II, Institute of Meteoritics
Robert Macy, Research Engineer II
Bryan MacFarlane, Field Research Assistant
Paula Pascetti, Department Administrator
Tessia Robbins, Research Tech/Life Sciences
Anthony Velardez, Facilities Service Technician

VISITING SCIENTISTS:

Kent Condie, New Mexico Tech
Rhawn Denniston, Cornell College
Dr. Jeff Grossman, USGS, Reston
Daniel Holm, Kent State University
Morgane LeBrun, Ecole Normale Superieure de Geology, Nancy, France
Paola Manzari, Universita Italy
Leslie Melim, Western Illinois University
Roberto Molina-Garza, UNAM
Michael Petronis, New Mexico Highlands University
Ulrike Werban, UFZ-Centre for Environmental Research in Leipzig, Germany
DEPARTMENTAL STANDING COMMITTEES, 2008-2009

ASSOCIATE CHAIRS
A. Brearley
M. Roy

GRADUATE COMMITTEE
J. Selverstone
Y. Asmerom
L. Scuderi
T. Fischer
R. Jones
P. Fawcett

GRADUATE ADMISSIONS COMMITTEE
G. Meyer
Z. Sharp
C. Agee
L.D. McFadden (sabbatical Fall, 08)
M. Elrick
G. Weissmann

INSTRUMENTATION AND FACILITIES
Z. Sharp
M. Ali
Y. Asmerom
C. Agee
C. Shearer
A. Brearley
L. Crossey
P. King

UNDERGRADUATE COMMITTEE
D. Gutzler
G. Weissmann
G. Smith
M. Nyman

COMPUTATIONAL FACILITIES
J. Galewsky
D. Gutzler
J. Connolly
M. Roy
P. Fawcett
T. Wawrzyniec

FACULTY PRODUCTIVITY ASSESSMENT
J.W. Geissman
M. Roy
K.E. Karlstrom
P. Fawcett
T. Fischer

COLLECTIONS COMMITTEE
B. Kues
G. Smith

GRADUATE ADVISOR
J. Selverstone

UNDERGRADUATE ADVISORS
G. Weissmann (Env. Sci)
M. Elrick (E&PS)
L.J. Crossey (E&PS and Env. Sci., Also Honors Advisor)
P. Fawcett (Env. Sci. Course Equivalency checks)

1 Committee Chair underlined.
LIBRARY LIAISON

B. Kues

VEHICLES

K.E. Karlstrom
P. Pascetti
A. Velardez

SAW ROOM

T. Wawrzyniec

ALUMNI NEWSLETTER EDITOR

B. Kues

ALUMNI RELATIONS

J. Galewsky
J. W. Geissman
T. Wawrzyniec

FACULTY REPRESENTATIVE TO CASWELL SILVER BOARD

J. Galewsky
APPOINTMENTS AND SEPARATIONS

APPOINTMENTS TO FACULTY

Paula Watt, Lecturer III

SEPARATIONS FROM FACULTY

Paula Watt, Lecturer III

SEPARATION FROM STAFF

Jaime Barnes, Post doctoral
David Draper, Research Professor
Eileen Embid, Editorial Specialist
Peng Li, Senior Research Scientist I, Ph.D.
Bryan MacFarlane, Field Research Assistant
Joya Tetreault, Post doctoral
II. ACTIVITIES, ACHIEVEMENTS, AND PLANS
INTRODUCTION

This annual report summarizes the activities, accomplishments, and plans of the Department of Earth and Planetary Sciences (E&PS), during the academic year 2008-2009. It also includes, when appropriate, some relevant information for the Institute of Meteoritics and Astromaterials Institute (IOM; Professor Carl Agee, Director and Full Professor in the Department), a Category II Institute in the College of Arts and Sciences that has been closely affiliated with the Department since 1967. Most details of faculty activities (Part III), including faculty, staff, and student publications, however, are derived from biographical supplements for calendar year 2008. Therefore, published papers, chapters, and other documents included in the report, for example, are only for that year. Because this is the only document that comprehensively summarizes the Department's history during the past year and it is used as a source of information by interested parties within and outside of the University, we continue to attempt to make it as complete as possible.

During academic year 2008-2009, the faculty of the Department of Earth and Planetary Sciences consisted of 21 regular tenured or tenure-track faculty, 4 Lecturers and 9 Senior Research Professors and/or Research and Research Associate Professors. In addition, 11 Ph.D.-level research scientists (five within IOM and one M.S. level research staff member) filled several non-faculty positions within the Department. Most of these individuals are scientific staff with specific responsibilities relating to analytical laboratories and departmental research activities. Also, the Department has five emeritus faculty members, four of them retain offices in Northrop Hall and are still actively engaged in scientific research. Finally, the Department has a large number of Adjunct Faculty, nearly all of whom have Ph.D.s and who are engaged in various collaborative research projects involving other faculty and staff members and graduate and undergraduate students. A few Adjunct Professors are retired, eminent scientists from other institutions and who spend parts of their post-retirement, productive years of their research careers at UNM. The Department reviews its Adjunct Faculty on an annual basis, and in many cases will remove Adjuncts from its list. We have also added three Adjunct Faculty over the past year. The Department faculty is thus augmented by many Earth and Planetary scientists, with Ph.D., or Master's degrees, who in some cases participate in teaching and advisement of graduate students, adding in important and beneficial ways to the research capabilities and scholarly reputation of the Department.

The permanent scientific staff in the Department and IOM also includes several technicians and Research Associates. The office administrative, clerical, and support staff also contribute vitally to the functioning of the Department and this cannot be overstated. Several other scientists affiliated with other institutions were in residence in the Department for periods ranging from weeks to the entire year, conducting research as visiting scientists and working with faculty and staff members. The names of all these departmental personnel are included in the first section of this report and in the Appendix.

FACULTY AND STAFF ACCOMPLISHMENTS

Instructional Activities

1. Student enrollments

Student enrollments in Department of Earth and Planetary Sciences courses during the 2008-2009 academic years, as indicated by total student credit hours (SCH), totaled 10,654 for regular courses, and 11,870 counting Natural Sciences Program courses (see Table below). These figures represent a continued modest increase from the 2005/06 academic year, when we saw the first year of overall student credit hour decline after six straight years of increases in SCH associated with courses offered in Earth and Planetary Sciences. These figures include academic year courses plus our two summer courses (E&PS-319L and 420L in early summer in 2009 as well as student credit hours generated by courses that are part of the now eight-year old Department degree program in Environmental Sciences (Env. Sc.). The Department's SCH figures for the past 12 years are given below.
<table>
<thead>
<tr>
<th>Year</th>
<th>SCH</th>
<th>SCH (with Natural Sciences Program)</th>
<th>% change from previous year regular</th>
<th>Inc. N.S.P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997-98</td>
<td>5882</td>
<td>6534</td>
<td>-6.7</td>
<td>+3.7</td>
</tr>
<tr>
<td>1998-99</td>
<td>5705</td>
<td>6777</td>
<td>-3.0</td>
<td>+3.7</td>
</tr>
<tr>
<td>1999-00</td>
<td>6464</td>
<td>7580</td>
<td>+13.3</td>
<td>+11.8</td>
</tr>
<tr>
<td>2000-01</td>
<td>6752</td>
<td>7812</td>
<td>+4.5</td>
<td>+3.1</td>
</tr>
<tr>
<td>2001-02</td>
<td>7041</td>
<td>8181</td>
<td>+4.3</td>
<td>+4.7</td>
</tr>
<tr>
<td>2002-03</td>
<td>8417</td>
<td>9953</td>
<td>+19.5</td>
<td>+21.7</td>
</tr>
<tr>
<td>2003-04</td>
<td>8705</td>
<td>10,061</td>
<td>+4.4</td>
<td>+2.1</td>
</tr>
<tr>
<td>2004-05</td>
<td>8930</td>
<td>10,190</td>
<td>+2.6</td>
<td>+1.28</td>
</tr>
<tr>
<td>2005-06</td>
<td>8653</td>
<td>9977</td>
<td>-3.10</td>
<td>-2.09</td>
</tr>
<tr>
<td>2006-07</td>
<td>8813</td>
<td>10,177</td>
<td>+1.8</td>
<td>+2.0</td>
</tr>
<tr>
<td>2007-08</td>
<td>9348</td>
<td>10,444</td>
<td>+6.87</td>
<td>+2.6</td>
</tr>
<tr>
<td>2008-09</td>
<td>10654</td>
<td>11,870</td>
<td>-13.9</td>
<td>+13.6</td>
</tr>
</tbody>
</table>

Over the past ten years, there has been an overall increase of some 87% (for E&PS courses only) since academic year 1999-00 and overall E&PS SCH productivity has returned to levels last observed during the late 1980s. In fact, the numbers of students in many of our core E&PS courses is at record highs, and continues to seriously tax our teaching facilities and resources. Notably, for the past several years we have increased, based on student demand, the number of lecture sections in Env.Sci. 101 (Blue Planet) and the corresponding laboratory section Env.Sc. 102L.

In the past several annual reports, we have emphasized the considerable increases in E&PS enrollments since 1999-00. These increases have occurred in part because of overall enrollment increases at UNM during this time period, although the rate of increase has fluctuated over the past few years. The percentage increase in SCH for Earth and Planetary Sciences is larger than the overall increases in SCH for both UNM as well as many components of the College of Arts and Sciences over this time period. The increases certainly reflect the increasing popularity of the Environmental Sciences 101 (Blue Planet) sections and associated laboratory course, Env. Sci. 102L. In fact, in the context of preparing our course teaching schedule for Fall, 2009, we faced the need to add yet another additional lecture section of Env. Sci. 101, and increased the number of Env. Sci. 102L sections to ten (all of which are presently completely full). Accordingly, in the report from four years ago, we also indicated that the Department very much appreciates receiving additional TA and GA support from the College (mainly associated with the "Success funds") to aid in the Department's academic mission and in recognition of the need for additional TAs and related support associated with the increased enrollments and new laboratory sections. The small decreases in student credit hour production we observed in the 2005-06 academic year (again, the first after six straight years of increases) seems most likely to reflect the overall slight downturn in UNM and College enrollments also observed during that academic year. In our recent reports, we emphasized that we were not overly concerned that this relatively small decrease was indicating the inception of a worrisome, longer-term trend. This past 2008-09 AY numbers are consistent with overall strong course enrollments over the past several years, and we believe that future increases in SCH in the Department of Earth and Planetary Sciences will reflect the general, national trend of greater interest in the Earth Sciences. The faculty does understand the importance of maintaining these enrollments, and when possible, attempting to increase them in measured and realistic ways.

2. Developments in Course Offerings

As always, the tenure-stream faculty continued to teach over 90 percent of the courses offered during academic year 2008-09. A small number of courses were taught by "Part-time Instructors", some of whom have or have had Adjunct Faculty status (e.g., Thomas Williamson (Dinosaurs and their World)). Lecturers, of course, have a strong affiliation with the Department, and include Dr. Aurora Pun (Physical Geology, Geologic Disasters, Coordinator for our 105L sections) and Dr. Tim Wawrzyniec (Physical Geology, Petroleum Geology, and New Mexico Field Geology). Other Lecturers (Dr. Matt Nyman and Ms. Amy Ellwein) are responsible for most of the courses taught in the Natural Science Program.

Several relatively new additions to our course offerings continue to have success. In the Spring of 2008, Dr. Laura Crossey offered a special 400 level course in Environmental Field Methods, a timely course needed by our
increasingly large group of Environmental Science majors. Dr. Rhian Jones also continued to offer a new course at the 400 level entitled Analytical Methods in Geochemistry. Both faculty members intend to use this experience as a basis for the development of formal, new courses essential to our curriculum. After an initial complete overhaul of a critical course in the undergraduate degree program, E&PS-433 (Statistics and Data Analysis), two years ago, Drs. Dave Gutzler and Mousumi Roy continued to develop a very well-subscribed, and completely redesigned and reorganized course. On the basis of their experience teaching this course two years ago, they continued to co-teach the course during the 2008-09 academic year and will do so in the 2008-09 academic year. Dr. Dave Gutzler also led a new graduate seminar (E&PS-548) on the topic of “drought”. This seminar proved to be quite popular amongst graduate students, not the least because of the highly timely nature of this topic, one of great interest to the good citizens of the State of New Mexico. Finally, Dr. Louis Scuderi and Dr. Tim Wawrzyniec taught a graduate level topics course in the use of GIS/Geopad technology for field geologic studies. The course was fully subscribed, and many of the graduate students continued to use geopads for their graduate research over the summer months. The course will be again taught in Spring, 2010.

The Department continues to assume responsibility for the Natural Sciences Program, which consists of a sequence of three courses integrating the Natural Sciences for College of Education students who will become K-9 teachers in New Mexico's public schools. This program provides potential public school teachers with solid training in science and in the effective teaching of science to younger students. In 2008-2009, xx classes were offered, again producing over xxx student credit hours, a significant contribution to the total SCH produced by the Department. The continuing integration of Natural Sciences Program and geoscience education into the Department is an important goal for the Department. Dr. Matthew Nyman, Lecturer III in the Department as the Natural Science Program Director, also continued to direct the operation of this program. So far, he has been successful in many respects developing additional courses in the Natural Science Program, helping develop important new contacts and collaboration at Sandia National Laboratory with key scientists, as well as helping to acquire new funding through grant proposals. Late in the 2006-07 academic year, a search was conducted for an additional Lecturer position in the Natural Sciences Program, and that position was filled in January, 2008, by Amy Ellwein, Ph.D., candidate in the Department of Earth and Planetary Sciences, who will be completing her Ph.D., in the 2009-10 academic year.

Notably, the Department very much looks forward to the completion of the Science and Math Learning Center in late 2010. Several members of the Department, including Professor John Geissman (current Chair), Professor Les McFadden (past Chair), Professor Gary Smith (past coordinator for our Physical Geology 105L labs), Professor Grant Meyer (coordinator for our Env.Sc. 102L labs), Dr. Aurora Pun (coordinator for our Physical Geology labs), and Dr. Matt Nyman and Ms. Amy Ellwein (coordinators for our Natural Science Program lab-based courses), have been involved in the planning process for the facility. We are very, very excited for the opportunity to begin teaching in the new facility!

3. Summer Course Offerings

During the early part of Summer, 2009, the Department conducted its 3-week Introductory Field Geology (E&PS-319) and Advanced Field Geology (E&PS-420) courses as well as E&PS 101, and E&PS 105L. The Field Volcanology Course (E&PS-453), which, historically, has been taught every other year, was not taught this past summer. It is unlikely that this course will be taught in Summer, 2010, as well.

Curriculum Changes and Outcomes Assessment

The only significant change in the E&PS curriculum in 2008-2009 was the addition of a well-subscribed graduate level course taught by Dr. Penny King, Senior Research Scientist in the Institute of Meteoritics and Professor Gary Smith on the nuts and bolts of “surviving” graduate school and beyond, with some level of emphasis on careers in the professoriate.

Continued plans for outcomes assessment occupied a considerable amount of time by several faculty in the Department, during the 2008-2009 academic year, in anticipation of a formal outcomes assessment program in place at UNM. The Department prepared comprehensive Goals/Objectives and corresponding Outcomes for ALL of its
programs (E&PS BS, E&PS BA, Env. Sci., B.S., and Graduate Program), and has provided numerous detailed (and accepted) examples of specific outcome assessment plans for each of the programs. The Department does continue to utilize many procedures adopted during the last effort by the University to develop such programs. For example, all graduate exams are formally evaluated with specific outcomes assessment goals in mind; and we continue to offer key courses for our seniors in both the conventional Geoscience as well as the Environmental Science Programs that are designed to fulfill "capstone course" goals. The Department conducted outcomes assessment for several of its General Education (UNM core) courses during the 2008-09 academic year.

Research and Publication

The faculty, research staff and students of the Department continued their high level of productivity in research in 2008-09. Research is an essential and fundamental function of the Department of Earth and Planetary Sciences at UNM, as it should be in any academic department at a research university. As we have repeatedly noted in past annual reports, the Department's status and respect within its discipline depends primarily on the quality and quantity of its research, and its collective ability to attract external funding for research activities as well as high-quality graduate students in its Graduate Program, just as a university's stature depends mainly on the scholarly activities of its entire faculty and associated Research Scientists and Research Professors. The highly favorable outcome of the external review of the Department in the 2003-04 academic year strongly reflects this. The Department anxiously awaits the outcome of the long-awaited NRC report on the rankings of graduate programs in the sciences. This report was due to be released in February, 2008, and, at the time of preparing this report, it appears that the NRC report may be released before December, 2009! Notably, with an essentially non-changing instructional and general (I&G) budget (thus decreasing in real dollars), overhead return funds to the Department continue to be used for a wide range of purposes to augment research activities in the Department. The 2008-09 year continued to see an unprecedented array of financial crises (i.e. beginning with the late August, 2007, announcement of the very large and growing debt in the Office of the Vice Provost for Research and Economic Development, OVPRED) and a complicated array of possible responses to these financial difficulties by the Central Administration. The Department of Earth and Planetary Sciences remains very concerned about a potential loss in overhead return to the Department. Part of the reason for this concern is the fact that the (partial) salaries of several key staff in the Department are paid using overhead return funds, a practice we were instructed to carry out by a previous Dean of the College of Arts and Sciences.

Our active research programs form an essential teaching tool in keeping undergraduate and graduate students up to date, in educating them not only about facts but also about how knowledge is gained, and (especially with graduate students) providing support for thesis/dissertation work and in the mentoring process of future geoscientists.

During calendar year 2008-09, members of the Department tenure-stream faculty produced over one hundred publications, and these are primarily scholarly papers in refereed journals and edited volumes, but they also include geologic maps and other important publications (see section III). Most of these publications are papers published in major national and international journals (also see University of New Mexico Faculty Publications and Creative Works, 2008). Department and IOM Research Scientists, Research Professors, and graduate students collectively also published a large amount of research (see The Annual Report of the Institute of Meteoritics, 2008). Department faculty, staff and students also were included as contributing authors on over 170 abstracts of papers presented at numerous professional meetings and conferences. Although publications by Department Adjunct faculty are not formally included in this report, many Adjunct faculty are also quite active with respect to publishing results of their research. Part 4 of Section III includes additional information concerning the research activities of some of our Adjunct faculty members.

As with the past several years, graduate students and several undergraduates participated significantly in the Department's publication effort (see section IV). Many refereed papers published in 2008-09, as well as those submitted this year, had student coauthors and students also contributed to many of the published abstracts based on presentations made at professional meetings. At the Geological Society of America meeting in Houston, over 15 students, including three undergraduates, presented their research; at the Fall American Geophysical Union meeting, in San Francisco, some 20 students, including three undergraduates, presented their research work. Numerous graduate
students also presented work at Sectional Meetings of the Geological Society of America and at the Spring Meeting of the New Mexico Geological Society. The Department always has a strong presence at the Fall Field Conference meeting of the New Mexico Geological Society, with several informal presentations being made by our faculty and students on the multi-day field based conference. The Department faculty continues to be strongly committed to involving students at both the graduate and undergraduate level in research (including providing financial support), to encourage them to present the results of their research through professional talks, and to publish the results of their research in appropriate venues. All of these activities will clearly play an important role in their preparation for an array of possible careers in the Earth Sciences. In terms of careers in the geosciences, two of our former PhD students, Jamie Barnes and Dan Breker, joined the faculty of the Jackson School of Earth Sciences at the University of Texas at Austin. Two of our students, Jack Grow and Tony Salem, took a different path and joined Shell Oil in Houston. Speaking of a different path, Leah Roberts joined the Peace Corps for a 27 month stint in Paraguay.

E&PS and IOM have and continue to be very successful in acquiring substantial funding from several external agencies in support of its research and teaching mission (see section III, part 3). Contracts and grant awards to faculty and staff in the Department of Earth and Planetary Sciences during 2008-09 totaled over $2.5 million, with over 45 active research grants held by faculty in Earth and Planetary Sciences. Also, research scientists and E&PS faculty in the Institute of Meteoritics were awarded over $1.5 million in funding associated with several grants, mostly associated with research supported by NASA and the NSF. During the 2006-07 year, in a combined effort with the School of Engineering, the Department was successful in obtaining funding ($675,000) from the National Science Foundation for a focus ion beam scanning electron microscope (FIB/SEM), which has been delivered and is now nearly fully operational in the Electron Microbeam Analysis Facility in Northrop Hall, the Director of which is Professor Adrian Brearley. This instrument represents a major step forward in obtaining state-of-the-art instrumentation for nanoscience and nanotechnology research on the UNM campus and opens up substantial new research opportunities in the areas of nanocharacterization, nanomachining and nanofabrication. The successful proposal with Professor Abhaya Datye, Chemical and Nuclear Engineering as Principal Investigator and coPIs Adrian Brearley (E&PS) and Zayd Lesemann, Mechanical Engineering was funded through the NSF Major Research Infrastructure Program. EPS scientists are participants on the two Stimulus-based MRI proposals that were submitted to the NSF over the 2009 summer.

UNM scientists in other Departments or Colleges/Schools often are awarded research grants and contracts that involve the utilization of E&PS analytical facilities, including the TEM, stable isotope, radiogenic isotope, analytical chemistry, and paleomagnetism laboratories in support of the research activities associated with those awards. This represents another important avenue by which E&PS researchers contribute to research and acquire external funding for UNM.

In addition to publications and grant/contract-supported research, the E&PS faculty and research staff also pursued numerous research projects during 2008-09 that were not externally funded or published upon during the year (see Section 3). Several E&PS faculty obtain support from the UNM Research Allocations Committee on a regular basis, and these seed research funds are greatly appreciated and most well-utilized. Eventually many of these creative works do ultimately receive funding following the second or even third time proposal requests are submitted, reflecting both improvement in the focus and/or overall quality of the proposal, or the availability or increase in funding in associated areas of NSF and other funding organizations, or both. In Spring, 2009, several NSF proposals were funded through the Federal Economic Stimulus program. Finally, it is essential for UNM administrators to recognize that the quality and long-term scientific impacts of research conducted by faculty, staff and students in the Department are not at all necessarily directly correlated to the size of the contracts and grants that support such research. Historically, E&PS faculty have understand the importance of producing IDC funds to the university, the College and the Department, but we also understand the even greater importance in the long term of the importance of the knowledge and understanding of nature and the degree to which we can impart this to our students. We hope that the UNM administration understands this, and hope that UNM does not follow the "lead" of other institutions of higher learning that have opted to place a premium on specific types of research as well as specific funding levels insofar as tenure, promotion and other important measures of achievement are recognized in academia.
Other Scholarly Activities

As reported in previous Annual Reports, most of the faculty and research staff participated widely outside the University in various professional activities at the state, national and international levels during 2008-2009. These activities include service on society committees and science review panels of governmental agencies, as well as participation in professional organizations, such as presenting talks and posters at national meetings, organizing and chairing symposia, leading field trips, and serving as officers. Such activities represent an important form of service to the profession, but also increase professional recognition, the opportunity for collaborative research, and leads to greater visibility for UNM and the creative work of its faculty. This participation is shown in sections III and IV.

Participation by the faculty and research staff as Editors, Associate Editors, and on Editorial Boards of national and international journals was substantial in 2008-09 as it has been in the past. For example, Dr. Karlstrom completed a four-year term as co-Editor of the Bulletin of the Geological Society of America, an international society of over 22,000 members. In addition, Dr. Geissman, who was the GSA Bulletin Editor for six years from 1995-01, is currently the Chief Science Editor for EOS, the weekly news journal of the American Geophysical Union, an international society of over 60,000 members. Several faculty are members of Journal Editorial Boards. Also, several faculty members participated in scholarly and professional activities in numerous foreign countries. Such activities help to advance UNM's reputation nationally and internationally.

University and Public Service

Service to the College, University and to the citizens of New Mexico is an important component of the Department's activities. E&PS Faculty members are heavily involved in different areas of service to the College, University and Community. A few selected examples of this service that illustrate the diverse nature of such service include: (1) Giving invited specialty talks to groups in the community (e.g., Indian Pueblo Cultural Center, New Mexico Native Plant Society, Rotary Club, Science Cafes) (2) Participating in radio programs broadcasting features involving diverse topics in the Earth and Environmental Sciences (e.g., KUNM and the New Mexicans for Science and Reason Talk Radio program), including global warming and the energy crisis in the hopes of educating New Mexico citizens about how eight years of totally failed federal administrative policies require immediate attention; (3) Preparing and submitting several, typically pro-science based articles as contributions to the Albuquerque Journal, including on global warming, energy sustainability, and the never-ending perception by less than intelligent individuals concerning the difference between faith and science, and many other major newspapers; and (4) Coaching youngsters in sporting activities to help promote healthy American values.

An important activity provided by the Department to the University and the public is maintenance (without direct University support) of two public museums, one devoted to geology and specifically the geology of New Mexico (minerals, rocks, fossils) (The Caswell Silver Family Museum) and the other to astromaterials (e.g., meteorites) (Institute of Meteoritics Museum). These museums are open each weekday, are free, and are visited by thousands of school children and adults each year. They are advertised in each issue of UNM Today. A free pamphlet provides information for a self-guided tour, and faculty and graduate students on occasion lead tours when arrangements have been made in advance. Thousands of recorded (group) visitors toured the Geology Museum in 2007-08; and many (unrecorded) individuals also visited the museum. These visitors include dozens of elementary, middle, and high school classes from around New Mexico, together with teachers and parents (see Appendix for a complete list). The Geology Museum and collections constantly receive donations of new materials, and donated funds are used to purchase several display-quality specimens each year. The Geology Museum was again represented by Dr. Gary Smith at the Annual Tucson Gem and Mineral Show, the nation's largest, during the academic year 2007-08. Our museums were highlighted in Dr. Mike Mares' "Linking Time, Place and Culture: The Museums and Collections of UNM" presentation on Monday, 1 October, 2007, as part of the UNM Connect celebration week.

Another important form of service the Department provides to the University is through assistance lent to the Institute for Medieval Studies. Research and other activities conducted by the Institute contribute in many important ways to the dissemination, publicizing and understanding of Earth, environmental and planetary sciences, both within
the University community and the public. In 2008-09, the Department was again pleased to help support and sponsor this historically very successful and educational lecture series.

The Department also maintains the Harding Pegmatite mine in southern Taos County, donated to UNM by Dr. Arthur Montgomery, as an unusual mineral-collecting locality and outdoor geological laboratory. Mr. Gilbert Griego, a Department staff member, is the long-time caretaker of the property. Over 1000 people visited the Harding property in 2008-09, and they came from all over the country (see Appendix). Among the visitors were mineralogy and field geology classes from several other universities, in addition to students from UNM. Former UNM Professor Rod Ewing, now at the University of Michigan, brings his Mineralogy class to the mine every Fall. Clearly, the Harding Mine is very well known to geologists and amateur rock hounds and mineral collectors, and in maintaining and operating it, the University and Department perform a notable service for the public. The Department welcomes visitors and voluntary contributions to help maintain this resource, but permission from the E&PS Department must be obtained before each visit. Working with the State of New Mexico, the Department and UNM are in the process of placing security gates on several of the mine entrances, for the sake of the safety of its visitors.

GENERAL DEPARTMENTAL ACTIVITIES

Facilities

Capital Improvements

Over the past few years, a number of major and minor capital improvements have taken place in Northrop Hall, although, as we continue to point out in these Annual Reports, additional upgrades are still clearly needed. In Spring, 2004, the College, with help from the UNM Physical Plant, supported the costs of purchasing and installing a backup electrical power generator for specific analytical research facilities in Northrop Hall. This system was installed in the Fall of 2005. With increasing need for a superior backup power generation system, the Department was able to upgrade this initial system in Spring, 2007, using funds provided by the College, Department, and Institute of Meteoritics. As noted in previous reports, the presence of such a system is crucial to Northrop Hall, as several times in the past few years, including in July, 2008, when our newly installed XRF instrument in the Analytical Geochemistry Laboratory was seriously damaged, unplanned power outages have caused serious damages to instruments in the Department’s laboratories at a cost of several thousand dollars and lost research and teaching time. The new Focused Ion Beam Microprobe is one of the latest large additions to the array of analytical facilities in the Department.

As first reported in the Annual Report from three years ago, recently departed Provost Reed Dasenbrock developed a plan to use State of New Mexico bond funds to construct a new building to house the “Science and Math Learning Center”. With the passage of the state bond issue, about $25,000,000 is available to support construction of a new multi-story building that will house the Department of Mathematics, and also freshman Chemistry laboratories, some Biology laboratories, and one large lecture hall and several computer-based classrooms. The Department of Earth and Planetary Sciences will have about 5000 square feet of space designated in this new building for the Natural Sciences Program laboratory/classroom, office space for the Natural Sciences Program, a laboratory/classroom for the E&PS Physical Geology lab (105L), and as a partly shared space with Biology, a laboratory/classroom for the Environmental Science Program labs (102L). The availability of this new space will go a long way towards relieving a rapidly increasing “space problem” in Northrop Hall that has been exacerbated over the past few years with growth of E&PS faculty, staff and laboratories. To be more specific, in Spring, 2009, Dr. Geissman established an ad hoc Long Range Planning Committee for the Department and asked the Committee, chaired by Dr. McFadden, to explore possible uses of the three spaces (rooms 114, 117, and 126) in Northrop Hall that would be "freed" to the Department with the completion of the Science and Math Learning Center. The Committee provided a report, along with a series of questions, to Dr. Geissman. Dr. Geissman answered the Committee’s questions and a full set of pertinent documents was provided to the entire E&PS faculty. At this point, we plan to convert room 114 into a dedicated student computer pod, room 117 into a teaching laboratory dedicated to our Earth History and Paleontology classes, but also that can be utilized by other courses (e.g., New Mexico Field Geology, Structural Geology, etc.), and room 126 into a much-needed graduate student office space area. The Department greatly appreciates the keen interest by the College of Arts and Sciences over the past two years in fostering the development of the Science and Math Learning Center.
Department was ecstatic to be able to participate in the official groundbreaking ceremony on 5 June, 2009. From a personal perspective, the author of this report is very much appreciative of the never-ending efforts of Dean Claiborne to see the project through to long-awaited initiation and completion (late Fall, 2010).

In 2008-09, no institutional requests for new equipment and major capital improvements were submitted, as no University-level funds were then available to support them.

We continue to upgrade the Department's facilities, including those directly related to teaching, as needed with available funds, from a number of sources. In 2008-09, the faculty voted on a proposal to utilize the annual College "Instructional Equipment Allocation funds to upgrade the Department's classroom instructional facilities with several new ceiling mounted digital projectors in teaching spaces and the acquisition of three new Mac computers for our Department computer lab and computer-based teaching space. The proposal was funded by the College, which we most appreciate.

Analytical Facilities

The Department and Institute of Meteoritics continue to maintain an array of outstanding and growing analytical facilities necessary to advanced research in many areas of the Earth Sciences. As mentioned above, these facilities are also utilized extensively by other departments, centers, and institutes on campus, as well as institutions outside UNM (e.g., the National Labs). Sustaining the operation and maintenance of the Department's analytical laboratories (mainly from grants and user fees) is for the most part successfully accomplished, but in some cases rather precariously. The costs of instructing students in the utilization of analytical facilities, service contracts and technician salaries is a persistent and usually growing drain, particularly on PI budgets.

As in several previous years, in 2008-2009, the Department used a part of its IDC return funds to help support successful cost-share proposals to acquire new equipment. One example is a recently successful proposal to the Instrumentation and Facilities Program of the Earth Sciences Division of the NSF by Dr. Tobias Fischer for a highly sophisticated gas chromatograph coupled with a quadrupole mass spectrometer. These instruments allow the measurement of volatiles (CO2, N2, CH4, H2S, hydrocarbons and noble gases) at concentrations in the parts per billion level. We will be able to determine volatile concentrations in volcanic emissions, the atmosphere, water samples of natural springs and ground waters as well as magmatic and metamorphic rocks. This laboratory is unique in that all these gases can be measured simultaneously. Results can be coupled with measurements of noble gas isotopes and stable isotopes to quantify compositions of gases as well as their sources. Applications in the fields of volcanology, environmental and atmospheric chemistry and biogeochemistry will open new opportunities for future research and funding.

As another recent example of the use of IDC return funds, the Department partially supported a major addition to the stable isotope laboratory. Spurned by a number of rapidly emerging research projects, the lab was in need of a large radius mass spectrometer in order to be able to analyze carbon monoxide (needs of Maya Elrick) and 17O (Rhian Jones, Adrian Brearley). The laboratory negotiated the purchase of 'used' instrumentation from the University of Iowa for the sum of $35,000. The instrumentation is valued at well over a half a million dollars if purchased new. The equipment was installed on the third floor of Northrop Hall in May, 2007, and has lived up to all expectations. The laboratory also received a gift from a private company of a VG mass spectrometer and some very worthwhile peripherals, such as microbalances, etc. valued at about $100,000. The stable isotope laboratory is now able to fill the needs of all current users, making analyses that could not have been done with previously existing equipment. In early summer, 2007, the existing XRF instrument in the Analytical Chemistry Laboratory was essentially destroyed when a water pipe above it burst. Senior Research Scientist Dr. Mehdi Ali was able to recoup a considerable part of the worth of the instrument by working with UNM Risk Management and the State. Additional funding for a replacement, state of the art Rigaku XRF unit was cobbled together from a number of sources, including the Caswell Silver Foundation, the Department of Earth and Planetary Sciences, the Department of Chemistry, the Department of Anthropology, and the College of Arts and Sciences. The new XRF unit was installed in May, 2008, and has received considerable use.

Recently, with Congressional funding to strengthen support for the Institute of Meteoritics, space in the lower level of Northrop Hall has been recently renovated into an entirely new research facility for Dr. Penny King, a new
Senior Research Scientist in the Institute of Meteoritics. Although E&PS faculty were, overall, concerned about the loss of teaching space in Northrop Hall, we collectively recognized that, in the long term, with the completion of the Science and Math Learning Center, a new, and adequately renovated space for teaching Earth History and other laboratory sections would be defined.

Additional new analytical facilities include a new instrument for the Radiogenic Isotope Geochemistry Laboratory, under the direction of Dr. Yemane Asmerom, recently added a Neptune MC-ICPMS instrument, which has dramatically expanded the research capabilities of the laboratory, which is housed on the third floor of Northrop Hall. A well-attended celebration of its installation took place in Spring, 2008. The stable isotope laboratory very recently obtained funding for a cavity ring-down laser spectrometer. This instrument simultaneously measures the oxygen and hydrogen isotope composition of water vapor with a precision equivalent to the finest conventional mass spectrometry techniques. It is relatively cost-efficient and easy to operate and maintain. It is field portable (if appropriate battery supplies are constructed) and will be used to better understand water - water vapor conversion and transport in the atmosphere in a very broad range of settings. The laboratory also will soon acquire an induction furnace, which will allow heating samples to extremely high temperatures while in a gas stream. This will be connected to the above system in order to be able to extract water from hydrous phases, which will then be fed through the cavity ring-down spectrometer.

In addition, and very importantly, IDC return funds are also used, as noted above, to help support salaries of very key staff members involved in support of the laboratories, Department computer network management and essential front office operations. Without these funds, these supported individuals may not remain with E&PS.

Computing Facilities

During 2008-09, the Department also used a substantial part of its general funding from the state to support faculty, staff and student use of its computers and network. Funds are used to support renewal of software licenses critical for both research and education (e.g., ARC-GIS) as well as new software applications. Our Department Computational Facilities Committee recognized the acute need to replace our very old large format plotter and for additional memory storage related to the Department server, and was fortunate to receive support from the College, in early Fall, 2008, to replace the plotter and obtain additional server memory. Through funds provided by the College last year, as stated above, we added three new Mac computers to our computer laboratory. In addition, we have utilized a modest amount of general funding to completely overhaul our Department website. We involved an outside consultant in part of this work, and thanks to the efforts of Mr. Jim Connolly, Computer specialist in the Department, Dr. Tim Wawrzyniec, Lecturer III, with strong computer skills, and Professor Joe Galewsky, Chair, Department Computational Facilities Committee, the website is nearing completion and should “go live” in October, 2009.

4. Teaching Facilities

One major upgrade to our teaching facilities in Northrop Hall took place during the 2007-08 year. In late May, 2007, outgoing chair Dr. Les McFadden, and incoming Chair Dr. John Geissman, completed and submitted a proposal to the Frank and Marie Gorham Foundation for funding to support the acquisition of ten (10) ruggedized portable computers (geopads) for field computational instruction in GIS-based activities, including digital mapping. The geopads and related software and hardware arrived in early Fall, 2007, and were installed and uploaded and their use is currently being supervised by Dr. Tim Wawrzyniec, Lecturer III in the Department. In Spring, 2008, Dr. Wawrzyniec and Professor Louis Scuderi taught a class in geopad use, which was fully-subscribed.

On a different note used at the end of the Spring, 2007, semester, the Department did lose a relatively well-used teaching space (room B-19) for Earth History and Paleontology laboratory sessions, as well as numerous small graduate classes and informal meetings.

The author of this report emphasizes, as above, that it is very safe to assume that the entire Department of Earth and Planetary Sciences looks forward to the completion of the Science Mathematics Learning Center and the
availability of three large, currently occupied spaces for renovation into educational and research facilities. The Department has taken our discussion of the future use of these spaces very seriously, as discussed above.

Recruiting Visits

The Department was not visited by any large companies in the petroleum and energy resource areas during the 2008-09 period. However, representatives from Shell Oil did request that we send several of our graduate students to Houston, for an all expenses paid geosciences graduate student “fair” in Houston in August, 2008. Two of our graduate students (Jack Grow and Anthony Salem) who participated in the fair were offered permanent jobs upon completion of their graduate degrees. Shell Oil has expressed interest in visiting the Department for recruiting purposes this academic year.

Professional Lectures given in the Department during the 2008-2009 academic year are listed below:

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Title of Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/29/08</td>
<td>John W. Geissman</td>
<td>Chair, E&amp;PS, UNM, Introduction of New and Returning Graduate Students, Faculty and Staff.</td>
</tr>
<tr>
<td>9/05/08</td>
<td>Chuck Chapin</td>
<td>New Mexico Bureau of Geology and Mineral Resources, “Interplay of Oceanographic and Paleoclimate Events with Tectonism during Middle to Late Miocene Sedimentation Across the Southwestern USA”.</td>
</tr>
<tr>
<td>9/12/08</td>
<td>Cindy Ebinger</td>
<td>University of Rochester, “Snap, Crackle, Pop: Rupturing Continental Lithosphere”.</td>
</tr>
<tr>
<td>9/19/08</td>
<td>Michael Joachimski</td>
<td>University of Erlangen, “Late Paleozoic Climate Evolution – Insights from Oxygen Isotopes in Biogenic Apatite”.</td>
</tr>
<tr>
<td>10/03/08</td>
<td>Mehdi Ali</td>
<td>Earth and Planetary Sciences, University of New Mexico</td>
</tr>
<tr>
<td>10/03/08</td>
<td>John Archuleta</td>
<td>Safety and Risk Services, University of New Mexico</td>
</tr>
<tr>
<td>10/03/08</td>
<td>Lowell White</td>
<td>Laboratory Chemical Hygiene and Silicosis/Asbestosis</td>
</tr>
<tr>
<td>10/10/08</td>
<td>Ralph Chapman</td>
<td>Los Alamos National Laboratory, “The Use of Virtual Fossils and Artifacts in Paleontology and Archaeology: A Boon to Research, Collections, and Public Programs”.</td>
</tr>
<tr>
<td>10/17/08</td>
<td>FALL BREAK</td>
<td>NO COLLOQUIUM</td>
</tr>
<tr>
<td>10/24/08</td>
<td>Glen Spinelli</td>
<td>New Mexico Tech, “Effects of Fluid Circulation in Subducting Crust on Seismogenic Zone Temperatures”.</td>
</tr>
<tr>
<td>10/31/08</td>
<td>Becky Flowers</td>
<td>University of Colorado, “Unroofing, Incision and Uplift History of the Southwestern Colorado Plateau From Apatite (U-Th)/He Thermochronometry”.</td>
</tr>
<tr>
<td>11/0/08</td>
<td>Mark Boslough</td>
<td>Sandia National Laboratories, “Airbursts from Asteroid and Comet Impacts”.</td>
</tr>
<tr>
<td>11/14/08</td>
<td>Mike Cosca</td>
<td>U.S. Geological Survey, Denver, “Significance of Texture, Composition, and Microstructure on Ar-Ar Ages: Insight from High Spatial Resolution UV Laser Analyses”.</td>
</tr>
<tr>
<td>11/21/08</td>
<td>Donna Jurdy</td>
<td>Northwestern University, Two Lectures: “Mars and Magnetism” and “Planetary Tectonics”.</td>
</tr>
<tr>
<td>11/28/08</td>
<td>THANKSGIVING</td>
<td>NO COLLOQUIUM</td>
</tr>
</tbody>
</table>
12/05/08 Peter Molnar University of Colorado, "Caswell Silver Distinguished Lecturer, "The Growth and Movement of Islands in Indonesia, El Niño, and the Ice Age".
12/12/08 Matt Saltzmann Ohio State University, "Evolution of the Marine Carbon Cycle During the Paleozoic".
1/23/09 Nancy McMillan New Mexico State University, "Trigger for Laramide Magmatism: Normal Subduction, Shallow-angle Subduction, or Structural Inheritance".
1/30/09 Ben Holtzman Columbia University, "Organized Melt, Seismic Anisotropy and Plate Boundary Dynamics".
2/06/09 John Platt University of Southern California, "Mechanics of Continental Transforms and the Active Tectonics of California".
2/13/09 Joe Meert University of Florida, "Rewriting the Proterozoic History of India".
2/20/09 Steve Laubach University of Texas, "How Faults in Sedimentary Rocks Open and Seal: Insights from Structural Diagenesis".
2/27/09 Terry Jordan Cornell University, "Co-Evolution of the Central Andes and Atacama Desert: Chickens and Eggs".
3/06/09 Maria Lane Department of Geography, University of New Mexico, Quest for Mars: Origins, Cross Currents, and the Early Role of the Earth".
3/13/09 Cliff Dahm Department of Biology, "University of New Mexico, "The California Bay-Delta Science Program".
3/20/09 SPRING BREAK NO COLLOQUIUM
4/03/09 Nathan Niemi University of Michigan, "Late Cenozoic Exhumation of the Greater Caucasus Mountains: Implications for Evolution of the Arabia-Eurasia Collision".
4/10/09 Peter Molnar University of Colorado, Caswell Silver Distinguished Lecturer, "The Growth and Movement of Islands in Indonesia, El Niño, and the Ice Age".
4/17/09 Cathy Snelson New Mexico Tech, "Exploring the Plumbing System of Erebus, Antarctica Via Controlled-Source Seismology".
4/24/09 Jonathan Payne Stanford University, "New Constraints on End-Permian Mass Extinction Scenarios from Calcium Isotopes".
5/01/09 Lynn Soreghan University of Oklahoma, "Ice in Equatorial Pangaea".
5/08/09 Undergraduates Caswell Silver Undergraduate Research Symposium
Introductions, University of New Mexico, Earth and Planetary Sciences
Opening Comments – Dr. Laura J. Crossey
Presentations of Completed Research Projects
Introductions by Project Advisor

2:20 pm Alexandra Kirk "Complex Alteration of Fe-Ni Metal in Meteorites." Advisor: Dr. Adrian Brearley.
2:35 pm John D. Nance "The Structural Evolution of the Tonala Shear Zone – A Multiply Activated, Fossil Plate Boundary Shear Zone, Chiapas, Mexico." Advisor: Dr. Tim Wawrzyniec.
As noted in the past Department Annual Reports, the Department is very fortunate to be financially and morally supported by a large group of active and enthusiastic alumni. As current Chairperson of the Department, I break from a bit of tradition and emphasize, to an even greater degree, how important alumni support of Department activities has been in the past, and must continue to be in the future. A key goal of the Department’s will be to enhance our outreach to our alumni. For the past seven years, I have been the Chair of my alma mater’s alumni advisory board, as part of a public institution of higher education with the largest public endowment in the nation. Alumni support is crucial to the lifeblood of an institution, and in a Department like Earth and Planetary Sciences, it makes, literally, all the difference in the world between a fair department and one that can truly compete, at all levels, with overall far better supported institutions across the nation. If I am Chair for four years or for eight years, I hope to be able to dedicate my most sincere efforts to make our alumni appreciated and cultivate that appreciation for the betterment of the Department of Earth and Planetary Sciences and thus the institution in general.

The Department continues to increase and improve contacts with alumni through gatherings at professional meetings, publication of a well-circulated Department newsletter (“News from Northrop Hall”) and through many personal and professional contacts. In addition, in early April, 2008, the Department hosted a celebration for three
emeriti faculty (Dr. Roger Anderson, Dr. Wolf Elston, and Dr. Lee Woodward), at which over 200 alums and many of their spouses returned to Northrop Hall for two days of geoscience talks, field geologic trips, an introductory welcoming reception in the Silver Family Museum, and a banquet at the Hilton Hotel. The Department continues to work closely with College Development staff, to engage in new activities related to development, and is very pleased to have a full Development staff for the College now in place. In addition, the Department is very pleased to have the opportunity to work with a geoscientist (Mr. John Welty) in the UNM Foundation! Individually and collectively, alumni (and other supporters of the Department) provide generous financial, advisory and moral support for many departmental activities, which contribute significantly to our success in our educational and research missions. In addition, their support provides the funds associated with over 20 scholarships, funds and endowments that enable the Department to provide financial support to over fifty undergraduate and graduates each year. Financial aid provided through these resources ranges from a few hundred dollars to full three-year graduate fellowships. Many tens of thousands of dollars are provided through funds such as the Alumni Fellowship, the Albert and Mary Black Family endowments and the Ernest Rich Fund. The largest amount of funding to the Department comes from the Caswell Silver Foundation for Earth Sciences, and the Kelley, Miossec, Wanek, Rhodes, Vann and Wengend Scholarships, discussed in more detail below. In June, 2008, the Department received a contribution of $100,000 from a donor in Los Alamos to establish the Ronald G. Boyd Memorial Endowment in Mineralogy. As noted in a previous section, the Department was the recipient in 2007-08 of another large donation from the Frank and Marie Gorham Charitable Foundation that supported the acquisition of 10 Geopads for computer-oriented field instruction and research purposes and has provided several research graduate student fellowships for the 2008-09 academic year. Frank Gorham, now deceased, was a long-time supporter of the Department. One of his sons, Tim Gorham, is also a Department alumnus, and it is in part through his recent efforts that these most recent generous gifts have been provided to the Department. Over the past year, thanks to the initiative of Tim Gorham, the Department has prepared a proposal, agreed upon by the entire faculty, to establish the Gorham Foundation Endowment to the Department, with a goal of $1M coming from the Gorham Foundation and that amount matched by other alumni and friends of the Department. Based on recent discussions with Tim Gorham and the Lawyer for the Gorham Foundation, it appears that the initial phase of this support will begin early in 2010. Mr. Bill Uher and Mr. John Welty are to be thanked for their tremendous efforts with this initiative.

The endowments in the UNM Foundation associated with the Department of Earth and Planetary Sciences continue to account for a substantial percentage of all endowments in the College of Arts and Sciences. The financial aid we are able to provide our students is augmented by other scholarships and other forms of aid acquired from institutions outside the University (e.g., the Geological Society of America, the New Mexico Geological Society, American Association of Petroleum Geologists) and funds from the University (e.g., SRAC; tuition waivers). A full summary of scholarships and fellowships received by Earth and Planetary Sciences students is presented in Part IV of this report.

Thanks to the efforts of Pat Gratton and several additional alumni who have maintained careers in the oil and gas industry, a long-standing tradition at the annual American Association of Petroleum Geologists is the “Rio Rats” alumni gathering. The Department will continue to provide a connection to the gathering each spring at the Annual AAPG meeting. In fact, Dr. Geissman was planning to attend the meeting in April, 2008, in San Antonio, but his trip had to be cancelled because of an urgent meeting concerning budgetary matters in the College of Arts and Sciences. The Chair could not attend the AAPG meeting in Spring, 2009, because he was teaching the Department’s introductory field geology course at the time. The Chair will make every attempt to participate in the 2010 AAPG meeting.

Caswell Silver Foundation

The most important source of alumni support to the Department is the Caswell Silver Foundation. Funds generated by the investments of the Foundation in 2008-09 provided full-time support, including stipend, tuition, medical insurance, and a research budget, for the Leon Silver/Vincent Kelley graduate student Fellows Lyman Persico and Amber Hawkins (currently, only Amber Hawkins is supported). The Foundation also subsidized over 50 percent of the travel expenses of faculty members participating in professional meetings. As noted repeatedly in previous Department annual reports, the faculty recognize that, via the Caswell Silver Graduate Fellowships as well as additional scholarship funds made possible by the Foundation (and funds from other alumni contributions), we
have had a far greater chance to attract some of the most highly qualified, academically capable graduate students, including those from underrepresented backgrounds, to the Department.

The Caswell Silver Foundation also supports the Caswell Silver Distinguished Lecturer series, which allows the Department to bring scientists of the stature of National Academy of Sciences Members for lectures and visits with faculty and students. Visits by Distinguished Lecturers are welcomed by the Department, as they provide opportunities to interact with some of the most distinguished and influential scientists in the country as well as to inform them of our department and the research and other academic activities we are pursuing. In Spring, 2009, the Department invited Dr. Peter Molnar, from the University of Colorado, Boulder, a highly distinguished and profoundly versatile geoscientist, who is currently devoting most of his research efforts to the relations between global tectonics and climate. The faculty, staff and students of the Department are very fortunate to have the chance to hear and interact with scientists of his stature, a chance we would not have without the very generous support of the Caswell Silver Foundation.

As in previous years, the Silver Foundation made possible two $900 Meritorious Staff Awards, presented to two outstanding non-academic staff members of the Department. These awards allow the faculty to express in a tangible way their deep appreciation for the efforts of the staff in contributing to the effective operation, advancement and well being of the Department. Recipients of these awards, presented at the Department's May 2009, Commencement Ceremonies, were Cindy Jaramillo (Administrative Assistant, Earth and Planetary Sciences) and Mike Spilde (Research Scientist III, Institute of Meteoritics).

Another very important function supported by the Foundation is the Caswell Silver Undergraduate Research Symposium, now held during the last week of classes. The most recent, The Eighth Annual Symposium was again very well attended, attracting the participation of many undergraduate majors conducting research in diverse areas of the Earth, Environmental and Planetary sciences.

In terms of Foundation activities, the Spring meeting of the Foundation Board was held in mid-April, 2009. It comes as no surprise that last year was a difficult one for the Foundation in terms of a substantial loss of net worth and the magnitude of annual return on investments, as was the case all over the world. Mr. Alberto Gutierrez, President of Geolex, and President of the Board, as well as his colleagues on the Board have done a masterful job of avoiding the worst case situations. As a point of information, the annual budget to the Department, as a result of the financial downturn, has gone from over $125K to less than $85K. The next meeting of the Foundation Board is on December 5, 2009.

**PLANS AND GOALS**

The relatively recent additions to the faculty of Dr. Gary Weissmann, Dr. Joe Galewsky, Dr. Matt Nyman (Lecturer III, Natural Sciences Program), Ms. Amy Ellwein (Lecturer III, Natural Sciences Program), and Dr. Tim Wawrzyniec have strengthened the Department in many important ways. As noted last year, the addition of Dr. Galewsky helps strengthen a program in the area of meteorology and climate dynamics that had only included Dr. Dave Gutzler. The Department hopes that at some time in the near future that it may have an opportunity to hire another faculty member in this scientific discipline, as we believe the Department and College are potentially well positioned to develop a strong research program in an area that would complement other strong programs in the College and elsewhere at UNM and that would be of particularly great significance in a drought-prone, poor, mostly arid state.

The importance of the addition of Dr. Nyman as Director of the Natural Sciences Program has been discussed in previous annual reports. Nevertheless, it would not be inappropriate to note again that the development of K-9 (on p. 10) teachers in the sciences (providing them with both content and effective pedagogy) may prove, in the long run, to be one of the most significant academic activities through which the Department aids citizens in the State of New Mexico. We welcome the further addition of Ms. Amy Ellwein, as Lecturer III, to the program during the 2007-08 year. Ms. Ellwein will complete her Ph.D., degree in Fall, 2009. There is simply no substitute for science literacy, and a nation with an increasing number of scientifically illiterate citizens (e.g., who believe that biblical creationism is an adequate explanation for biological diversity- a position taken by the country’s current president—or believe the Earth
to be 7000 years old) is a nation that will inevitably decline, and recent events in the United States are at least hinting at such a decline. Both Dr. Nyman and Ms. Ellwein have been and remain very active in the design review process for the new Natural Sciences laboratory/teaching space in the Science and Math Learning Center. The Natural Sciences Program is looking forward to moving into their new spaces in the SMLC in early 2011. Dr. Weissmann succeeded Dr. Mike Campana, who accepted a position as Director of a university-wide program at Oregon State University. As the Department elected to name, as of Fall of 2006, the Department's new Black Family Professor of Hydrogeology, a position partly endowed by funds donated to the Department by the Black Family, Interim Dean Norwood, after a series of discussions with the Chair and associated faculty discussions, formally endorsed a plan that would permit the Department to conduct a search for another hydrologist in academic year 2007-08. The search was concluded in late Spring, 2008, with the acceptance by Dr. David Bout, who was on the faculty at the University of Massachusetts, Amherst, of a hiring offer from the College. Dr. Weissmann served as the chair of the search committee. In consultation with Dr. Bout, the College agreed to defer his arrival/start-up date to January, 2009. Unfortunately, with the economic downturn, Dr. Bout was not able to sell his home in Massachusetts and his wife's future job position in Albuquerque (she is also a hydrologist) was lost, and we were informed of his decision to not come to UNM in late November, 2008. Our logical hope was that the addition of a second hydrologist would help the Department strengthen its hydrology program and serve to further improve ties with the Institution's Water Resources Program. We certainly hope that we will be able to search for a second hydrologist in the near future (Fall, 2010??). The fact that our initial search was successful reflects the efforts in academic year 2006-07 by an ad hoc Department committee that identified subdiscipline(s) in the general realm of hydrogeology that would most likely help it to develop a nationally strong program. We hope that our (future) emerging program will compliment the very strong hydrology program at New Mexico Tech (rather than foolishly attempt to compete with it, a seriously inappropriate strategy in largely publically funded university in a poor state).

The National Research Council (NRC) was engaged in conducting its decadal (±/-) national evaluation of doctoral programs at institutions of higher learning during AY 2006-07. The Department is excited about the ongoing evaluation, as the faculty firmly believe that during the past two decades the Department has progressively built a doctoral program in a much stronger research-oriented department that is, at the least, second to none in the “peer group” of institutions, established by the NM Commission of Higher Education, to which UNM is compared. Earth and Planetary Sciences may possibly be, when size and other appropriate factors are considered, in the upper quartile of institutions with programs in the Earth Sciences. As a matter of information, the response by E&PS Faculty was 100 percent. We look forward to learning the outcome of this comprehensive evaluation, which was, in principle, to be announced in February, 2008, but has been postponed until November, 2009, at the earliest. The Chair of the Department remains in close contact with Professor Amy Wohler!, Dean of the Graduate Studies program here, who played a tremendous role in organizing UNM’s response to the NRC evaluation.

It was our intent during the Spring, 2008, semester, to initiate a discussion of long-range plans for the Department, including but not limited to: future tenure-track hires in the context of long-term academic and research goals of the Department, the utilization of space in Northrop Hall to be made available upon completion of the Math/Science Learning Center, and the sustainability of our graduate program in terms of improving graduate student support. Because of a number of unexpected matters affecting the Department and the College, this discussion was postponed. A Department ad hoc long-range planning committee, which is not a standing committee of the Department, was constituted in Spring, 2009, and discussions concerning the utilization of space in Northrop Hall were conducted during the Spring semester, 2009, as noted above. This ad hoc committee will continue tackling other issues over the course of the 2009-10 academic year.
III. ACTIVITIES OF THE FACULTY AND RESEARCH SCIENTISTS

- Activities of Full, Associate and Assistant Professors
- Activities of Research Professors
- Activities of Senior Research Scientists and Staff
1. TEACHING ACCOMPLISHMENTS OF FACULTY AND RESEARCH STAFF

Carl Agee, Professor, IOM Director

Courses taught

Spring: E&PS 465/565 (enrolled 14/4)
Fall: E&PS 365 (enrolled 44)

Yemane Asmerom, Professor

Courses taught

Fall: E&PS 410/510 – Fundamentals of Geochemistry
     E&PS 203 – Resources, Environment and public policy

Spring: E&PS 101 – Physical Geology

Independent study

Euan Mitchell
Julian Dillon

Lab activities

Developmental work on the Neptune multi-collector.

Graduate students supervised:

Euan Mitchell (Ph.D.)
Julian Dillon (MS)

Graduate student committee

Anthony Salem (Ph.D.; second thesis chair)
Eileen Embid (MS) Progress
Sara Keller (exam committee)
Angela McLain (Ph.D.) Progress
Ryan Crow (Ph.D.) in progress
Owen Shufeldt (MS) in progress
Jake McDermott (MS) in progress

Lab training and consulting UNM (partial):

National and international visitors and collaborations
Adrian Brearley, Professor

Courses taught

Spring:
- E&PS 587 – Advanced Mineralogy (3 enrolled)
- E&PS 493 – Independent Study (1 enrolled)
- E&PS 551 – Problems (1 enrolled)
- E&PS 599 – Thesis (1 enrolled)
- E&PS 699 – Dissertation (2 enrolled)

Fall:
- E&PS301 – Earth Materials (40 enrolled)
- E&PS302L – Mineralogy Lab (3 enrolled)
- E&PS 491 – Problems (1 enrolled)
- E&PS 493 – Independent Study (1 enrolled)
- E&PS 495 – Senior Thesis (1 enrolled)
- E&PS 551 – Problems (1 enrolled)
- E&PS 599 – Thesis (1 enrolled)
- E&PS 699 – Dissertation (2 enrolled)

Advisement and thesis committees

M.S. Thesis Advisor and Committee Chair
Kristen Mullen

PhD Thesis advisor and committee chair
Jana Berlin
Rena Ford
Mark Tyra
Amber Hawkins (CoAdvisor with Jane Selverstone)

M.S. Thesis committee member
Hollis Kovach
Molly Wick
Ara Kooser
Steven Alardo

Ph.D. Thesis committee member
Laura Burkemper
Beth Nichols
Matt Dawson (Anthropology)

Senior Thesis
Alexandra Kirk
Laura J. Crossey, Professor

Courses taught

Spring:  
Env Sc 430 – Advanced Environmental Science (13 enrolled)  
Env Sc 530 – Advanced Environmental Science (4 enrolled)  
E&PS 519L – Selected Topics in Geochemistry (4 enrolled)  
E&PS 491 – Problems (1 enrolled)  
E&PS 493 – Independent Study (1 enrolled)  
E&PS 495 – Senior Thesis (1 enrolled)  
E&PS 551 – Problems (3 enrolled)  
E&PS 599 – Masters Thesis (1 enrolled)  
E&PS 699 – Dissertation (1 enrolled)  
Professional Project – MWR 598 (2 enrolled)

Summer:  
E&PS 420L – Advanced Field Geology (10 enrolled) w/KEK  
E&PS 520L – Advanced Field Geology (7 enrolled) w/KEK

Fall:  
E&PS 101 – How Earth Works (24 enrolled) w/KEK (Freshman Learning Community)  
E&PS 415 – Geochemistry of Natural Waters (13 enrolled)  
E&PS 515 – Geochemistry of Natural Waters (9 enrolled)  
E&PS 519L – Selected Topics: Geochem Modeling (1 enrolled)  
E&PS 491 – Problems (1 enrolled)  
E&PS 493 – Independent Study (1 enrolled)  
E&PS 495 – Senior Thesis (1 enrolled)  
E&PS 551 – Problems (3 enrolled)  
E&PS 599 – Masters Thesis (4 enrolled)  
MWR PP – Professional Project (1 enrolled)

PhD Committee

Matthew Kirk (Chair, 2008)

PhD Committee member:

Angela McLain, Sean Connell, Ann Ollila, Ryan Crow  
Kendra Maas (Biology, 2008), Ondrea Hummell (Biology),  
Miguel Santisteven (Biology)

MS Committee, chaired

Jan Curtis (MWR, 2008), Eileen Embid, Elizabeth Promo,  
Jessica Lopez Pearce, Amy Williams  
Brandi Cron, Ara Kooser

MS Committee member:

Catrina Johnson, Sara Mustafa Chudnoff (MWR),  
Ryan Crow (2008), Mousavi Aliyer (Chem)  
Kristen Mullen, Andy Darling, Owen Shufeldt, Jake McDermott,  
Jody Weikart, Megan Green (2008, NAU)
Undergraduate Sr. Thesis/Research Supervision

Brandi Cron (Biology, 2008), Stephen Teet (Envi Sci, 2008),
Joshua Gallegos (Envi Sci, 2008)

Undergraduate REU Mentoring Sevilleta LTER

Christine Waters (UTEP; summer 2008)

Graduate Students supported with my extramural grants

Matthew Kirk (PhD: RA supplement)
Ara Kooser (MS: 0.25 FTE RA Fall 08)
Ryan Crow (PhD: 0.5 FTE RA w/KK)
Mel Strong (PhD: GK-12 Grant Fellowship Spring 08, Summer 08)
Tony Salem (PhD: GK-12 Grant Fellowship Spring 08, Summer 08)
Leah Johnson (PhD: GK-12 Grant Fellowship Spring 08, Summer 08)
Jessica Lopez Pearce (MS: GK-12 Grant Fellowship Spring 08, Summer 08, Fall 08)
Karen Michelson (PhD: GK-12 Grant Fellowship Fall 08)
Bethany Theiling (PhD: GK-12 Grant Fellowship Fall 08)
Stephanie Yurchyk (MS: GK-12 Grant Fellowship Fall 08)
Brandi Cron (MS: AMP BD Grant Fellowship Fall 08)
Eileen Embid (0.2 FTE RA supplement)
Amy Williams (0.2 FTE RA supplement)
Zabe Premo (0.2 FTE RA supplement)

Undergraduate (10-15 hrs per week/research support)

Brandi Cron (Biology)
Also 6 minority undergraduates from A&S & Engineering (STEM) with Alliance for Minority Participation funding.

Maya Elricl<, Associate Professor

Courses taught

Spring: Earth History – (35 students)
E&PS 544 – Carbonate Sedimentology-Stratigraphy (7 enrolled)

Fall: E&PS 304 – Sedimentology-Stratigraphy (12 enrolled)

Advisement

E&PS Undergraduate Advisor

PhD Advisor

Bethany Theiling-PhD
Stephanie Yurchyk-MS
Zach Wallace-MS
Thesis committee

John Rissetto, PhD (Anthropology)

Exam committee

Beth Nichols (PhD-advisor 2nd topic)

Senior thesis advisor

Levi Lemintino

Amy Ellwein, Lecturer III, Natural Science Program

Taught 5 sections of Environmental Science (NTSC263L), incorporated a new textbook, developed all labs, lectures, activities, and fieldtrips.

Rated within the top 10% of instructors and courses at the University of New Mexico on ICES and IDEA forms.

Two students enrolled for problems credits (EPS 491), Spring 2009. This one-credit problems course for two elementary education majors in the Dual Licensure Program, College of Education consists of two parts. Research project 1: participate in Project BudBurst (http://www.windows.ucar.edu/citizen_science/budburst/), which recruits citizen scientists to assist a national phenology network. When these students become teachers, they can use this science project in their own classrooms. Research project 2: the preservice teachers research the use of science notebooks in elementary classrooms and write a report. The objective is to give the students a tool they can use to do authentic inquiry with their future elementary students.

Will teach 400-level NTSC field course for elementary and middle school teachers, June 2009

Peter J. Fawcett, Associate Professor

Courses taught

Spring: ENV SCI 101 – The Blue Planet (156 enrolled)
E&PS 439 – Paleoclimatology (32 enrolled)
E&PS 599 – Thesis Research (1 enrolled)

Fall: E&PS 436/536 – Mathematical Modeling in the Geosciences (9 enrolled)
E&PS 551 – Problems (1 enrolled)
E&PS 599 – Thesis Research (1 enrolled)

Graduate Students Supervised:

Catrina Johnson (M.S.)
Christy Laudadio (M.S. – co-advisor with Louis Scuderi)
Justin Dodd (PhD – co-advisor with Zach Sharp)
Postdoctoral Fellows Supervised:

Gonzalo Jimenez-Moreno (PhD, University of Granada, Spain)

Graduate Thesis Committees:

Ph.D.: Natalie Dawson (Biology), James Huika, Linda Donohoo-Hurley, John Hurley, Ginny Rust, Mel Strong, Bethany Theiling, Mark Tyra, Kate Zeigler
M.S.: Zach Wallace, Andy Yuhas

External Examiner:

PhD: Anne Ollila

Tobias Fischer, Associate Professor

Courses taught

Spring: E&PS 101 – Introduction to Geology
        E&PS 252 – Volcanoes
        E&PS – Calderas Seminar

Fall: E&PS 101 – Introduction to Geology
      E&PS 450/550L – Volcanology

Post-Doc supervised

Dr. Jaime Barnes supervised with Sharp funded by L'Oreal and NSF through June, 2009.

Graduate Students supervised

Karen Prade, MS funded by BRIDGE Fellowship, 2 years
Jody Weikart, MS 1 year RA 1 year TA
Danielle Lord, MS 1 year RA, 1 year TA,
J. Maarten DeMoor, PhD RA/TA combination.

Graduate Committee

Above students and
Euan Mitchell, PhD
Ashley Edelman, MS
Zabe Premo, MS
Julian Dillon, MS

Exam Committee

Above students
Joseph Galewsky, Assistant Professor

Courses taught

Spring:  
EnvSc 101 – The Blue Planet (160 enrolled)  
E&PS 522 – Fluid Mechanics (11 enrolled)

Fall:  
Research semester

Thesis/Exam Committees

PhD Advisees: John Hurley, Leah Johnson  
PhD Committees: Caitlin Callahan, Justin Dodd (advisor for 2nd Ph.D. proposal) Mel Strong, Brian Yanites (student at the University of Colorado, Boulder), James Hulka  
MS Committees: Sarah Keller

John W. Geissman, Chair and Professor

Courses taught

Spring:  
E&PS 490 – Presentations (18 enrolled)  
E&PS 310L – New Mexico Field Geology (24 enrolled)

Summer:  
E&PS 319L – Introductory Field Geology (32 enrolled) (w/G. Meyer)

Fall:  
E&PS 490 – Presentations (17 enrolled)  
E&PS 401/501 – Coordinator, Department Seminar

Graduate students supervised:

Kate Zeigler, PhD  
Linda Donohoo-Hurley, PhD  
Jenn Boyd, PhD, Anthropology (co-advised)  
Sean Connell, PhD (co-advised)  
Travis Naibert, MS  
Jack Grow, MS  
Stephanie Mason, MS  
Andrea Daman, MS, Lehigh University

Exam committees

Ashley Edelman

Graduate Students financially supported:

Linda Donohoo-Hurley  
Kate Zeigler  
Travis Naibert  
Jack Grow
Course Development

Continued to modify/improve undergraduate field geology course (E&PS 319L), with Professor Meyer.

Undergraduate Research Advising

Nicolas George
Nicole Wilson

Graduate Theses Completed

Kate Zeigler, PhD, Spring, “Paleomagnetism and magnetostratigraphy of the Upper Triassic Chinle Group, Chama Basin, north-central New Mexico”

David Gutzler, Professor

Courses taught

Spring:
- E&PS 433 – Data Analysis Statistics (17 enrolled)
- E&PS 436 – Climate Dynamics (15 enrolled)
- E&PS 536 – Climate Dynamics (8 enrolled)
- E&PS 495 – Senior Thesis (1 enrolled)
- E&PS 699 – Dissertation (1 enrolled)

Guest lectures:
- Hydroclimate research lecture to UNM Water Resources Program students (Feb 1.)
- Climate change lecture, E&PS 566 (Feb 11.)
- Climate change lecture, UHON 302 (Mar 4.)

Fall:
- E&PS 436 – Climate Dynamics (8 enrolled)
- E&PS 536 – Climate Dynamics (14 enrolled)
- E&PS 493 – Independent Study (2 enrolled)
- E&PS 551 – Problems (1 enrolled)
- E&PS 699 – Dissertation (1 enrolled)

Supervision of graduate students:

M. Strong (Ph.D.)
S. Keller (MS)

Other graduate thesis committees:

M.S.: C. Laudadio, R. Levine, D. Lord, A. Yuhas

Ph.D.: A. Ellwein, J. Dodd, J. Hulka, J. Hurley, L. Johnson (E&PS)
- J. Linford (Physics)
- T. Kennedy (Biology)
Supervision of undergraduates:

P. Higgins (EnvSc senior thesis, graduated 5/08)
L. van Alst (E&PS senior thesis, in progress Fall 08)
T. Robbins (EnvSc senior thesis, in progress Fall 08)

Rhian H. Jones, Associate Professor

Courses taught

Spring: E&PS 400 – Analytical Methods in Geochemistry (11 enrolled)
Fall: E&PS 513 – Planetary Materials (9 enrolled)

Student advisement

Ph.D. students:
Jana Berlin (co-advisor)

M.S. students:
Hollis Kovach - Defended September 2008
Molly Wick

Undergraduate students:

Linda Dreeland
Committee member for:
Rena Ford (Ph.D.)
Mark Tyra (Ph.D.)
Megan Duncan (M.S.)

Exam committees:
Jessica Lopez (M.S.)

Karl E. Karlstrom, Professor

Courses taught

My course load in 2008 consisted of 5 courses (three undergraduate courses, one 400/500 level course, and one 500 level course) plus a Problems course involving a weekly research group meeting. One of the undergraduate courses was team taught as an overload (the Freshman Learning Community 101 course). Given my GSA Bulletin editorship, which carries a 1 course per semester release time, this gives an adjusted equivalent teaching load of ~6 courses for 2008 using the departmental "fair share" workload policy.

Spring: E&PS 307L – Structural Geology (19 enrolled)
E&PS 526 – Advanced Structural Geology (5 enrolled)
E&PS 599 – Masters Thesis (2 enrolled)

Summer: E&PS 420L/520L – Advanced Field Geology (17 enrolled) w/L. Crossey

Fall: E&PS 310 – New Mexico Field Geology (23 enrolled)
E&PS 101/105 – Introduction to Geology (24 enrolled) w/L. Crossey
Students supervised:

In 2008, my structure/tectonics research group consisted of 1 Ph.D. and 4 M.S. students (one of whom is transitioning to a PhD). 1 MS student, Ryan Crow, completed his MS in 2008. I meet regularly with each student.

Tony Salem (Ph.D.) started in Fall 2005, he came from Arizona State University. His PhD project involves a tectonic study of the Maria Fold and Thrust Belt. His expected completion date is Summer 2009. Funding is from a departmental TA, the G K-12 grant (to Scott Collins and Laura Crosse) and supplemented by my research grants.

Ryan Crow (MS, PhD) started his MS in Fall 2005. He came from University of Colorado and is working on the Quaternary volcanic and tectonic geomorphic history of western Grand Canyon. He completed his MS degree in Spring 2008. Funding was a mixture of TA support (1/3) and the Trail of Time NSF grant. He started the PhD program in Fall 2009.

Darling, Andy (MS), expected 2010, Evaluating Neogene uplift and denudational history of the Colorado Rockies using river profiles and incision records

Shufeldt, Owen (MS), expected 2010, Crystal shear zone of Grand Canyon and detrital zircons of the turbidites in Grand Canyon

McDermott, Jake (MS), expected 2010, Gneiss Canyon shear zone of Grand Canyon and Nd analysis of mafic and ultramafic rocks in Grand Canyon

Chairman of Thesis Committee for 2008

Tony Salem
Ryan Crow
Owen Shufeldt
Jake McDermott
Andy Darling

Member on thesis committees in 2008

Eileen Embid
Rob Sanders (New Mexico Tech)
Jessica Lopez-Pierce
Amy Williams
Brandi Cron
Mike Doe (Colorado School of Mines)

Undergraduate thesis advisor

Dylan Rose-Coss
Thomas Sower
Brandon Dixon
Steve Brown
Barry S. Kues, Professor

Courses taught

Spring: E&PS-101 (60 enrolled)  
        E&PS-411 (7 enrolled)

Fall:  E&PS-101 (118 enrolled)  
        E&PS-250 (14 enrolled)

M.S. exam committees:

Amy Williams  
Ara Kooser

Grant A. Meyer, Associate Professor

Courses taught

Spring: Env.Sci. 101 - The Blue Planet  
        E&PS 516 - Topics/Fluvial Geomorphology

Summer: E&PS 319 - Introductory Field Geology (w/J.W. Geissman)

Fall:  E&PS 481/581L - Geomorphology and Surficial Geology and Lab  
        Env.Sci. 330 - Environmental Systems

Coordinator for Env.Sci. 102L. The Blue Planet Labs, Fall and Spring semesters (7 and 8 sections).

Dissertations and Theses Advised

Current Advisees: Lyman Persico (MS 2006, current PhD), Ben Swanson (PhD), Rebekah Levine (MS)  
Co-advising: Carolyn Domrose (MS) with Les McFadden  
Committee membership: Debra Bryan, Sean Connell, Amy Ellwein, Nina Lanza (PhD)  
Leah Roberts, Devin Gaugler, Nick Engdahl, Ashley Edelman, Michelle Olson (MS)  
Scott Worman, Anthropology (PhD).

Leslie D. McFadden, Professor

Courses taught

Fall:  Sabbatical leave

Spring: Administrative Leave

Guest Lecturer:

ANTH 375/575 Archeology Field Research - applications of soils in archeological studies.
Community and Regional Planning 470/570 - Semiarid lands Development, Planning and Restoration
Community and Regional Planning (Department of Architecture and Planning) - Relevance of Soil geomorphic and ecologic studies in NE Arizona to research in landscape ecology and Holocene climate change.

Graduate Students Supervised or Co-supervised

Angela McLain (Ph.D.)
Amy Ellwein (Ph.D; co-advised with L. Scuderi)
Carolyn Domrose (M.S.)
Devin Gaugler (M.S.)
Leah Roberts (M.S.)
Debra Bryan (Ph.D.)
Dan Breecker (Ph.D., co-advised with Z. Sharp)

Ph.D. Committees

Bob Powers (Dept of Anthropology)
Ben Swanson
Lyman Persico

Matthew Nyman, Assistant Professor/Lecturer

Courses taught

Fall: NS 261L - Physical Science (21 enrolled)
NS 400 (online) – Earth Systems Science for Educators (3 enrolled)

Spring: NS 261L – Physical Science (37 enrolled)
E&PS 491 – Problems (1 enrolled)

This problems course was developed for a College of Education pre-service teacher who required 1 more science credit for a science endorsement. The focus of the project was on assessing multi-disciplinary courses; that is, courses that integrate science instruction with other disciplines.

Summer: Natural Science 400 (online) – Earth Systems for Educators

Victor Polvak, Senior Research Scientist

Provides faculty, staff, graduate students, undergraduate students, and other visitors with proper instruction on the use of our Radiogenic Isotope Lab. Provided training and assistance to three visiting researchers, one visiting graduate student, three visiting undergraduate students, and seven departmental graduate students.

Aurora Pun, Adjunct Assistant Professor

Courses taught

Spring: E&PS 101 – How Earth Works (95 enrolled)
E&PS 101 – How Earth Works (100 enrolled)
E&PS 115 – Geologic Disasters (23 enrolled)
E&PS 105L – Physical Geology Lab coordinator (128 enrolled)

Summer:
E&PS 101 – How Earth Works (23 enrolled)

Fall:
E&PS 101 – How Earth Works (77 enrolled)
E&PS 101 – How Earth Works (26 enrolled)
E&PS 105L – Physical Geology Lab coordinator (136 enrolled)

Mousumi Roy, Associate Professor

Courses taught

Spring:
- E&PS 527 – Introduction to Geophysics (5 enrolled)
- E&PS 427 – Introduction to Geophysics (2 enrolled)
- PHAST 327 – Intro to Geophysics (2 enrolled)
- E&PS 533 – Statistics and Data Analysis in Earth Science (6 enrolled)
- E&PS 551 – Problems in Geophysics (1 enrolled)

Fall:
- E&PS 522 – Geodynamics (5 enrolled)
- E&PS 551 – Problems in Geophysics (1 enrolled)

Post-docs supervised

Joya Tetreault

Students supervised

Caitlin Callahan (Ph.D., RA support)
Kirsten Sanders (Ph.D., TA)

Other research group members supervised

Nicolas George (UNM undergraduate; provided support)
Mark Fleharty (provided partial support for scientific programming)
Adam Ringler (UNM graduate student)

Thesis/Exam Committees

PhD Defense: A. Ringler (UNM Mathematics and Statistics)
PhD Exam committees: L. Hurley, K. Hutchins, N. Lanza, K. Sanders, L. Burkemper
MS Defense: J. Grow, T. Naibert
MS Exams committees: M. Halick, S. Mason

Louis A. Scuderi, Associate Professor

Courses taught:

Spring:
- E&PS 300 – Geographic Information Systems (25 enrolled)
- E&PS 522 – Geopads (10 enrolled)
Fall: Env. Sc. 101 – The Blue Planet (105 enrolled)

Students Advised, Committee Chair

MS Students (all funded with external grants):
Christine Laudadio, MS
Michelle Olsen, MS
Danielle Lord, MS

PhD Students (all except Ellwein funded with external grants):
Andy Yuhas, PhD
Amy Ellwein, PhD
James Hukla, PhD

Committee Membership

Devin Gaugler, MS
Carolyn Domrose, MS
Elizabeth Nichols, PhD
Ann Ollila, PhD
Anthony Salem, PhD

Anthropology Committee Membership

Roberto A. Herrera, Ph.D.
Luke Kellett, PhD.

Engineering/Computer Science Committee Membership

Janakiramanan Ramachandran, PhD Completed F08

Jane Silverstone, Professor

Courses taught:

Spring: E&PS 303L – Igneous and Metamorphic Petrology (20 enrolled)
E&PS 551 – Problems (1 enrolled)
E&PS 599 – Masters thesis (1 enrolled)

Fall: E&PS 101 – How the Earth Works (85 enrolled)
E&PS 421/521 – Metamorphism (11 enrolled)
E&PS 495 – Senior thesis (1 enrolled)
E&PS 599 – Masters thesis (1 enrolled)

Undergraduate students supervised

Will Woodruff
Noel Gill
Graduate students supervised

Melissa Halick, MS (joint with Z. Sharp)
Amber Hawkins-Whitaker, PhD (joint with A.J. Brearley)
Karen Michelsen, PhD

Thesis and dissertation committees (in addition to students listed above)

Jana Berlin, PhD
Caitlin Callahan, PhD
Rena Ford, PhD
Jack Grow, MS
Euan Mitchell, MS, PhD
Travis Naibert, MS
Molly Wick, MS
Stacey Chambliss, PhD Anthropology
Connie Constan, PhD Anthropology

Zachary Sharp, Professor

Courses taught

Spring: E&PS 405 – (1 enrolled)
         E&PS 505 – (7 enrolled)

Fall: Env. Sci. 101-001 – (182 enrolled)
      Env. Sci. 101-002 – (156 enrolled)

Postdoctoral Fellow supervised

Jaime Barnes (2007-2009)

Graduate Students supervised Major advisor

Mel Strong (Ph.D.) w/ Dave Gutzler, 2003-
Justin Dodd (PhD) w/ Peter Fawcett, 2006-
Leah Johnson (PhD) w/ Joe Galewsky, 2007-
J. Maarten DeMoor (PhD) w/ Tobias Fischer and Penny King, 2008-
Melissa Halick (M.S.) w/ Jane Selverstone, 2007-

Exam Committee member

Kristen Mullen (MS), Kareen Prade (MS)
Jody Weikert (MS), Jana Berlin, Ph.D.
Rena Ford, (Ph.D.), Debra Bryan (Ph.D)
John Hurley, (Ph.D.), Amber Hawkins (Ph.D.)

Outside PhD Examiner

Chris Fraser, Biology, Tim Lowry (advisor)
Gary A. Smith, Professor

Courses taught

Spring:  
E&PS 333 – Environmental Geology (34 enrolled)  
E&PS 482L/582L – ANTH 482L/582L (19 enrolled)  
E&PS 551 – Problems (1 enrolled)  
E&PS 699 – Dissertation (1 enrolled)

Fall:  
E&PS 201L – Earth History (35 enrolled)  
E&PS 491 – Problems (2 enrolled)  
E&PS 599 – Master’s thesis (1 enrolled)  
E&PS 699 – Dissertation (1 enrolled)

Student Advisement

Ph.D. Student Advised  
Sean Connell

Ph.D. Dissertation and/or Comprehensive Examination Committee  
Matt Kirk  
Julie Sanchez (Educational Psychology)  
J. Maarten DeMoor, Ph.D. committee

M.S. Student Advised  
Ashley Edelman

Timothy Wawrzyniec, Research Scientist

During the calendar year, I was responsible for teaching E&PS 310: New Mexico Field Geology, and the creation of two new class offered as upper level topics courses. During the Spring term, co-created the class “Geopads Workshop”. The class was offered to any E&PS student who had successfully completed 6 credits of field camp. The purpose of the class was to introduce digital mapping techniques and the use of Microsoft OneNote and ESRI ArcGIS for organizing, and documenting geologic field observations. The course enrollment was limited to 10 students and featured the use of the departments collection of tablet PCs. During the Fall term, Dr. Wawrzyniec offered introductory petroleum geology. The class had 21 students from a broad spectrum of backgrounds; the only pre-requisite was E&PS 100 or equivalent. The latter was well received by the students and featured visits from industry professionals including the former President of AAPG (Pat Gratton, UNM Alum).

Gary Weissmann, Associate Professor

Courses taught:

Spring: EnvSci. 101 – Developed materials for student with visual impairment  
(125 enrolled)

Fall:  
EnvSci. 101 – Developed additional materials for 4 students with visual impairments (168 enrolled)  
E&PS 462/562 – (25 enrolled)
Graduate Students Advised

Ginny Rust (MS/PhD student)
Beth Nichols (PhD student)
Nick Engdahl (MS student)
Michelle Olson (MS student)

Graduate Student Committees

Stephanie Yurchyk (MS)
Bethany Theiling (PhD, 2nd proposal advisor)
Andy Yuhas (PhD), Marti Frisbee (PhD-NMT)
2. PUBLICATIONS DURING THE CALENDAR YEAR 2008-2009
(E&PS tenure-track Faculty are underlined; ** = research scientists; * = students)

**Refereed Journal Papers and Chapters in Edited Volumes**

Compressibility of water in magma and the prediction of density crossovers in mantle differentiation

C.B. Agee

Static compression of hydrous silicate melt and the effect of water on planetary differentiation

C.B. Agee

The Fe-C system at 5 GPa and implications for Earth's core


Speleothems

Y. Asmerom

Age and evolution of the Grand Canyon revealed by U-Pb dating of water table-type speleothems

V.J. Polyak**, C. Hill and Y. Asmerom

Response to Comments on the "Age and Evolution of the Grand Canyon Revealed by U-Pb Dating of Water Table-Type Speleothems"

V.J. Polyak**, C. Hill and Y. Asmerom

U-series dating

Y. Asmerom

Caribbean chronostratigraphy refined with U-Pb dating of a Miocene Coral


Mineralogy, aqueous alteration and primitive textural characteristics of fine-grained rims in the Y791198 CM2 carbonaceous chondrite: TEM observations and comparison to ALH81002.

L.J. Chizmadia* and A.J. Brearley

A TEM study of thermally modified Comet 81P/Wild 2 dust particles by interactions with the aerogel matrix during the Stardust capture process.

Characterization of micron-sized Fe,Ni metal grains in fine-grained rims in the Y-791198 CM2 carbonaceous chondrite: Implications for asteroidal and preaccretionary models for aqueous alteration.
L.J. Chizmadia*, Y. Xu, C. Schwappach and A.J. Brearley

Oxygen Isotopes in Chondritic Components.
H. Yurimoto, A.N. Krot, B.-G Choi, J. Aleon, T. Kunihiro and A.J. Brearley

Molecular Characterization of the Diversity and Distribution of a Thermal Spring Microbial Community using rRNA and Functional Genes

Effect of saline groundwater upwelling on iron and manganese cycling in the Rio Grande floodplain aquifer
Applied Geochemistry, v. 24, p. 426-437 (2009)

CREST Experiment Probes the Roots and Geologic History of the Colorado Rockies
The Outcrop, v. 38, p. 6-11 (2009)

C-isotope stratigraphy and paleoenvironmental changes across OAE2 (mid-Cretaceous) from shallow-water platform carbonates of southern Mexico
M. Elrick, R. Molina-Garza, R. Duncan and L. Snow

Millennial- and centennial-scale vegetation and climate changes during the Late Pleistocene and Holocene from northern New Mexico (USA)
G. Jiménez-Moreno, P.J. Fawcett and R.S. Anderson
Quaternary Science Reviews, v. 27, p. 1448-1452 (2008)

Chemical evolution of thermal waters and changes in the hydrothermal system after the November 2002 eruption in the Papandayan volcano (West Java, Indonesia)
A. Mazot, A. Bernard, T.P. Fischer, S. Inguaggiato and I.S. Sutawidjaja

Hydrogen isotopes in Mariana arc melt inclusions: implications for subduction dehydration and the deep-Earth water cycle
A.M. Shaw, E. Hauri, T.P. Fischer, D.R. Hilton and K.H. Kelly

Evolution, transfer and release of magmas and volcanic gases: an introduction
G.F. Zellmer, T.P. Fischer and C-H Chen

Fumarole compositions and mercury emissions from the Tatun Volcanic Field, Taiwan: Results from real time measurements and direct sampling techniques

Chlorine isotope variations across the Izu-Bonin-Mariana arc
J.D. Barnes**, Z.D. Sharp and T.P. Fischer
Aqueous and isotope geochemistry of mineral springs along the southern margin of the Tibetan plateau - Implications for fluid sources and regional degassing of CO₂


Volatile fluxes (H₂O, CO₂, N₂, HCl, HF) from arc volcanoes

T.P. Fischer


Orographic Clouds in Terrain-Blocked Flows: An Idealized Modeling Study

J. Galewsky


Climate Over Landscapes


Rain shadow development during the growth of mountain ranges: An atmospheric dynamics perspective,

J. Galewsky


Stratigraphic, Volcanic, and Anisotropy of Magnetic Susceptibility Data bearing on the source and transport direction of mid-Tertiary ash flow tuffs, Candelaria Hills area, west-central Nevada

M.S. Petronis and J.W. Geissman


Evolution and strain reorganization within late Neogene structural stepovers linking the central Walker Lane and northern Eastern California Shear Zone, western Great Basin

J.S. Oldow, J.W. Geissman and D. Stockli


Paleomagnetism and geochronology of sills of the Poe Mountain area, southwest Montana: Implications for the timing of fold and thrust belt deformation and vertical axis rotations along the southern margin of the Helena salient

S.S. Harlan, J.W. Geissman, C.J. Schmidt and S.C. Whisner


Paleomagnetism of Proterozoic mafic dikes from the Tobacco Root Mountains, Southwest Montana

S.S. Harlan, J.W. Geissman and L. Snee

Precambrian Research, v. 163, p. 239-264 (2008)

Anisotropy of magnetic susceptibility, paleomagnetic, and petrographic data bearing on the emplacement of the Western Granite, Isle of Rum, NW Scotland: Insights into the origin and emplacement of felsic magma bodies

M.S. Petronis, B. O'Driscoll, V.R. Troll, J.W. Geissman and C.H. Emeleus


40Ar/39Ar dating links Albuquerque Volcanoes to the Pringle Falls excursion and the Geomagnetic Instability Time Scale

B.S. Singer, B.R. Jincha, B.T. Kirby, J. W. Geissman and E. Herrero-Bervera


Slow and fast deformation in the Dora Maira Massif, Italian Alps: Pseudotachylites and inferences on exhumation history

M.S. Zechmeister, E.C. Ferre, M.A. Cosca and J.W. Geissman

US CLIVAR Drought Predictability Research
D. Legler, D.S. Gutzler and S. Schubert
CLIVAR Exchanges, 13(1), 33-34 (2008)

Atmospheric simulations of the 2004 North American Monsoon Circulation (NAMAP2)
D.S. Gutzler and 19 co-authors
CLIVAR Exchanges, 13(2), 6-8 (2008)

Model for tectonically driven incision of the less than 6 Ma Grand Canyon
K.E. Karlstrom, R. Crow*, L.J. Crossey, D. Coblentz and J. van Wijk

Informal geoscience education on a grand scale: the Trail of Time exhibition at Grand Canyon

History of Quaternary volcanism and lava dams in western Grand Canyon based on LIDAR analysis, $^{49}$Ar/$^{39}$Ar dating, and field studies: Implications for flow stratigraphy, timing of volcanic events, and lava dams
R. Crow*, K.E. Karlstrom, W. McIntosh, L. Peters and N. Dunbar

Assembly, configuration, and break-up history of Rodinia: a synthesis

A feather from the Upper Cretaceous (lower Campanian) Point Lookout Sandstone, San Juan Basin, New Mexico
T.E. Williamson, B.S. Kues, G.S. Weissmann, T.A. Stidham and *S.L. Yurchyk

Geology of the southern Gila Wilderness, Second-day road log from Silver City to Lake Roberts via San Lorenzo
G.H. Mack, B.S. Kues, K.A. Giles and V.T. McLemore

Paleontology and age of the Pennsylvanian Oswaldo and Syrena Formations
B.S. Kues

Early geological studies in southwestern and south-central New Mexico
B.S. Kues

The Mountains of New Mexico, by Robert Julyan, photographs by Carl Smith
B.S. Kues

The influence of bedrock weathering in the response of drainage basins and associated alluvial fans to Holocene climates
M.C. Eppes and L.D. McFadden
Dendrogeomorphically derived slope response to decadal and centennial scale climate variability: Black Mesa, Arizona, USA

L. Scuderi, L.D. McFadden and J. McAuliffe

Aspect controls on hillslope geomorphology and implications for slope evolution, northeastern Arizona

B.N. Burnett*, G.A. Meyer and L.D. McFadden

Late Holocene records of fire in alluvial fan sediments: fire-climate relationships and implications for management of Rocky Mountain forests

J.L. Pierce and G.A. Meyer
International Journal of Wildland Fire 17, p. 84-95 (2008)

Relative size of fluvial and glaciated valleys in central Idaho

B.E. Amerson, D.R. Montgomery and G.A. Meyer


Changes in fire activity since the Last Glacial Maximum: an assessment based on a global synthesis and analysis of charcoal data


A refractory Ca-SiO-H_2O_2 vapor condensation experiment with implications for calciosilica dust transforming to silicate and carbonate minerals.


Origin and formation of iron-silicide phases in the aerogel of the Stardust mission.


A deep metastable eutectic iron-aluminate

F.J.M. Rietmeijer**, A. Pun** and J.A. Nuth III

Natural variations in comet-aggregate meteoroid compositions.

F.J.M. Rietmeijer**
Earth, Moon, and Planets, v. 102, p. 461-471 (2008)
Understanding the comet Wild 2 mineralogy in samples from the Stardust Mission.
F.J.M. Rietmeijer **

Carbon in meteoroids: Wild 2 dust analyses, IDPs and cometary dust analogues.
A. Rotundi and F.J.M. Rietmeijer**

A comparison of chemistry and dust cloud formation in ultracool dwarf model atmospheres.
Ch. Helling, A. Ackerman, F. Allard, M. Dehn, P. Hauschildt, D. Homeier, K. Lodders, M. Marley, F. Rietmeijer**, T. Tsuji and P. Woitke P.

Comparing Wild 2 particles to chondrites and IDPs.

Microtextural constraints on the interplay between fluid-rock reactions and deformation.
A. Ault* and J. Selverstone

MODIS-derived NDVI Characterisation of Drought-Induced Evergreen Dieoff in Western North America.
A. Yuhas* and L.A. Scuderi

Two chloride sources in soils of the McMurdo dry valleys, Antarctica
H. Bao, J.D. Barnes**, Z.D. Sharp and D.R. Marchant

Stable isotope ($\delta^{18}$O, $\delta^{2}D$, $\delta^{37}$Cl) evidence for multiple fluid histories in mid-Atlantic abyssal peridotites (ODP Leg 209)

A field and laboratory method for monitoring the concentration and isotopic composition of soil CO$_2$
D. Breecker* and Z.D. Sharp

Seasonal bias in the formation and stable isotope composition of pedogenic carbonate in modern soils from central New Mexico, USA
D. Breecker*, Z.D. Sharp and L.D. McFadden

Cl-derived argon isotope production in the CLICIT facility of OSTR reactor and the effects of the Cl correction in $^{40}$Ar/$^{39}$Ar geochronology
P.R. Renne, Z.D. Sharp and M.T. Heizler

Late Holocene storm-trajectory changes inferred from the oxygen isotope composition of lake diatoms, south Alaska
C.J. Schiff, D.S. Kaufman, A.P. Wolfe, J. Dodd* and Z.D. Sharp
Comment to “Chlorine stable isotopes and halogen concentrations in convergent margins with implications for the Cl isotopes cycle in the ocean” by Wei et al.**; a review of the Cl isotope composition of serpentinites and the global chlorine cycle

Z.D. Sharp and J.D. Barnes**

Annual Editions
Z.D. Sharp

A unique glimpse into asteroidal melting processes in the early solar system from the Graves Nunatak 06128/06129 achondrites

First-day questions for the learner-centered classroom
G.A. Smith

Describing the dimensionality of geospatial data in the earth sciences – Recommendations for nomenclature

Major structural elements of the Miocene section, Burgos Basin, northeastern Mexico
J.J. Hernandez-Mendoza, M.V. DeAngelo, T.F. Wawrzyniec and T.F. Hentz

Miocene Chronostratigraphy, paleogeography, and play framework of the Burgos Basin, southern Gulf of Mexico

Books Authored

The Paleontology of New Mexico
B.S. Kues
University of New Mexico Press, 428 p. (2008)

Book Chapters and Book Monograph

Natural variations in comet-aggregate meteoroid compositions.
F.J.M. Rietmeijer**

Carbon in Meteoroids: Wild 2 dust analyses, IDPs and cometary dust analogues. Rotundi and F.J.M. Rietmeijer**
Notes, Extended Abstracts, and Other Publications

Proposed Bushveld scenario: impact, mantle upwelling, meltdown, collapse
W.E. Elston

Breccias and geological setting of the Santa Fe, New Mexico, USA, impact structure. Houston
E.L. Tegtmeier, H.E. Newsom, W.E. Elston and McElvain
Lunar and Planetary Institute Contribution 1423, no.3090

The ~28 Ma Bursum cauldron, viewed from Aldo Leopold Vista and Holt Mountain, in Geology of the Gila Wilderness and Silver City Areas (G. Mack, J. Witcher, V.M. Lueth, editors)
W.E. Elston

Tectonic elements of the San Lorenzo area: Emory cauldron, Mimbres fault zone, Mimbres half-graben, in Geology of the Gila Wilderness and Silver City Areas (G. Mack, J. Witcher, V.M. Lueth, editors)
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Role of the Santa Rita-Hanover axis in the development and preservation of the Chino ore body, in Geology of the Gila Wilderness and Silver City Areas (G. Mack, J. Witcher, V.M. Lueth, editors)
W.E. Elston and M.J. Aldrich

When batholiths exploded: The Mogollon-Datil volcanic field, southwestern New Mexico, in Geology of the Gila Wilderness and Silver City Areas (G. Mack, J. Witcher, V.M. Lueth, editors)
W.E. Elston

Science Teacher Training: the Role of Universities
M.W. Nyman, A.L. Ellwein, L.D. McFadden and J.W. Geissman
EOS, Transactions, American Geophysical Union, v. 89, n. 50, p. 514 (2008)

http://serc.carleton.edu/teacherprep/courses/UNM-Geobotany.html, peer-reviewed web contribution.
A.L. Ellwein and T. Lowrey
Geobotany

Talking Makes a Difference
M.W. Nyman

Understanding the comet Wild 2 mineralogy in samples from the Stardust Mission
F.J.M. Rietmeijer

Challenges and results of real comet dust analyses: The Stardust mission
F.J.M. Rietmeijer
DUSTER – The collection and analyses of solid aerosols in the stratosphere
Proc. 18th ESA Symposium on European rocket and balloon research programmes and related research, Visby (Sweden), 3-7 June 2007, ESA SP-647, 225-230 (2008)

An experimental study of phyllosilicate modification in comets during perihelion could be relevant to ferric iron-rich layer silicate formation at the Martian surface.
F.J.M. Rietmeierr and K. Thiel
Workshop on Ground Truth from Mars: Science Payoff from a Sample Return Mission, April 21-23, 2008

Surface Waves Across the TA: an Integrated Seismic and Geodynamic Analysis of Mantle Deformation Beneath California
J. Gaherty, P. Chen, M. Roy, J. Tétrault and L. Zhao
IRIS Meeting (2008)

A new approach to evapotranspiration modeling using MODIS imagery inputs
L.A. Scuderi
International EOS/NPP Direct Readout Meeting, Bangkok, Thailand (2008)

Image Processing of Outcrop Lidar Scans for Use in Heterogeneity Models

Satellite Sensor Data: Real-time Data Processing Activities at the University of New Mexico Center for Rapid Environmental Assessment and Terrain Evaluation
J. Vande Castle, L.A. Scuderi and P. Kindilien**

An Extremely Late Die State, 1830 JR-3 Dime.
L. Scuderi, L., and Meaney, R.,
John Reich Collectors Society Journal 57, 6-11 (2008)

Die Sinking and Bulges on 1814 JR-2 and JR-3 Bust Dimes.
L. Scuderi

Representations of Outcrop Heterogeneity from Lidar Imagery for Groundwater Modeling
E.M. Nichols*, G.S. Weissmann, T.F. Wawrzyniecc**, L.A. Scuderi, J. Frechette** and B. Theiling*

Where Do Meanderbelts Form in Modern Continental Sedimentary Basins
G.S. Weissmann, A.J. Hartley, G. Nichols*, L.A. Scuderi, M. Olson*, H. Buehler** and R. Banteah**

Changing our View of Aggradational Fluvial Systems – The Distributary Fluvial System (DFS) Paradigm
G.S. Weissmann, A.J. Hartley, G. Nichols*, L.A. Scuderi, M. Olson*, H. Buehler** and R. Banteah**
AGU Fall 2008 Meeting, San Francisco (2008)
Abstracts

Possible extended hyper aridity during the late Pleistocene in the SW USA from speleothem data
Y. Asmerom, V.J. Polyak**, and S.J. Burns

A Florida speleothem record snapshot of late Pleistocene and mid-Holocene climate change
J. Polk, P.E. van Beynen and Y. Asmerom

Florida speleothem records variable intensity of teleconnections during Late Holocene in subtropical North America
P.E. van Beynen, Y. Asmerom, V.J. Polyak**, L. Soto and J.S. Polk

1,340 year long Late Holocene stalagmite stable isotope records from the Yucatan Peninsula, Mexico
AGU Fall Meeting, PP13C-1481 (2008)

Advances in high-precision U-series analyses using MC-ICPMS
V.J. Polyak** and Y. Asmerom
Federation of Analytical Chemistry and Spectroscopy Societies, abstract # 524

Holocene Increase in the Bay Branch of the Monsoon Inferred From δ18O of Speleothems From Central India
M.G. Yadava, R. Ramesh, Y. Asmerom and V.J. Polyak**

High-resolution record of the H4 event from a Puerto Rico speleothem

Role of fluids in melt generation in the Cascade arc; constraints from U-series data from Central Oregon
E.C. Mitchell* and Y. Asmerom

Incision history of the Rio Salado and implications for uplift history of the Jemez Mountains
T. Sower, D. Rose-Cose, K.E. Karlstrom, L.J. Crossey, Y. Asmerom and V.J. Polyak**
New Mexico Geology, v. 30, no. 2, pp.63-64 (2008)

Petrologic and Chemical Effects of the Onset of Aqueous Alteration on the Matrices of CR Chondrites: GRA 95229.
N.M. Abreu and A.J. Brearley

Unraveling the effects of aqueous alteration on primary nebular alteration on primary nebular materials: Electron microbeam study of matrices of CR chondrites
N.M. Abreu* and A.J. Brearley

Effect of Thermal and Aqueous Alteration on the Composition of Monocarboxylics Acids in Carbonaceous Chondrites.
M.R. Alexandre, Y. Wang, Y. Huang**, A.J. Brearley and C.M. O'D Alexander
Fe/Mn Systematics of Chondrule Olivine: Significant Differences Between Type I: Chondrules in CO, CR, and Ordinary Chondrites
J. Berlin*, R.H. Jones and A.J. Brearley

Determining Bulk Chemical Compositions of Chondrules by Electron Microprobe: Modal Recombination versus Defocused Beam Analyses.
J. Berlin*, R.H. Jones, A.J. Brearley and M.N. Spilde**

Amorphous Carbon-rich Grains in the Matrices of the Primitive Carbonaceous Chondrites, AL
A.J. Brearley

A.J. Brearley

A.J. Brearley
EOS (2008)

Element Exchange Between Matrix and a CAI in the Allende Meteorite.
R. Ford* and A.J. Brearley

Experimental analysis of Arsenic mobility in iron and sulfate reducing environments
Geochimica et Cosmochimica Acta 72, A475 (2008)

Using ArcGIS for correlating multi-technique micro-spatial analytical data: A case study of early solar system carbonates in a carbonaceous chondrite
M.A. Tyra* and A.J. Brearley
EOS, (2008)

Sinkholes in southeast New Mexico; profiling the geochemical, hydrological and microbial character of sinks along the pecos river at bitter lake national wildlife refuge, Roswell, New Mexico
Z.E.A. Premo* and L.J. Crossey

Relationships between temporal variations in ground water chemistry and micrometeorological fluxes along the middle Rio Grande of New Mexico
S. Teet, L.J. Crossey, J. Cleverly and J. Thibault

Aqueous geochemistry of the springs and wells of the Sevilleta National Wildlife Refuge; Evaluating hydrologic pathways and microbiology
A.J. Williams*, L.J. Crossey and K.E. Karlstrom
New Mexico Geological Society Spring Meeting; Abstracts, New Mexico Geology 30(2):64 (2008)
Hypothesis for epeirogenic uplift above the Jemez lineament: Is Neogene doming recorded by river profiles and terraces?
AGU Fall Meeting

Comparing carbonate-depositing hydrothermal systems along the MAR at Lost City hydrothermal field and along the Rio Grande rift in the southwestern US: Geochemistry, Geomicrobiology and Mineralogy
AGU Fall Meeting (2008)

Investigation of the Biogenic Origin of Cave Pool Precipitates in the Guadalupe Mountains, NM Using Extracted Phospholipids and Other Biomarkers
A. Kooser*, L.J. Crossey and D. Northrup
AGU Fall Meeting (2008)

An Aqueous Geochemical and Hydrologic Study of the Springs and Wells of the Sevilleta National Wildlife Refuge,
A.J. Williams* and L.J. Crossey
AGU Fall Meeting (2008)

Microbial Communities of Terrestrial Springs in Extensional Settings of the Western U.S.A.
C. Takaes-Vesbach, L.J. Crossey, K.E. Karlstrom and J. Hall
AGU Fall Meeting (2008)

An Assessment of Surface Water/Groundwater Interactions and Water Quality in Bluewater Creek,
J. Curtis, L.J. Crossey, B. Thomson, T. Ward and E. Huffman
New Mexico, National Ground Water Association (2008)

Deep groundwater upwelling affects metal cycling in the Rio Grande floodplain of the Socorro Basin
UNM Student Water Symposium, Albuquerque, NM (2008)

Investigating the timing of Late Ordovician cooling and glaciation using oxygen isotopes of conodont apatite
M. Elrick, M., Tyra*, S. Leslie and V. Atudorei**

The Rio Grande Rift in Mexican perspective
W.E. Elston

Coupled Warming and Drought in the American Southwest During Long mid-Pleistocene Interglacials (MIS 11 and 13)

Interannual Variability of Seasonally Influenced Playa Lake Inundation in Northern Mexico: Possible Analogs for Wetter Holocene Climates
C.K. Laudadio*, P.J. Fawcett and L.A. Scuderi

Oxygen Isotopes Calibration Study of Modern Diatoms in Freshwater Environments: Implications for Biogenic Silica as a Paleoclimate Proxy
J.P. Dodd*, Z.D. Sharp and P.J. Fawcett
AGU 89 (53), Fall Meet. Suppl., Abstract PP51C-1517 (2008)
Novel Insights to the Factors Controlling Monsoon Precipitation in Southwestern US From a mid-Pleistocene Lake Sediment Record, Valles Caldera, Northern New Mexico
L. Cisneros-Dozal, Y. Huang, J. Toney, J. Heikoop, J. Fessenden, P.F. Fawcett and S. Anderson

Volatile chemistry of the 2007 to present explosive eruption of Olitoloyo Lengai volcano
J.M. DeMoor*, T.P. Fischer, P.L. King, Z.D. Sham, A.M. Shaw and F. Mangasini

Gravity sliding and secondary deformation within the Huckleberry Ridge Tuff and subjacent Pliocene units,
Fremont County, Idaho, USA
G. Embree, J.W. Geissman, R.W. Clayton and M. Millard

Paleomagnetic data from Upper Cretaceous red beds, Northwest Vietnam (song Da Terrane), and their bearing on
the extrusion history of Indochina and deformation along its margins
J.W. Geissman, N. Pho, B.C. Burchfiel and S. Magneto
Paleomagnetism of the Todos Santos Formation in the Maya Block, Chiapas: Preliminary Results
A. Godinez-Urban, R.S. Molina-Garza, A. Iriondo and J.W. Geissman

Paleomagnetic data bearing on the evolution of the Walker Lane Belt transfer zone from mid-Miocene to Present: An investigation of the inferred southern and eastern boundaries
J.S. Graw*, J.W. Geissman and J.S. Oldow

Paleomagnetic and AMS results from two layered mafic laccoliths in north-central Montana
D.K. Holm, J.W. Geissman, T.J. Naibert* and N.K. George*

Magnetic stratification and the internal structure of layered intrusions
S.M. Maes, E. Ferre and J.W. Geissman

New paleomagnetic data from the Quaternary Bandelier Tuff: Implications for the tectonic evolution of the Rio Grande Rift
S.N. Mason, A. Sussman, J.W. Geissman, C. Lewis, B. Oliva-Urchia, E. Schultz-Fellenz J. Gardner

Deformation of Late Miocene plutons along the Tonala Shear Zone: A relict plate boundary in the eastern Tehuantepec region

Comparison of Anisotropy of magnetic susceptibility (AMS) and anisotropy of anhysteretic remanent magnetization (AARM) in intrusive igneous rocks
T.J. Naibert*, J.W. Geissman, D.K. Holm and S. Muggleton*

Progressive strain reorganization in Late Neogene structural stepovers, Central Walker Lane, western Great Basin
GRA 06129: A meteorite from a new asteroidal geochemical reservoir or Venus?

Paleomagnetism, rock magnetism, and magnetic mineralogy of the Eocene Disang Group, Changeling area, Arunachal Pradesh, northeast India
A. Uddin, J.W. Geissman, J.N. Sarma and T.J. Naibert*

Magnetostratigraphy of the Upper Triassic Chinle Group and implications for the age and correlation of Upper Triassic strata in North America
K.E. Zeigler* and J.W. Geissman

Atmospheric simulations of the 2004 North American Monsoon circulation: NAMAP2 [contributed]
D.S. Gutzler and 19 co-authors
NOAA Climate Prediction Program for the Americas PI meeting, Silver Spring MD, September 2008
U.S. Drought statistics based on persistent seasonal climate anomalies [contributed]
D.S. Gutzler
NOAA Climate Diagnostics and Drought Prediction Workshop, Lincoln NE, October 22, 2008.

Trace elements in aluminum-rich chondrules from the Mokoia CV chondrite
R.H. Jones and M.D. Norman

Determining bulk chemical compositions of chondrules by electron microprobe: Modal recombination versus defocused beam analyses
J. Berlin*, R.H. Jones and A.J. Brearley
Microscopy and Microanalysis (2008)

Making the most of small extraterrestrial samples: Chemical and isotopic information obtained from multiple microbeam techniques
R.H. Jones
Microscopy and Microanalysis (2008)

Bulk compositions of chondrules and the nature of chondrule precursor materials
R.H. Jones
71st Annual Meeting of the Meteoritical Society (2008), Abstract #5263 (2008)

Geologic Cross Section of the North American Plate near 36° Latitude, Part I: Western U.S. from the Pacific Oceanic Crust to the Mid-Continental

Abandonment of Unaweep Canyon ~1 Ma and the Effects of Transient Knickpoint Migration, Western Colorado

Geologic Cross Section of the North American Plate near 36° Latitude, Part II: Atlantic Ocean Crust to 99° W Longitude
Geological Society of America Abstracts with Programs, 251-10 (2008)

Colorado River system of the southwestern U.S.: analysis of the longitudinal profile, differential incision, and hypothesis for dynamic uplift and rapid incision in the last 6 Ma: T11C-1896
K.E. Karlstrom, E. Kirby, S. Kelley, A. Aslan, W. Ouimet, D. Coblentz and J. van Wijk
AGU Fall meeting (2008)

The Geodynamic Origins of Western U.S. Topography: Correlations and Speculations: T11C-1892
D. Coblentz, J. van Wijk, W.S. Phillips, K.E. Karlstrom and C. Chase
AGU Fall meeting (2008)

Evaluating Neogene uplift and denudational history of the Colorado Rockies using river profiles and incision records: T11C-1893
A. Darling*, K.E. Karlstrom, E. Kirby, W. Ouimet, D. Coblentz and A. Aslan
AGU Fall Meeting (2008)

High Resolution Imaging of the Aspen Anomaly - CREST and USAArray: U43B,0057
AGU Fall Meeting (2008)
How not to assemble a Precambrian supercontinent—Reply to comment by J.D.A. Piper on “Assembly, configuration, and break-up history of Rodinia: A synthesis”
An Upper Cretaceous (lower Campanian) feather from the Point Lookout Sandstone, northwestern New Mexico
T.E. Williamson, B.S. Kues, G.S. Weissman, T.A. Stidham and *S.L. Yurchyk*
New Mexico Geology, v. 30, p. 61 (2008)

Biogeomorphology of small semi-arid basins, northeastern Arizona
L. Roberts*, L.D. McFadden and J. McAuliffe

Integrating different conceptual models in studies of topography-soil relations: The importance of chronosequence-based studies

Influences of topoclimate, soil-forming processes, and vegetation distribution on the evolution of hillslopes in the Sevilleta Wildlife Refuge, central New Mexico
D. Gaugler*, L.D. McFadden and G. Meyer

Seasonal biases in Δ13C values of soil and cave carbonates
D. Breecker*, J. Quade, T. Fischer, L.D. McFadden and Z. Sharp

Complex polygenesis and soil stratigraphy of soils in the eastern Sevilleta National Wildlife Refuge, Belen, NM

New field data supporting the role of insolation in physical weathering

Soil-geomorphology and the reconstruction of landscapes of the past
V. Holliday and L.D. McFadden

Testing a debris flow source area and initiation hypothesis for simple ‘classic’ martian gullies

Relationships between main channel incision and increased sediment yields following forest fires: Is climate the driver?
J.L. Pierce*, T. Rittenour and G. Meyer
Geological Society of America Abstracts with Programs 40(1), 100 (2008)

Medieval-period droughts, fires, floods and geomorphic change in interior western USA Mountains
Geological Society of America Abstracts with Programs, v. 40, no. 6, p. 228 (2008)
Influences of topoclimate, soil-forming processes, and vegetation distribution on the evolution of hillslopes in the Sevilleta Wildlife Refuge, Central New Mexico
D.F. Gaugler*, L.D. McFadden and G. Meyer

Complex polygenesis and soil stratigraphy of soils of the eastern Sevilleta National Wildlife Refuge, Belen, NM
Geological Society of America Abstracts with Programs, v. 40, no. 6, p. 466 (2008)

Beaver damming, fluvial geomorphology, and climate in Yellowstone National Park, Wyoming
L. Persico* and G. Meyer

Historic Rio Grande Channel Change: Relating channel adjustments measured from aerial photography to human and climate induced changes in hydrology
G. Meyer, B.J. Swanson* and J. Coonrod

Synchronous western North American and polar climate events
Y. Asmerom, V.J. Polyak** and S.J. Burns

Time, temperatures, and pressure indicated by metastable iron-sulfide nanophases in melted STARDUST aerogel
F.J.M. Rietmeijer**

Refractory deep metastable eutectic vapor phase condensates evolve to amorphous, but not quite, equilibrium minerals

Evidence for hot chemistry under reduced conditions in the thermally modified STARDUST samples
H. Leroux, F.J.M. Rietmeijer**, D. Jacob and M. Roskosz

Why isn't the Earth completely covered in water?
J.A. Nuth III, F.J.M. Rietmeijer** and C.L. Marnocha

Kinematic models of mantle flow and fabric beneath the San Andreas plate boundary region and implications for seismic anisotropy
M. Roy, J. Tetreault, A. Ringler, J. Gaherty, L. Zhao and P. Chen
Fall AGU Meeting, 2008

The EarthScope Rio Grande Rift GPS experiment: Measuring active tectonics in Colorado and New Mexico
A. Sheehan, H. Berglund, M. Roy, R.S. Nerem, A.R. Lowry, F. Blume and W. Szeliga
Annual GSA Meeting (2008)

Cenozoic magmatism and rock uplift of the Colorado Plateau by warming of chemically buoyant lithosphere,
Cenozoic magmatism and rock uplift of the Colorado by warming of chemically buoyant lithosphere
M. Roy, T.H. Jordan and J. Pederson
AGU Chapman (Lherzolite) Meeting (2008)
Models of seismic anisotropy and upper mantle deformation at the San Andreas fault system: Investigation of the role of crust-mantle coupling
M. Roy, J. Tetreault, A. Ringler, J. Gaherty, L. Zhao and P. Chen
AGU Chapman (Lherzholite) Meeting (2008)

Processing of the smallest Wild 2 particles in hot silica aerogel
F.J.M. Rietmeijer
Goldschmidt Conference (Vancouver, Canada) Abstracts 2008, A797

Seasonal biases in $\delta^{13}$C values of soil and cave carbonates
D. Breecker**, J. Quade, T.B. Fischer, L.D. McFadden and Z.D. Sharp
Abstracts with Programs, Geological Society of America, p. 276 (2008)

Complex polygenesis and soil stratigraphy of soils of the eastern Sevilleta National Wildlife refuge, Belen, NM.

Water vapor isotopes measurements at Mauna Loa, Hawaii: Comparison of laser spectroscopy and remote sensing with traditional methods, and the need for ongoing monitoring
D. Noone, J. Galewsky, Z.D. Sharp and J. Worden
Eos Transactions, Abstract A23C-0309 (2008)

Chlorine isotope geochemistry (Invited)
Z.D. Sharp and J.D. Barnes**
International Symposium on Isotopomers

Chlorine Partitioning Between Mantle and Core: Implications for Early Earth Processes
Z.D. Sharp, D.S. Draper** and C.B. Agee
Eos Transactions, Abstract MR41A-1778

The atmospheric water vapor line (Invited)
M. Strong*, Z.D. Sharp and D.S. Gutzler
Eos Transactions, Abstract A22C-06

GRA 06129: A meteorite from a new asteroidal geochemical reservoir or Venus?
LPSC 2008

Chlorine Stable Isotopes of Recent Tephra, Lavas and Volcanic Gases: Volatile Tracers in the Central American Arc
J.D. Barnes**, Z.D. Sharp and T.P. Fischer

Evolving Geologic Understanding of The Española Basin, Rio Grande Rift, Northern New Mexico
G.A. Smith
New Mexico Geology, v. 30, p. 52 (2008)

Stratigraphy and tectonic implications of Oligocene to early Miocene sedimentation in the Jemez Mountains, north-central New Mexico
S.A. Kelly, K. Kempf, F. Maldonado, G.A. Smith, S.D. Connell and D.J. Koning
New Mexico Geology, v. 30, p. 54 (2008)

Making Effective Rubrics - Keys to Assessing Learning
T. Root and G.A. Smith
Program, New Mexico Higher Education Assessment and Retention Conference, p. 10 (2008)
Lidar imagery based 2D and 3D representations of outcrop heterogeneity for groundwater modeling
E.M. Nichols, G.S. Weissmann, T.F. Wawrzyniec**, L.A. Scuderi, J.D. Frechette** and K.A. Klise
AGU, Fall Meeting (2008)

TLSpy: An open-source addition to terrestrial lidar workflows.
J.D. Frechette**, G.S. Weissmann and T.F. Wawrzyniec**
AGU, Fall Meeting. (2008)

Deformation of Late Miocene Plutons along the Tonala Shear Zone: A relict plate boundary in the Eastern Tehuantepec Region.
GSA Abstracts with Programs, v. 40, no. 6, p.188 (2008).

2D and 3D Representations of outcrop heterogeneity from lidar imagery for groundwater modeling.
E.M. Nichols, G.S. Weissmann, T.F. Wawrzyniec**, L.A. Scuderi, J. Frechette** and B. Theiling*
GSA Abstracts with Programs, v. 40, no. 6, p.471 (2008)

Identifying Material property boundaries from Lidar data using wavelet analysis.
A.B. Moreira, R.M. Neupauer, G.S. Weissmann, J. Frechette** and T.F. Wawrzyniec**
AGU Fall Meeting (2008)

Exploring Solute Transport and Streamline Connectivity Using Two-point and Multipoint Simulation models.
K.A. Klise, S.A. McKenna, V.C. Tidwell, J.W. Lane, G.S. Weissmann, T.F. Wawrzyniec** and E.M. Nichols
AGU Fall Meeting (2008)

Changing our view of aggradational fluvial systems – the distributary fluvial system (DFS) paradigm
G.S. Weissmann, A.J. Hartley, G.J. Nichols*, L.A. Scuderi, M. Olson, H. Buehler and R. Banteah
AGU Fall Meeting, San Francisco (2008)

Identifying material property boundaries from LIDAR data using wavelet analysis
A.B. Moreira, R.M. Neupauer, G.S. Weissmann, J. Frechette** and T.F. Wawrzyniec
AGU Fall Meeting, San Francisco (2008)

Lidar imagery based 2D and 3D representations of outcrop heterogeneity for groundwater modeling
E.M. Nichols, G.S. Weissmann, T.F. Wawrzyniec**, L.A. Scuderi, J.D. Frechette** and K.A. Klise
AGU Fall Meeting, San Francisco (2008)

Integration of geophysical and geostatistical methods for shallow aquifer characterization
N.B. Engdahl*, G.S. Weissmann, and N.D. Bonal
AGU Fall Meeting, San Francisco (2008)

Exploring solute transport and streamline connectivity using two-point and multipoint simulation methods
K.A. Klise, S.A. McKenna, V.C. Tidwell, J.W. Lane, G.S. Weissmann, T.F. Wawrzyniec** and E.M. Nichols*
AGU Fall Meeting, San Francisco (2008)

TLSpy: an open-source addition to terrestrial lidar workflows
J.D. Frechette**, G.S. Weissmann and T.F. Wawrzyniec**
AGU Fall Meeting, San Francisco (2008)

2D and 3D representations of outcrop heterogeneity from lidar imagery for groundwater modeling
E.M. Nichols, G.S. Weissmann, T.F. Wawrzyniec**, L.A. Scuderi, J. Frechette** and B. Thelling*
GSA Joint Annual Meeting (2008)
Outcrop-based GPR tomography through braided stream deposits, Outcrop Analogs
G.L. Rust*, G.S. Weissmann, U. Werban, T.F. Wawrzyniec** and J.D. Frechette**
SEPM Research Conference, Kilkee, Ireland (2008)

Are existing facies models for fluvial systems wrong? A new model for the interpretation of fluvial systems in the rock record
A.J. Hartley, G.S. Weissmann and G.J. Nichols*
British Sedimentological Research Group Meeting (2008)

Are distributary patterns dominant in fluvial deposits in the stratigraphic record? Rivers, Estuaries, Deltas, and Beaches: Traps for fossil fuels
G.J. Nichols*, A. Hartley and G.S. Weissmann
3. EXTERNALLY FUNDED RESEARCH GRANTS AND CONTRACTS

Awarded in January 1, 2008 – June 30, 2009

Collaborative Research: High Pressure Experimental Melt Density
C.B. Agee (PI)
NSF EAR CSEDI
$329,275 (June 1, 2009 - May 31, 2012) Commitment and PI: 0.5 summer

Studies of the nucleation, growth, and metamorphism of refractory materials: Simple analogs of complex natural samples
F.J.M. Rietmeijer (co-PI)
$477,900; April 1, 2007 – May 31, 2011

HRTEM Petrology of comet Wild 2 dust captured in STARDUST silica aerogel
F.J.M. Rietmeijer (PI)
National Aeronautics and Space Administration
$290,450; July 1, 2007 – June 30, 2010

Collaborative research: What is the strength of low-angle normal faults?
G.J. Axen (New Mexico Tech) and J. Selverstone
National Science Foundation
$148,564 (UNM component) June 1, 2008 – May 31, 2011

Development and Resilience of Complex Socioeconomic Systems: a Theoretical Model and Case Study from the Maya Lowlands
K. Prufer and Y. Asmerom, (UNM PIs)
National Science Foundation [36 months]
$899,000; $274,300 for UNM [Funded in 2008]

SGER Proposal: Dating Volcanic Rocks Using Syngenetic Non-Silicate Minerals
Y. Asmerom and V. Polyak (PIs)
National Science Foundation [36 months]
$50,227 [Funded in 2008]

Sabbatical supplemental funding
Y. Asmerom (PI)
Sloan Foundation
$61,002 [Funded in 2008]

Partial support for the acquisition of a Focused Ion Beam/FEGSEM for integrated mineralogical and isotopic analyses of extraterrestrial materials
A.J. Brearley (PI)
NASA Planetary Major Equipment Program
$350,000 (May 1, 2008 – April 30, 2009)

Upgrade of analytical transmission electron microscope facilities: Acquisition of an energy dispersive X-ray analysis system
A.J. Brearley (PI)
NASA Cosmochemistry Program
$20,000 (May 1, 2008 – April 30, 2009)
Chlorine isotope distribution in chondritic meteorites: Search for multiple nebular reservoirs
Z.D. Sharp, (PI), A.J. Brearley and R. Jones (coPI)
NASA Origins of Solar Systems Program
$148,061 (May 1, 2008-30 – April 30, 2010) (R. Jones salary supports 0.5 months)

Alliance for Minority Programs: Undergraduate Research Support at the University of New Mexico
L.J. Crossey (PI)
New Mexico State University/NSF
$55,000 (November 1, 2008 – October 31, 2009)

Louis Stokes Alliance for Minority Participation - Bridge to the Doctorate VI
L.J. Crossey (PI)
NSF Human Resources Division
$949,716 (September 1, 2008 – August 31, 2010)

Sevilleta Springs
L.J. Crossey (PI) and A. Williams
Water Resources Research Institute
$5,000 (September 1, 2008 – August 30, 2009)

Pathways to Integrating Math and Science
A. Ellwein
New Mexico Public Education Department (MNPED)
$100K (July 2008)

Climate change impacts on New Mexico’s mountain sources of water
W. Michener, (PI) and J. Galewsky et al
National Science Foundation/EPSCoR
$600K to EPS (2008-2013)

Collaborative Research: Intercomparison of atmospheric water vapor isotope measurements from Mauna Loa, Hawaii and implications for characterizing subtropical humidity
J. Galewsky, (PI) Z. Sharp, and D. Noone (U. Colorado)
National Science Foundation/Climate Dynamics
$63K to EPS (September 15, 2008 – 12 months)

Early solar system materials: Chemical, petrologic and isotopic investigations
R.H. Jones (PI)
NASA / Cosmochemistry
$484,000 (April 1, 2009 – March 31, 2012) (total funding: R. Jones salary support: 5 months)

Continental Smokers-- evaluating mantle-to-surface hydrologic connections, CO₂ flux, geomicrobiology, and water quality in continental rifts
L.J. Crossey, K.E. Karlstrom and others
NSF Hydrological Sciences Program
$300,000 to UNM (January 2009 – December 2011)

Pathways II: Inquiry through Earth Sciences
M.W. Nyman (Co-PI) and A. Ellwein
New Mexico Public Education Department
$100K (July 2009 – July 2010)
Collaborative CI-Team Implementation Project: Advancement of Cyberinfrastructure-Based Science Through Education, Training, and Mentoring of Science Communities

L. Scuderi (Co-Investigator)
National Science Foundation
$964,892 (2008-2010)

New Mexico EPSCoR RII3: Climate Change Impacts on New Mexico’s Mountain Sources of Water

L. Scuderi (Investigator)
National Science Foundation
$15,000,000 (2008-2011)

Geospatial Teaching and Field-Based Tools

L. Scuderi (PI)
Gorham Foundation
$60,000

Linked Isotopic (Cl, O, H) and Petrologic Studies of Fluid-rock Interaction During the Subduction Cycle

Z. Sharp and J. Selverstone, PI
EAR
$270,002 (June 1, 2009 – 24 months)

Grants and Awards current in the period January 1, 2008 – June 30, 2009 (continued from previous years)

Experimental Studies of Planetary Magmas at High Pressure Program Name: Cosmochemistry Program

C.B. Agee (PI)
NASA
$375,000 (Commitment and PI: 0.5 Summer) (May 1, 2007 – April 30, 2010)

Static Compression of Hydrous Silicate Liquids

C.B. Agee, (PI)
Program Name: NSF EAR
$250,000 (Commitment and PI: 0.5 summer) (July 1, 2005 – June 30, 2009)

Astromaterials Institute at the University of New Mexico Program Name: SMD, NASA

C.B. Agee, PI
$1,149,615 (Commitment and PI: 0.5 summer) (September 28, 2006 – September 30, 2009)

Continental Response to Abrupt Climatic Events from Speleothem Data, SW USA

Y. Asmerom and V. Polyak **
National Science Foundation [48 months]
$400,000 [Funded in 2007]

Collaborative Research: Millennial-scale tropical rainfall variability from 100 to 20 ka: Testing cross-isthmian water vapor transport and feedbacks on thermohaline circulation

Y. Asmerom, UNM PI
National Science Foundation [Resubmitted, funded at reduced amount [$100,000 and administered though UNLV at $100,000]

Bridging the Gap: Reconstructing the Evolution of Grand Canyon from the Dating of Speleothems

V. Polyak** Y. Asmerom and C. Hill
National Science Foundation [48 months]
$243,000
Increasing Minority Ph.D.s in Earth & Planetary Sciences [program enlarged to include all incoming minority Ph.D. students]

**Y. Asmerom**, PI
Sloan Foundation [On-going]
$38,000 / per student

Integrated mineralogical and isotopic studies of STARDUST cometary samples

**A.J. Brearley** (P.I.)
NASA Stardust Data Analysis Program
$199,000 (May 1, 2007 – April 30, 2010)

Major Research Infrastructure – MRI: Focused Ion Beam System for Nano Fabrication and Nano Machining of Materials

A. Datye (PI), **A.J. Brearley** and Z. Leseman (coPIs)
NSF Major Research Infrastructure Program
$762,140 (June 2007 – May 2009)

Formation and Alteration Histories of Chondritic Materials

**A.J. Brearley** (PI)
NASA Cosmochemistry Program
$875,000 (March 15, 2006 – March 14, 2011)

Mechanisms and kinetics of aqueous alteration reactions in chondritic meteorites

**A.J. Brearley** (PI)
NASA Origins of Solar Systems program
$140,025 (March 15, 2005 – March 15, 2009)

Alliance for Minority Programs: Undergraduate Research Support at the University of New Mexico

**L.J. Crossey** (PI)
New Mexico State University/National Science Foundation
$55,000 (November 1, 2007 – October 31, 2008)

Track 1, GK-12: Ecohydrogeology in the Middle Rio Grande Environment

**L.J. Crossey**, Co-I; with S. Collins (UNM, Biology)
National Science Foundation/HER (0538396)
$1,664,336 (April 1, 2006 – March 31, 2008)

Collaborative Research: CO2 Springs and travertines of the Southwestern US: Hydrologic pathways linking tectonism to water quality

**L.J. Crossey**, PI: with T. Fischer and K.E. Karlstrom
National Science Foundation/Hydrologic Sciences (0538304)
$149,795 (January 1, 2006 – December 31, 2008)

Collaborative Research: Biogenic cave carbonates: Identifying surface carbon input to subsurface ecosystems:

**L.J. Crossey** (Co-I) with D. Northup and M. Spilde**
NSF Low-temperature Geochemistry and Geobiology Program
$112,982 (September 1, 2007 – August 31, 2009)

Middle Paleozoic climatic and sea-level changes and their influence on marine community evolution: a comparison of models from Perunica microcontinent and Laurussian continent

**M. Elrick** (co-PI Jiri Fryda, Czech Geological Survey)
AMVIS (American Science Information Center-joint cooperative U.S.-Czech Republic)
$150,000 (2008 – 2012)
Using oxygen isotopes from apatitic conodonts to understand the origins of Paleozoic-Triassic 3rd-order (My-scale) sea-level changes
M. Elrick and Z. Sharp, co-PI
National Science Foundation

Late Pleistocene hightand shoreline chronologies and climate change: pluvial Lake Palomas, northern Mexico
P.J. Fawcett (PI)
University of New Mexico Research Allocation Committee
$4,000 (October 15, 2007 – 09/30/08)

Acquisition of instrumentation for volatile analyses in Earth Sciences
T. Fischer (PI) and L.J. Crossey (co-PI)
National Science Foundation/EAR IF
$183,318 (August 20, 2008 – August 19, 2010)

Constraining the process of volatile transfer from the subducted slab to the surface using phenocrysts of recently erupted tephras from the Izu-Bonin-Marianas arc
T. Fischer
National Science Foundation/ OCE MARGINS
$75,095.00 (March 28, 2007 – March 27, 2009) (extended for one year)

Collaborative Research: The Nitrogen Isotope Systematics of the Icelandic Mantle
T. Fischer (PI), Z. Sharp and Hilton (co-PIs)
National Science Foundation/EAR-0537618
$239,340.00; January 1, 2006 – December 21, 2008 (extended for one year)

Collaborative Research: Diagnosis of subtropical humidity dynamics using tracers of last saturation.
J. Galewsky, (Pis) and A. Sobel (Columbia University)
National Science Foundation/ Climate Dynamics
$184,842 to EPS

Collaborative research: Identification of the plate boundary between India and Indochina through integrated petrologic, structural, and paleomagnetic analyses
J.W. Geissman
National Science Foundation, Tectonics
$104,473 (request, UNM component, two years)

Integrated Stratigraphic, Geomorphic, Sedimentologic, Numeric, and Experimental Study of Hanging Wall Ramp Architecture in Continental Half Grabens
G.A. Smith and J.W. Geissman
National Science Foundation, EAR, Geology and Paleontology
$147,210 (March 2004 – February 2009)

Collaborative Research: Integrated Tectonic and Paleomagnetic Study of the Early Cenozoic Rotation and Extrusion of Asian Crust around the Eastern Himalayan Syntaxis
J.W. Geissman
National Science Foundation, EAR, Tectonics
$181,000 (three years)

Workshop on integrated scientific coring on the Colorado Plateau: Early Mesozoic history of west Pangea
P. Olsen, D. Kent and J.W. Geissman
National Science Foundation, EAR, Sedimentary Geology and Paleobiology
$40,000 (October, 2006 – June, 2008)
A collaborative paleomagnetic, remote sensing, and field investigation of the Neogene fragmentation of the Maya Block, with implications for the Jurassic opening of the Gulf of Mexico
T. Wawrzyniec** and J.W. Geissman
American Chemical Society, Petroleum Research Fund
$80,000 (August 1, 2006 – August, 2008)

Collaborative Research: Magma dynamics in sill and dike systems: Constraints from magnetic fabrics and paleomagnetism in the Karoo large igneous province
J.W. Geissman and E. Ferre, Southern Illinois University
National Science Foundation, EAR, Tectonics
$77,256 (January, 2008 – December, 2009)

ICDP Workshop on the Colorado Plateau Coring Project: 100 Million Years of Climatic, Tectonic, and Biotic Evolution in Continental Cores
J.W. Geissman, G.H. Bachmann, Martin-Luther-Universität Halle-Wittenberg, R.C. Blakey, Northern Arizona University, D.V. Kent, Rutgers University, Wolfram M. Kärschner, Universiteit Utrecht, Paul E. Olsen, Columbia University, J. Sha, Nanjing Institute of Geology and Paleontology, Nanjing
International Continental Drilling Program
$35,000 (May 1, 2008 – December 1, 2008)

The North American Monsoon System Climate Process Team
J. Schemm, (PI) NOAA and D. Gutzler (co-PI)
NOAA Climate Program Office/Climate Prediction Program for the Americas
$230K/yr ($33K/yr to UNM), 36 months (June 05 – May 08)

The Seasonal Cycle of Drought
D. Gutzler (PI)
NOAA Climate Program Office/Climate Prediction Program for the Americas
$65K (July 07 – May 09, 14 months)

Petrologic, Chemical and Experimental Investigations of Early Solar System Materials
R.H. Jones (PI)
NASA/Cosmochemistry
$351,000 (April 1, 2006 – March 31, 2010) (total funding R. Jones salary support: 4 months)

Collaborative Research: The Trail of Time: A Geoscience Exhibition at Grand Canyon National Park
National Science Foundation Informal Science Education Program
$1,834,740 to UNM (June 1, 2006 – May 31, 2009)

Collaborative Research: CREST: Colorado Rockies Experiment and Seismic Transects
K.E. Karlstrom, with K. Dueker, R. Aster, E. Kirby, L.J. Crossey and others, 2007-2010
National Science Foundation Continental Dynamics Program
$299,457 to UNM (June 1, 2007 –December 31, 2010)

Collaborative Research: Dating sedimentary sequences: In situ U/Th-Pb microprobe dating of early diagenetic monazite in Neoproterozoic black shales
National Science Foundation Sedimentary Geology and Paleobiology Program
$105,920 to UNM (January 1, 2007 – December 31, 2008)
Collaborative Research: Testing models for incision and neotectonics of the Grand Canyon region: field studies, Ar-Ar dating of Neogene basalts, and detrital zircon and monazite analysis of quartzite cobbles
National Science Foundation Tectonics Program
$159,964 to UNM (July 15, 2007 – June 30, 2009)

Research Experience for Undergraduates (REU) Site: New Mexico Sevilleta LTER REU Site Program
S. Collins (PI) and L.D. McFadden (Co-PI)
National Science Foundation
$267,465 (April 1, 2008 – March 30, 2011)

New Mexico Alliance for Faculty Diversity, Partnerships for Adaptation, Implementation and Dissemination
T. Stirling, (PI) L.D. McFadden, one of several co-P.I.s at 4 institutions
National Science Foundation
$655,460 (UNM share, $77,700) (January 1, 2007 – December 31, 2009)

Geomorphic influence of beaver on fluvial systems in northern Yellowstone, U.S. National Park Service – Colorado Plateau Cooperative Ecosystem Studies Unit
G. Meyer (PI)
$11,995 (September 1, 2008 – August 31, 2009)

Coupling of hydrologic-hydraulic models and aerial photos through time, U.S. Army Corps of Engineers – Urban Flood Demonstration Program
G. Meyer (PI) and J. Coonrod (Co-PI)
$100,633 (July 2006 – July 2009)

Pathways to Integrating Math and Science
M.W. Nyman
New Mexico Public Education Department (NMPED)
$100K (July 2008)

Museum Teaching Fellows
M.W. Nyman
Albert I. Pierce Foundation
$10K (1/2008)

Studies of the nucleation, growth, and metamorphism of refractory materials: Simple analogs of complex natural samples
F.J.M. Rietmeijer** (co-PI)
$477,900 (April 1, 2007 – May 31, 2011)

HRTEM Petrology of comet Wild 2 dust captured in STARDUST silica aerogel
F.J.M. Rietmeijer** (PI)
National Aeronautics and Space Administration
$290,450 (July 1, 2007 – June 30, 2010)

Transmission Electron Microscope characterization of chemical vapor deposits on the returned GENESIS heat shield
F.J.M. Rietmeijer** (PI)
The SETI Institute
$10,582 (September 1, 2004 – July 31, 2008)
Analyses of ablation features on the STARDUST heat shield
F.J.M. Rietmeijer** (PI)
The SETI Institute
$10,581 (November 1, 2005 – July 31, 2008)

Collaborative Research: Interpretations of seismic anisotropy in terms of the long-term tectonic history of the Western US
J. Gaherty, M. Roy and A. Lerner-Lam (PIs)
National Science Foundation Earthscope
$118K to M. Roy (2006-08)

Acquisition of a high-sensitivity gravity meter for studies in continental lithosphere structure/tectonics
M. Roy, J.W. Geissman and T. Wawrzniec** (PI’s)
National Science Foundation-EAR-Instrumentation and Facilities
$56K; 06-08, including a 1-year no-cost extension

Testing a new model of the Tertiary evolution of the Colorado Plateau based on constraints from magmatic patterns, xenoliths, geologic, and geophysical data
M. Roy (sole PI)
National Science Foundation, EAR-Tectonics Program
$100K (2006-2008)

Collaborative Research: Crustal deformation measurements and a multidisciplinary geophysical investigation of the Rio Grande Rift
M. Roy (PIs): A. Sheehan, S. Nerem, A. Lowry
National Science Foundation, EAR-Earthscope Program
$124K to MR, $605K (July 2005 – July 2010)

Collaborative research: Metamorphic fluid evolution and rock rheology
J. Selverstone, A. Brearley (collaborative with Jan Tullis, Brown University)
National Science Foundation
$131,740 (June 1, 2005 – May 31, 2009)

Center for Rapid Environmental Assessment and Terrain Evaluation (CREATE) Follow up Scientific Investigations
L. Scuderi (PI)
National Aeronautics and Space Administration
$3,500,000 (2004-2010)

EPSCOR-Hydrology
L. Scuderi (Co-Investigator)
National Science Foundation
$157,500 (2005-2009)

Chlorine Isotope Geochemistry of Volcanic Systems
Z. Sharp (PI), J. Barnes* and T. Fischer
EAR
$193,674 (June 1, 2007 – May 29, 2009)

Stable Isotope Profiles in Modern Desert Soils
Z. Sharp (PI) and L.D. McFadden (Co-PI)
EAR
$95,007 (February 15, 2007 – June 30, 2009)
SGER: Chlorine Isotopes as Tracers of Subduction Zone Fluids
Z. Sharp (PI)
EAR
$82,163 (June 1 – 24 months)

The Department of Energy (DOE-BES): Investigation into the relationship between heterogeneity and heavy-tailed solute transport.
G.S. Weissmann, S. McKenna and V. Tidwell (Pis)
Sandia National Laboratory, D. Benson, Colorado School of Mines
$30,000 ($15,000 for 2007)

The Department of Energy (DOE-ESMP): Geochemical and Physical Aquifer Property Heterogeneity: A multi-scale sedimentologic approach to reactive solute transport
G.S. Weissmann, R. Allen-King, University of Buffalo, C. Murray (PIs) Pacific Northwest National Laboratory
$296,895; 5/2006
4. RESEARCH PROJECTS IN PROGRESS

Carl Agee, Professor, Director of Institute of Meteoritics

Pending Support

Title: Static Compression of CO2-bearing Silicate Liquids
Program Name: NSF EAR Petrology and Geochemistry/Geophysics
Period of performance and budget: 6/01/09 - 5/31/12; $312,205
Commitment and PI: 0.5 summer, Carl B. Agee, PI

Yemane Asmerom, Professor

In press

A combined Sm-Nd, Rb-Sr, and U-Pb isotopic study of Mg-suite norite 78238: Further evidence for early differentiation of the Moon
Edmunson, J., Borg, L.E., Nyquist, L.E. and Asmerom, Y.,
Cosmochimica Acta, in press

Excavation and Dating of Ngalue Cave: A Middle Stone Age Site along the Niassa Rift, Mozambique
Mercader, J., Asmerom, Y., Raja, M., and Skinner, A.,
Journal of Human Evolution, in press

Adrian Brearley, Professor

Manuscripts in press or submitted

Structural characterization of terrestrial microbial Mn oxides from Pina Creek, A.
Geochimica et Cosmochimica Acta 73, 889-910 (2009)

Dust particle size evolution. In ‘Protoplanetary Dust’ Edited by Daniel Apai and Dante Lauretta,
Pontoppidan, K. M. and Brearley, A.J.

Early solar system processes recorded in the matrices of two highly pristine CR3 carbonaceous chondrites, MET00426 and QUE99177.
Abreu, N.M. and Brearley, A.J.

Early Solar System Processes Recorded In The Matrices of Two Highly Pristine CR3 Carbonaceous Chondrites, MET 00426 and QUE 99177
Manuscripts in preparation

- Deciphering the characteristics of the CV3 chondrite Vigarano matrix: Evidence nebular and asteroidal processes. (with Neyda Abreu)

- A TEM study of chondrules in the CM carbonaceous chondrites, Lewis Cliff 90500 - new constraints for the aqueous alteration of chondrules (with Nick Hanowski)

- Chondrule serpentinies as indicators of aqueous alteration in CM carbonaceous chondrites (with Nick Hanowski)

- Zoning and Mn-Cr isotope systematics of carbonates in the ALH84034 CM carbonaceous chondrites: Evidence for prolonged aqueous activity on the CM2 chondrite parent body (with Ian Hutcheon)

- Hydrous phases of martian origin in ALH84001.

- Ubiquitous nanophase carbides in CM2 chondrites: Evidence for widespread Fischer-Tropsch catalysis reactions in the early solar system

- Iron carbides in the Vigarano CV3 chondrite; Constraints on the conditions of asteroidal aqueous alteration (with Neyda Abreu)

- The effect of cooling rate on the protoenstatite to orthoenstatite inversion: an experimental and transmission electron microscope study (with Rhian Jones)

Unfunded proposals

- Experimental Constraints on the Origin of Sulfide Minerals in Chondritic Meteorites
  A.J. Brearley (PI)
  NASA Origins of Solar Systems Program
  $495,501

Laura J. Crossey, Professor

Manuscripts accepted in press

- Degasging of mantle-derived CO₂ and ³He from springs in the southern Colorado Plateau region-neotectonic connections, and implications for understanding the groundwater system


Submitted pending 2008

[funded 09] "Continental Smokers": evaluating mantle degassing, CO2 flux, geomicrobiology, and water quality in extensional continental regimes
Pl: w/ K. Karlstrom, C. Tacaks-Vesbach (Biology)
NSF Hydrologic Sciences, $294,561 (8/1/2009-7/31/2011)

New, GK-12: ENvironmental CHAnge for New Mexico Teaching (ENCHANT)
Pl: w/ S. Collins (Biology), R. Kitchen (Math)
NSF Education/Human Resources, $2,975,222 (8/1/2008-7/31/2013).

Collaborative Research: Long-term Biotic Changes and Resilience in Desert Sinkholes Related to Managed Use in the Face of Climate Change
Co-I: w/ Becky Bixby, Cristina Takaes-Vesbach
$569,054 (8/1/2009-7/31/2011)
NSF Ecology

[funded 09] Alliance for Minority Programs: Undergraduate Research Support at the University of New Mexico
Pl: w/ M. Lam (Biology), K. Karlstrom
New Mexico State University/NSF
9/1/09-8/31/10: $30,500

Collaborative Proposal: Track 2: Planning for seven generations: Climate change in Indian Country,
Pl: w/ M. Lam (Biology), K. Karlstrom
NSF EHR Opportunities for Enhancing Diversity in the Geosciences; $331,562 (8/1/2009-7/31/2012).

Maya Elrick, Associate Professor

Manuscripts in press

Stratigraphic and oxygen isotope evidence for My-scale glaciation driving eustasy in the Early-Middle Devonian greenhouse world.
M. Elrick, S. Berkyova, G. Klapper, Z. Sharp, M. Joachimski, J. Fryda
Palaeogeography, Palaeoclimatology, Palaeoecology, in press.

Manuscripts in preparation

C- and O-isotopic evidence of Pennsylvanian glacio-eustasy
Elrick, M. and Scott, L.A.
Middle Pennsylvanian Gray Mesa Formation, central New Mexico
Pending

Testing for high-frequency (10^4-10^5 yr) glacio- and thermo-eustasy in greenhouse & transitional climates using oxygen isotopes of conodont apatite
M. Elrick and M., Sharp., Z.
National Science Foundation, $298,500, 6/09-6/12

Amy Ellwein, Lecturer III, Natural Science Program

Pending

NSF proposals (2) submitted to the following programs in Fall 2008.
Grant to be submitted to the New Mexico Public Education Department on April 30, 2009.

Dynamics of Coupled Natural and Human Systems (CNH) Co-PI, J. Coonrod, P.I., UNM Civil Engineering
Enhancing Diversity in the Geosciences (OEDG) Co-PI, Geissman, P.I. UNM Arts and Sciences
Pathways II: Inquiry through Earth Sciences, to be submitted to the New Mexico Public Education Department, co-PI w/ M. Nyman.

Research Projects in Progress

Co-PI on an in-service K-5 teacher professional development project funded by the New Mexico Public Education Department: Bernalillo Public Schools, Pathways to Integrating Math and Science. This highly successful one-year project is in its final stages.

Continue to make progress on dissertation research in soil geomorphology and plans to defend in 2010.

Wolfgang E. Elston, Professor Emeritus, Senior Research Professor

Research projects in progress

Geologic field work on the Bushveld Complex, South Africa; petrographic studies of Bushveld rocks.
Ongoing long-term research on mid-Cenozoic volcanism, southwestern New Mexico.

Participation (w/H.E. Newsom, T.H. McElvain, E.L. Tegtmeier, and others) in ongoing investigation of the Santa Fe meteorite impact structure, Sangre de Cristo Mountains, NM

Peter J. Fawcett, Associate Professor

Manuscripts in preparation

Coupled Warming and Drought in the American Southwest During Long mid-Pleistocene Interglacials (MIS 11 and 13)
Fawcett, P.J., and 15 others
To be submitted to Science

A reevaluation of the timing and extent of middle and late-Holocene glaciations and climatic conditions in the Sierra Nevada
Scuderi, L.A. and Fawcett, P.J.
To be submitted Quaternary Research
Paleolimnological record of late Quaternary climate change from Laguna El Fresnal, northern Mexico
Fawcett P.J. and Castiglia, P.J.*, To be submitted to Paleolimnology.

Lacustrine and alluvial stratigraphy of Holocene pluvial Lake Palomas shorelines, El Fresnal Basin, Chihuahua, Mexico
Fawcett, P.J., and Parker, J.*, To be submitted to Quaternary Research

Journal articles in press

Remote Sensing of Playa lakes in western North America: Monitoring lake change resulting from climate variability in semi-arid regions, Quaternary Research

Research proposals submitted

Collaborative Research: A high-resolution middle Pleistocene paleoclimate record (MIS 14 to 10) from the Valles Caldera, New Mexico
Peter J. Fawcett, (PI) John W. Geissman, R. Scott Anderson (Northern Arizona University), Erik Brown and Joe Werne (University of Minnesota Duluth)
Funding Organization: National Science Foundation, P2C2 Program
$215,925 requested (UNM Portion)

Tobias Fischer, Associate Professor

In press

Upper-mantle volatile chemistry at Oldoinyo Lengai volcano and the origin of carbonatites
Nature

Quantifying Inorganic Sources of geochemical energy in hydrothermal ecosystems, Yellowstone National Park, USA.

Assessing the effects of degassing and crustal contamination on the helium and carbon geochemistry of hydrothermal fluids: insights from the Southern Volcanic Zone of Chile.
Chem. Geol.

Degassing of mantle-derived CO2 and 3He from springs in the southern Colorado Plateau region-flux rates, neotectonic connections, and implications for understanding groundwater systems
GSA Bulletin

The 2005 and 2006 Eruptions of Ol Doinyo Lengai Volcano, East African Rift, Tanzania
B. Marty and P. Bernard CNRS and N. France (Collaborators)
Nature
Work in progress


Volatileies in the Central American subduction zone. Collaborator Hilton (Scripps). Funded by NSF (expired).

Volatileies in the Izu-Bonin-Marianas subduction zone. Collaborators are Hilton (Scripps) Hauri (DTM, Carnegie) and Shaw (WHOI) supported by NSF OCE. (Write up in progress)

SO₂ flux from Anatahan Volcano, Mariana Islands as measured by MODIS (satellite based) and comparisons to ground-based measurements (with Dr. Scuderi). Supported by UNM CREATE 01/01/03 – present Manuscript in progress with student Vanessa Maier. Slow progress on manuscript because of lame co-author out in CA

SGER: Chlorine Isotopes as Tracers of Subduction Zone Fluids (Sharp, PI; Fischer, co-PI) National Science Foundation/EAR 82,163.00 06/01/06-05/31/07. (Grant has expired but we are writing up papers).

Joseph Galewsky, Assistant Professor

Pending proposals

Acquisition of a tunable diode laser absorption spectroscopic isotope analyzer and peripheral induction furnace
PI: Z. Sharp and J. Galewsky
NSF EAR Instrumentation and Facilities
$61,115; in review

Unsuccessful proposals in CY 2008

NSF Geomorphology and Land-use dynamics
PIs Galewsky, Meyer, McFadden, Scuderi and Mcauliffe

Research projects

Diagnosis of subtropical humidity dynamics using tracers of last saturation (with #J. Hurley, UNM and A. Sobel, Columbia; NSF funding $184,842 to JG)

Intercomparison of atmospheric water vapor isotope measurements from Mauna Loa, Hawaii and implications for characterizing subtropical humidity (with #L. Johnson, Z. Sharp, and D. Noone, CU; NSF funding $63K to JG/ZS)

Works in progress

Orographic precipitation isotope ratios in stratified atmospheric flows: Implications for paleoelevation studies
J. Galewsky
Geology, in revision.
Demonstration of high precision continuous measurements of water isotopologues in laboratory and remote field deployments using WS-CRDS technology, P. Gupta, D. Noone, J. Galewsky, C. Sweeney, B.H. Vaughn
Rapid Communications in Mass Spectrometry, in revision.

ENSO variability in the humidity of the subtropical Pacific: A last-saturation approach
J. Hurley and J. Galewsky
To be submitted to Journal of Climate 4/09.

Identification of moistening and dehydration processes in the North Pacific subtropical dry zone from continuous water isotopologue measurements at Mauna Loa
D. Noone, J. Galewsky, Z. Sharp and co-authors
To be submitted to JGR-Atmospheres, 5/09.

John W. Geissman, Chair and Professor

Papers in press

Introductory field geology at the University of New Mexico, 1984 to today: What a “long, strange trip” it continues to be, in Mogk, D., ed., Geissman, J.W., and G. Meyer
Geological Society of America Special Paper, Field Geology Education: Historical Perspectives and Modern Approaches

An integrated magnetic and geological study of cataclasite dominated pseudotachylites in the Chiapas Massif, Mexico: A snap-shot of stress orientation following slip
Geophysical Journal International (2009)

Neogene vertical axis rotation and development of the Mina Deflection, central Walker Lane, Nevada, in Oldow, J.S., and Cashman, P.H., eds., Walker Lane Tectonics
Petronis, M.S., Geissman, J.W., Oldow, J.S., and McIntosh, W.C.,

Coordinated displacement and finite flattening on linked arrays of curved faults, Rhodes Salt Marsh basin, central Walker Lane Belt, Nevada, in Oldow, J.S., and Cashman, P.H., eds., Walker Lane Tectonics
Ferranti, L., Oldow, J.S., and Geissman, J.W.,


Connell, S.D., Smith, G.A., Geissman, J.W., and McIntosh, W.,
Geochemical identification of impact for Lunar crater, India
Misra, S., Newsom, H. E., Prasad, M. S., Geissman, J. W., Dube, A., and Sengupta, D.,

Geological Society of America Geologic Time Scale 2007, with explanation
Geissman, J. W., Walker, J. D., and Palmer, A. R.,
GSA Today

Paleomagnetism of the mid-Cenozoic Espinosa Formation and related rocks, central New Mexico
and its bearing on crustal rotation within the Rio Grande rift
Harlan, S. S., and Geissman, J. W.,
Lithosphere

Non-basaltic asteroidal melting during the earliest stages of solar system evolution, A view from
GRA 06128 and GRA 06129

Proposals in review

Major Research Instrumentation: Acquisition of a Magnetic Properties Measurement System
M. Kirk, UNM, Chemistry; J. W. Geissman, K. Malloy, UNM, Engineering; R. Duncan, UNM, Physics
National Science Foundation, Major Research Instrumentation
$315,319, September 1, 2009, through August 30, 2011

Collaborative Research: Terrestrial Paleoenvironmental record through the Permian-Triassic transition of Texas and New Mexico
J. W. Geissman and P. Renne (University of California, Berkeley)
National Science Foundation, EAR, Sedimentary Geology and Paleobiology
$136,967, February 1, 2008 through January 31, 2010

Collaborative Research: Geometry, kinematics, and dynamics of relay zones in extensional/transensional settings (pending)
National Science Foundation, EAR, Tectonics
Central New Mexico, Albuquerque
$178,000, August 1, 2009 through July 31, 2012 (0.5 months)

Collaborative Research: A high-resolution middle Pleistocene paleoclimate record from the Valles Caldera, New Mexico (pending)
National Science Foundation Paleo Perspectives on Climate change (P2C2)
$215,925, June 1, 2009 through May 31, 2011 (0.5 months)

Track 2: Southwest Opportunities for Diversity in the Geosciences (SODiG)
National Science Foundation EAR-Opportunities of Enhancing Diversity
New Mexico
September 1, 2009 through August 30, 2014 (0.25 months)
$19,935,86

Collaborative Proposal: Evolutionary Origins of Hominidae
National Science Foundation, Division of Behavioral and Cognitive Sciences Human Origins
Libya, New Mexico
October 1, 2009 through September 30, 2014 (0.8 months)
$255,036

Manuscripts in Review

Complexities in the early Cenozoic extrusion of crustal fragments around the eastern Himalayan syntaxis: Geosphere
Geissman, J.W., Burchfiel, B.C., Studnicki-Gizbert, C., Akoiz, S., Lianzhong, C., and Brocklehurst, S.,
Electronic Journal of the Geological Society of America

Rapid formation of large-scale rheomorphic structures in the 2.06 Ma Huckleberry Ridge Tuff, eastern Idaho: paleomagnetic and AMS data
Geology

Magnetostratigraphy of the uppermost Triassic/lowermost Jurassic Moenave Formation, Colorado Plateau: Correlation with the Newark Record
Hurley, L., Geissman, J.W., and Lucas, S.G.,
Geology

Manuscripts in preparation

Paleomagnetism of the Spanish Peaks igneous complex, south-central Colorado: Implications for the North American mid-Cenozoic reference paleomagnetic pole
Muggleton, S.R., and Geissman, J.W.,
Journal of Geophysical Research.

Magnetic property evidence for local heterogeneity in mantle oxidation state, mantle xenoliths from the Rio Puerco volcanic necks, central New Mexico
Callahan, C.N., Geissman, J.W., Selverstone, I., and Brearley, A.I.,

Lathrop Wells volcanic center: geology, geomorphology, and paleomagnetism
DePaolo, D.J., Geissman, J.W., Perry, F.V., McFadden, L.D., Wells, S.G., Crowe, B.M., and others?

Age and paleomagnetism of contractile structures in the Cottonwood Mountains, Death Valley area, southeast California
Snow, J.K., J.W. Geissman, and B.P. Wernicke
Elsevier, Earth Science Reviews, Wright/Troxel volume

Paleomagnetism of the Mesoproterozoic Pikes Peak batholith, southern Front Range, Colorado
Geissman, J.W., Harlan, S.S., Feig, A.D.,
Precambrian Research.

On the paleomagnetic signature of crystalline crust in extensional terranes
J.W. Geissman
Intended for Tectonics

Paleomagnetic data from the Hoover Dam area document approximately 45 degrees of counterclockwise rotation related to slip along the Lake Mead Fault System.
J.W. Geissman
Intended for Tectonics
Applications of Paleomagnetism in the Basin and Range province, western U.S.A., and relevance to models for crustal extension.
J.W. Geissman
Intended for Reviews of Geophysics (invited)

Paleomagnetism and rock magnetism of late Miocene intrusions, Paiute Ridge, Nevada.
C.D. Ratcliff, J.W. Geissman, F.V. Perry, B.M. Crowe, and P. Zeitler
Intended for Journal of Geophysical Research.

Partial late Paleozoic remagnetization of the Cambro-Ordovician Ignacio Formation, southwest San Juan Mountains, Colorado
J.W. Geissman
Intended for Geophysical Research Letters

Paleomagnetism of mafic dikes in the Roberts Mountains and Cortez Range, Nevada: Implications for structural history of the northern Nevada rift
J.W. Geissman, G.A. Acton, and M. Schneider*
Intended for Tectonics

The rock magnetic record of silicic magma emplacement, Obidian Domes, California
J.W. Geissman, J.C., Eichelberger, S.S. Harlan, and C. McCabe
Intended for Journal of Geophysical Research

Paleomagnetic and thermochronologic evidence for footwall tilt during extensional core complex development, Mineral Mountains, central Utah.
D.S. Coleman, J.W. Geissman, J.D. Walker, J.M. Bartley, and K.V. Hodges
Intended for Geological Society of America Special Paper, invited

Paleomagnetic results from Cenozoic volcanic rocks in the Walker Lane area, west-central Nevada, and their bearing on mechanics of Basin and Range extension

Further paleomagnetic results from Mesozoic plutons of the Walker Lane area, west-central Nevada, and tectonic implications.
J.W. Geissman, J.T. Callian* and J.S. Oldow
Tectonophysics

Paleomagnetism of the Jurassic Humboldt Lopolith, west-central Nevada: Results from extrusive equivalent metavolcanic rocks.
M.R. Hudson and J.W. Geissman
Geological Society of America Bulletin

Unsuccessful proposals for grants:

Collaborative Research: A high-resolution middle Pleistocene paleoclimate record (MIS 14 to 10) from the Valles Caldera, New Mexico
Peter Fawcett, John Geissman, and colleagues from Northern Arizona University and University of Minnesota, Duluth
National Science Foundation, Sedimentary Geology and Paleobiology
$170,000, August 1, 2007, through July, 2009

Collaborative Research: Paleoclimatic Reconstruction of Early Permian-Early Triassic Terrestrial Records - Implications on the Cause and Rate of the End-Permian Terrestrial Mass Extinction, Bogda Mountains, NW China
National Science Foundation, EAR, Sedimentary Geology and Paleobiology
Western China, Albuquerque, NM  
$158,530, January 1, 2009 through December 31, 2011

Collaborative Research: Walker Lane Integrated Geological and Geophysical Lithospheric Experiment (WIGGLE)  
National Science Foundation, EAR, Earthscope Science Program  
Danny Stockli (University of Kansas), Randy Keller (University of Oklahoma), Hersch Gilbert (Purdue University), John Geissman, John Oldow (University of Idaho)  
$178,000 (UNM component), January 1, 2008, through December, 2011

Non-sponsored Research:

"Generic" paleomagnetic and rock magnetic investigations of: Cenozoic volcanic rocks (Arizona, Nevada, California, New Mexico)  
Lower Paleozoic plutons (New Mexico, Colorado)  
Mesozoic sedimentary rocks (New Mexico, Colorado, West Texas, Nevada)  
Paleozoic sedimentary rocks (Nevada, New Mexico, Colorado, Utah)  
Cenozoic intrusions (Utah, Nevada, New Mexico)  
Mesozoic intrusions and fault-generated pseudotachylites (Nevada, Colorado, California, Mexico)

Other Creative Works

Accreditation: Wrong Path for the Geosciences  
Bralower, T., Easterling, W., Geissman, J. W., Savina, M., Tewksbury, B., Feiss, G., Macdonald, H., and Rhodes, D.,  

Exploring Geology, Book Review  
Geissman, J.W.,  
Eos, Transactions of the American Geophysical Union, v. 89, p. 366,368 (2008)

Science teacher training: The role of the Universities  
Nyman, M.W., Ellwein, A.L., McFadden, L.M., Geissman, J.W.,  
Eos, Transactions of the American Geophysical Union, v. 89, p. 514-515 (2008)

Climatic, tectonic, and biotic evolution in continental cores  
Olsen, P.E., Kent, D.V., and Geissman, J.W.,  
Eos, Transactions of the American Geophysical Union, v. 89, p. 118 (2008)

David Gutzler, Professor

Proposal submitted, in review

Climate Change and New Mexico's High Elevation Snowpack  
(PI: W. Michener, UNM lead scientist: D. Gutzler)  
National Science Foundation EPSCoR office  
60 months ($3M/yr to state EPSCoR office).

Manuscripts in progress/in press [*student co-authors]

Effects of climate change on mountain hydrology and water management in the upper Rio Grande watershed: Assessment methods and strategies  
A. Rango, B. Hurd, D.S. Gutzler and E.R. Vivoni  
Climate Research, submitted for publication (now in review).
The complex ecohydrology seasonal cycle of the Southwest United States
M. Notaro, Z. Liu, R. Gallimore, J. Williams, D.S. Gutzler and R. Thompson
Global Change Biology, submitted for publication (now in review).

A US CLIVAR project to assess and compare the responses of global climate models to drought-related SST forcing patterns: Overview and results
Journal of Climate, submitted for publication (now in review).

NAMAP2: Atmospheric simulations of the North American Monsoon
Journal of Climate, submitted for publication (now in review).

Predicting future threats to the long-term survival of Gila Trout using a high-resolution simulation of climate change
T. Kennedy*, D.S. Gutzler and R.L. Leung
Climatic Change, in press (paper), available online.

Rhian H. Jones, Associate Professor

Manuscripts in press and in review


Karl E. Karlstrom, Professor

Pending proposals for 2009

Collaborative research: Paleoproterozoic accretionary evolution of southern Laurentia, NSF Tectonics Program, PIs Karl Karlstrom (UNM), Michael Williams (UMass) George Gehrels (UArizona); 7-1-09 to 6-30-2012, $149,310 requested for UNM, pending (2009-2011)

Articles published and in press for 2009:

1 first-authored paper, 1 with an MS student as first author, 7 co-authored papers, and 8 chapters in a monograph are published or in press as of early 2009. There are numerous additional articles in various stages of preparation.
Age, provenance, and tectonic setting of Paleoproterozoic quartzite successions in the southwestern United States

CREST Experiment Probes the Roots and geologic History of the Colorado Rockies
Aster, R., MacCarthy*, J., Heizler, M., Kelley, S., Karlstrom, K.E., Crossley, L., Duiker, K., and the CREST team
Outcrop, v. 58, no. 1, p. 6-21 (2009).

Timeline and time scale cognition experiments for a geological interpretative exhibit at Grand Canyon.
Semken, S., Dodick, J., Ben-David, O., Pineda, M., Bueno Watts, N., & Karlstrom, K.,


Manuscripts in press

Degassing of mantle-derived CO2 and 3He from springs in the southern Colorado Plateau region-flux rates, neotectonics connections, and implications for understanding the groundwater system
Crossey, L.J., Karlstrom, K.E., Springer, A., Newell, D., Hilton, D., and Fischer, T.,

Timing and mechanisms of basement uplift and exhumation in the Colorado Plateau - Basin and Range Transition Zone, Virgin Mountain anticline, Nevada-Arizona, in Umhoeffer and Beard, eds.,
Quigley*, M., Karlstrom, K.E., Kelley, S., and Heizler, M.,
Geological Society of America Special Paper (submitted) in press.

Structure and 40Ar/39Ar K-feldspar thermal history of the Gold Butte block: re-evaluation of the tilted crustal section model, in Umheoeffer and Beard, eds.,
K.E. Karlstrom, M. Heizler and M.C. Quigley*
Geological Society of America Special Paper, (submitted) in press.

Late Quaternary Incision Rates and Drainage Evolution of the Uncompahgre and Gunnison Rivers Calibrated by Lava Creek B Ash, Western Colorado
A. Darling*, A. Aslan, R. Cole, K.E. Karlstrom, C. Betton and Wan
Rocky Mountain Geology, in press (2009)

Perspectives on the architecture of continental crust from integrated field studies of exposed isobaric sections, in Miller, R., and Snoke, A., eds., Crustal cross-sections from the western North America Cordillera and elsewhere: Implications for tectonic and petrologic processes: Boulder Williams, M. L., Karlstrom, K., Dumond*, G., and Mahan*, K. H.
Geological Society of America, Memoir, in press (2009)
Manuscripts in review

A Geologic Overview of Eastern Grand Canyon
Timmons, J.M., and Karlstrom, K.E., eds.
Grand Canyon Association Monograph, in review (2009).

Vishnu basement rocks of the upper Granite Gorge: continent formation 1.8 to 1.6 billion years ago, in Timmons, J.M., and Karlstrom, K.E., eds., A Geologic Overview of Eastern Grand Canyon
Karlstrom, K.E., and Williams, M.L.
Grand Canyon Association Monograph, in review (2009)

Karlstrom, K.E.,
Grand Canyon Association Monograph, in review (2009)

Kelley, S. A., and Karlstrom, K.E.,
Grand Canyon Association Monograph, in review (2009)

Crossey, L.J., and Karlstrom, K.E.,
Grand Canyon Association Monograph, in review (2009)

Karlstrom, K.E., and Timmons, J.M.,
Grand Canyon Association Monograph, in review (2009)

Timmons, J.M., Bloch, J., Fletcher, K., Karlstrom, K.E., Heizler, M., and Crossey, L.,
Grand Canyon Association Monograph, in review (2009)

Karlstrom, K.E., Timmons, J.M., and Crossey, L.J.,
Grand Canyon Association Monograph, in review (2009).

Barry S. Kues, Professor

Manuscripts in preparation

A Late Pennsylvanian marine fauna from the La Casa Member, Wild Cow Formation (Madera Group) near Abo Pass, Socorro County, New Mexico
B.S. Kues
For New Mexico Geological Society, Guidebook 60.
Late Pennsylvanian invertebrate paleontology of Bruton Canyon, northern Sierra Oscura, Socorro County, New Mexico
B.S. Kues
For New Mexico Geological Society, Guidebook 60

An Introduction to the Geology of New Mexico
B.S. Kues
For New Mexico Geological Society

Early Pennsylvanian (Morrowan) faunas from the Osha Canyon Formation, Nacimiento Mountains, New Mexico
B.S. Kues
For New Mexico Geology

Micromolluscs from the Madera Group (Upper Pennsylvanian), Jemez Springs Area, New Mexico
B.S. Kues and T. Yancey
For Journal of Paleontology

Manuscripts in revision

Upper Cretaceous (Turonian) decapod crustaceans from central New Mexico
E.K. Toolson and B.S. Kues
Journal of Paleontology

Other research

Continuing studies of Pennsylvanian-Permian strata and paleontology in NM; studies of Mississippian and Lower Permian brittle stars from south-central New Mexico; study of Atokan (Middle Pennsylvanian) invertebrate assemblages from the Sandia Formation in Jemez Mountains

McFadden, Leslie D., Professor

Manuscripts in press or accepted for publication in refereed publications


Manuscripts submitted or in review

Low atmospheric CO₂ levels during ancient greenhouse climates; Breecker, D., Sharp, Z. and McFadden, L. (PNAS)

The impact of soil properties on anthropogenic uranium distribution, Los Alamos National Laboratory, New Mexico; Watt, P. and McFadden, L., for Soil and Sediment Contamination.
Manuscripts in preparation

Cosmogenic nuclide dating of hoodoos and the determination of climatically-sensitive erosion of bedrock slopes; McFadden, L., Gosse, J., Meyer, G., McAuliffe, J., Burnett, B., Scuderi, L (for Geology).

Influence of dust and rock type on nonsteady-state hillslope soils in the Sandia Mountains, Persico, L., McFadden, L., Meyer, G. and Freschette, J. (for Geology).


Proposals pending

"Track 2: Southwest Opportunities for Diversity in the Geosciences (SODIG)", L McFadden (one of 5 Co-Principle Investigators)", National Science Foundation EAR-Opportunities of Enhancing Diversity, 09/01/09 - 08/30/14, $1,993,586.

Unfunded proposal submitted in 2008


Currently active, unfunded research projects

"Collaborative Research: The Role of Insolation in the Breakdown of Rock", National Science Foundation, M. Eppes, P.I., L. McFadden, one of several unfunded significant collaborators, 5/1/2009 - 4/33/2012.

Studies of the soils, geomorphology and Quaternary stratigraphy and ecology of the Blue Gap area and adjacent regions, Colorado Plateau, NW Arizona (with UNM colleagues G. Meyer, J. Galewsky, L. Scuderi, Tim Wawryzniec, E&PS graduate students, and J. McAuliffe, Desert Botanical Garden, Arizona).

Studies of soil geomorphic evolution of the landscapes of selected areas of the West Mesa in the Albuquerque area and central New Mexico in association with analysis of Paleoindian and later period archaeological sites (with Dr. Bruce Huckell, UNM Anthropology Department).

Studies of the soils and geomorphic evolution of hillslopes of the western side of the Sandia Mountains and the Sevilleta Wildlife Refuge Area, central New Mexico (with G. Meyer and E&PS graduate students).

Grant A. Meyer, Associate Professor

Manuscripts in press or in preparation

Holocene fire-related alluvial-fan deposition and climate in ponderosa pine and mixed-conifer forests, Sacramento Mountains, New Mexico

*Frechette, J.D. and Meyer, G.A.

The Holocene (in press)
Holocene beaver damming, fluvial geomorphology, and climate in Yellowstone National Park, Wyoming
*Persico, L.P., and Meyer, G.A.
Quaternary Research (in press)

Late Pleistocene and Holocene terraces of the South Fork Payette River, Idaho; controls on postglacial river incision
Pierce, J.L., and Meyer, G.A.,
In preparation for Geomorphology.

Hydraulic, geomorphic, and geochemical processes in floodplain contamination from a mine tailings dam failure
Meyer, G.A. and Watt, P.M.,
In preparation for Environmental and Engineering Geoscience.

The importance of dust and rock type on soil-mantled hill slopes in the Sandia Mountains, New Mexico
Persico, L.P., McFadden, L.D., Frechette, J.D., and Meyer, G.A.,
In preparation for Geology.

Manuscript peer review (with completion dates)

Geology (5/2008).
Quaternary Research (11/2008).
Assigned as reviewer for new textbook in geomorphology by Paul Bierman and David Montgomery, to be published by WH Freeman in 2010

Manuscripts in review

Evidence for debris flow and shallow subsurface flow on Mars
Icarus (in review)

Introductory field geology at the University of New Mexico, 1984 to today: What a "long, strange trip" it continues to be
Geissman, J.W., Meyer, G.
GSA Special Paper, Field Geology Education: Historical Perspectives and Modern Approaches (in review).

Pending and unfunded proposals

Engineered Systems and Ecosystem Response in the Middle Rio Grande
NSF Coupled Natural and Human Systems, ATM 0909506
Julie Coonrod, PI; Grant Meyer, co-PI
August 15, 2009 – August 15, 2012 ($1,477,482; pending)

Geomorphic influence of beaver on fluvial systems in the greater Yellowstone ecosystem
NSF Geomorphology and Land Use Dynamics Program, EAR 0844293
Grant Meyer, PI
Submitted July 16, 2008; 1/31/2009-12/31/2011 ($191,789; pending)
Hillslope erosion and its meteorological triggering in semi-arid landscapes of the Colorado Plateau
NSF Geomorphology and Land Use Dynamics Program, EAR 0819938
Joe Galewsky, PI; Grant Meyer, Les McFadden, Luis Scuderi, co-PIs
Submitted Jan. 16, 2008 ($330,264, not funded)

Development of Graphite Target Preparation Capability at UNM for Radiocarbon Dating by
Accelerator Mass Spectrometry
UNM Interdisciplinary Large RAC Grant Proposal
Grant Meyer, Zach Sharp, Felisa Smith, Keith Prufer, co-PIs
Jan. 17, 2008 ($9704, not funded)

Matthew Nyman, Assistant Professor/Lecturer

Papers in progress

Co-PI on an in-service K-5 teacher professional development project funded by the New Mexico
Public Education Department: Bernalillo Public Schools - Pathways to Integrating Math and
Science. This highly successful one-year project is in its final stages.

Integrating Informal Education Centers into Science Professional Development of Elementary
Teachers.

Pending Proposals

Co-PI: Dynamics of Coupled Natural and Human Systems (CNH), Julie Coonrod, P.I., UNM Civil
Engineering.
Co-PI: Enhancing Diversity in the Geosciences (OEDG), Geissman, P.I. UNM Arts and Sciences.

Unsuccessful proposals

Co-PI on NSF grant Science and Technology for Astrophysical and Atmospheric Research
(STAAR) Center, submitted pre-proposal, which was not accepted by NSF.

Victor Polyak, Senior Research Scientist

Manuscripts in preparation or press

Holocene record of ENSO.
V.J. Polyak, Y. Asmerom, J.B.T. Rasmussen, S.J. Burns, and M.S. Lachniet
To be submitted to Science

Last glacial moisture swings in the western USA and implication for response to global warming
Y. Asmerom, V.J. Polyak, S.J. Burns
Submitted to Science

Pleistocene-Holocene Climate Transition in Southwestern United States from a central New
Mexico Stalagmite
V.J. Polyak, Y. Asmerom, S.J. Burns
To be submitted to Science

A gray view of ENSO
V.J. Polyak, Y. Asmerom, S.J. Burns, M. Lachniet
In preparation
Correction of U-series dates using multiple measured initial $^{230}$Th/$^{232}$Th ratios and $^{228}$Th concentrations
V.J. Polyak, J.B.T. Rasmussen, and Y. Asmerom
Submitted to Congress of Speleology - Journal of Cave and Karst Studies

Microstructure of a soda straw
V.J. Polyak and P.P. Provencio
Submitted to International Congress of Speleology - Journal of Cave and Karst Studies

Climatic-driven banding in speleothems
V.J. Polyak and P.P. Provencio
Submitted to Journal of Cave and Karst Studies

How karst works in Grand Canyon
C.A. Hill and V.J. Polyak
Submitted to Journal of Hydrology

High-resolution record of the H4 event from a Puerto Rico speleothem
B. Onac, L. Soto, V. Polyak, Y. Asmerom, A.-V. Bojar, T. Miller
In preparation

Kraushohle (Austria): Morphology and mineralogy of an alpine sulfuric acid cave
J. De Waele, L. Plan, P. Audra, A. Rossi, C. Spotl, V. Polyak, B. McIntosh
Submitted to Congress of Speleology - Journal of Cave and Karst Studies

Other research

Timing of last major lake highstand in Lake Estancia from U-series dating of magnesite and gypsum. Collaborating with Roger Anderson and Bruce Allen
U-series dating support of Fort Stanton Cave project (BLM funded).
U-Pb chronology of speleothems from Jewel and Wind caves, South Dakota.

**Frans Rietmeijer**, Research Professor

**Manuscripts in press**

Dust formation and evolution in a Ca-Fe-SiO$_2$-H$_2$O$_2$ vapor phase condensation experiments and astronomical implications
F.J.M. Rietmeijer, A. Pun* and J.A. Nuth III
Monthly Notices Royal Astronomical Society

Glittery clouds in exo-planetary atmospheres?
Ch. Helling and F.J.M. Rietmeijer
International Journal of Astrobiology

**Manuscripts submitted**

A cometary aggregate Interplanetary Dust Particle as an analog for comet Wild 2 grain chemistry preserved in silica-rich Stardust glass
F.J.M. Rietmeijer
Meteoritics and Planetary Science
Chemical identification of Comet 81P/Wild 2 dust after interacting with molten silica aerogel
F.J.M. Rietmeijer
Meteoritics and Planetary Science

Manuscripts in preparation

Metastable equilibrium of Mg-cordierite and Mg-osumilite-type ring silicates constrained.
F.J.M. Rietmeijer, A. Pun* and J.A. Nuth III

Unsupported Research

Polarization of condensed cosmic dust analogs, Prof. A.-C. Levasseur-Regourd and Dr. Edith Hadamick, Service d’Aéronomie, Centre National de la Recherche Scientifique, Institut Pierre Simon Laplace (France)

Mousumi Roy, Associate Professor

Papers submitted in revision

Magmatism and rock uplift of the Colorado Plateau by warming of heterogeneous lithosphere
Roy, M., T.H. Jordan, J. Pederson,

Exploring the Relative Contributions of Temperature and Composition on Seismic Velocity Distribution in the Lithospheric Mantle beneath the Colorado Plateau
Roy, M., *Callahan, C.N., and K. Condie
To be submitted to Geochemistry, Geophysics, Geosystems, in revision, December, 2008.

Publications in preparation

Stratification of mantle fabric and anisotropy beneath strike slip plate boundaries
*Tetreault, J., M. Roy, J. Gaherty, A. Ringler, M. Fleharty, and L. Zhao
To be submitted in May 2009.

Shear wave splitting patterns in the San Andreas plate boundary region: models based on inferred mantle flow and fabric
*Ringer, A., Roy, M., Tetreault, J, Gaherty, J., et al.,
To be submitted to Geophysical Journal International, in 2009

Other research projects

Seismic anisotropy and its relation to crust-mantle coupling in the western US (with J. Gaherty and A. Lerner-Lam, Columbia University); (NSF-Earthscope; PIs: J. Gaherty, M. Roy, A. Lerner-Lam; ($118K to MR; 2006-08)

Melting and deformation surrounding continental keels (with A. Ringer, UNM, and B. Holtzman, Columbia University); NSF proposal in progress, 2008.
3D models of strike-slip fault systems using the code GALE (with M. Fleharty); NSF proposal in progress, 2008.

Thermal evolution of the Colorado Plateau following removal of the Farallon slab; collaboration with T. Jordan (USC); Funded by the National Science Foundation, EAR-Tectonics Program (sole PI, $100K total, 2006-2008)
Crustal deformation measurements and a multidisciplinary geophysical investigation of the Rio Grande Rift (with A. Sheehan and S. Nerem, CU Boulder; A. Lowry, Utah State); EAR-Earthscope Program PIs: A. Sheehan, S. Nerem, A. Lowry, and M. Roy ($124K to MR, $605K total, July 2005-July 2010

Exhumation and surface uplift of the Colorado Plateau based on rock cooling and erosion from apatite fission-track and (U-Th)/He thermochronology (with S. Kelley, J. Pederson, and D. Stockli)

Unsuccessful proposals

Why are arcs and orogens curved? Testing mechanisms for arc and fold and thrust belt curvature (with J. van Wijk, A. Sussman)
Collaborative Research: Constraining the Evolution of Upper Mantle Structure Using Low Temperature Thermochronometry: The High Plains Transition Between the U.S. Cordillera and the stable cratonic interior (with R. Flowers and S. Kelley)

Jane Selverstone, Professor

Manuscripts in review/revision/near submission

The effect of aqueous and carbonic fluids on the dislocation creep strength of quartz
Chernak, L.*, Hirth, G., Selverstone, J., and Tullis, J.

Fluid control on stress-corrosion cracking in eclogites: Implications for subduction-zone seismicity
Selverstone, J. and Brearley, A.J.,
Geology, (in revision)

Pending proposals

Linked isotopic (Cl, O, H) and petrologic studies of fluid-rock interaction during the subduction cycle
J. Selverstone and Z. Sharp
National Science Foundation
$270,001; 6/1/09-5/31/12

Unsuccessful proposals

Scales and mechanisms of fluid migration and equilibration during the subduction cycle
J. Selverstone, Z. Sharp, J.D. Barnes
National Science Foundation
$267,130; 6/1/08-5/31/11

Louis A. Scuderi, Associate Professor

In press

Hydrological and climatic changes in deserts of China since the Late Pleistocene: status and perspectives.
Yang, X., Scuderi, L.A.,
Quaternary Research, Projected publication Summer 2009.
Scuderi, L.A., *Laudadio, C.K., Fawcett, P.J.,
Quaternary Research, Projected publication Summer 2009.

In preparation

Impacts of the late 16th century megadrought on Pinyon pine germination in the western United States.
Scuderi, L.A., *Yuhas, A.,
To be submitted to Vegetation Science, 2009.

Amplitude Modulation of Decadal and Centennial-Scale Precipitation Variability in the American Southwest.
Scuderi, L.A.,
To be submitted to Geophysical Research Letters, 2009

Impact of recent climate change on inverted meadows: Sierra Nevada, USA.
Scuderi, L.A.,
To be submitted to Landscape Ecology, 2009.

Meteorologic conditions leading to inverted meadows in the Snowy Mountains, Victoria, AU.
Scuderi, L.A.,
Arctic, Antarctic and Alpine Research, 2009

Manuscripts in Review

Tree Image Growth Analysis Using the Instantaneous Phase and Frequency Modulation.
*Ramachandran, J., Pattichis, M.S., Baba, J.S., Scuderi, L.A.,
In review, Pattern Recognition, 2009.

Fluvial form in modern continental sedimentary basins: The Distributive Fluvial System (DFS) Paradigm.
In review, Geology.

Zachary Sharp, Professor

Manuscripts submitted or in press

Volcanic gas chemistry from the erupting Oldoinyo Lengai (East Africa): Origin of carbonatite magmas

Variations in chlorine stable isotopes along the Central American volcanic front
Barnes J.D., Sharp Z.D., Fischer T.P., Hilton D.R., and Carr M.J.

Seasonal bias in the formation and stable isotope composition of pedogenic carbonate in modern soils from central New Mexico, USA.
Breecker, D.O., Sharp, Z.D. and McFadden, L.D.
Proceedings of the National Academy of Science (submitted)
An experimental determination of chlorine isotope fractionation in acid systems and applications to volcanic fumaroles
Sharp, Z.D., Barnes, J.D., Fischer, T.P., and Halick, M.
Geochimica et Cosmochimica Acta (submitted)

Pending proposals

Acquisition of a tunable diode laser absorption spectroscopic isotope analyzer and peripheral induction furnace
EAR/PI
$69,115 (02/19/2009)

Testing for high-frequency (104-105 yr) glacio-and thermo-eustasy in greenhouse and transitional climates using oxygen isotopes of conodont apatite
EAR/Co-I w/ M. Elrick
$298,427 (01/13/2009)

IGERT: The Museum of Southwestern Biology as a nexus for interdisciplinary graduate research, education and training (MSB-IGERT)
DGE/E&PS lead
$2,808,032 (10/20/2008)

Collaborative Research: A high-resolution middle Pleistocene paleoclimate record from the Valles Caldera, New Mexico
EAR/Co-I w/ P. Fawcett
$215,925 (10/22/2008)

Gary A. Smith, Professor

Manuscripts in preparation

Sequential downstream integration of the Rio Grande through adjacent rift basins
Sean Connell* and Gary A. Smith
To be submitted to Geology

Publications in press

How Does Earth Work? 2nd edition
Gary A. Smith, Aurora Pun
Pearson Education, 569 p., January 2009

Geologic map of the El Rito quadrangle, Rio Arriba County, New Mexico
D.J. Koning and G.A. Smith
New Mexico Bureau of Geology and Mineral Resources
Open-file Geologic Map OF-GM, scale 1:24,000

Geologic map of the Squawback Ridge quadrangle, Deschutes and Jefferson Counties, Oregon
M.L. Ferns, D.E. Stensland, G.A. Smith
Oregon Department of Geology and Mineral Industries Geologic Map Series, scale 1:24,000.
(accepted 2002, proofs returned, holding in publication queue)
Geologic map of the Opal City quadrangle, Jefferson County, Oregon
G.A. Smith, M.L. Ferns
Oregon Department of Geology and Mineral Industries Geologic Map Series, scale 1:24,000.
(accepted 2002, proofs returned, holding in publication queue)

Unsupported research projects:
- Tectonics and sedimentation of the transition from Laramide compression to Neogene extension in northern New Mexico
- Stratigraphic patterns of volcanically overfilled rift basins
- Stratigraphic and structural evidence for the rupture of hanging-wall hinge zones, San Luis and Española basins, Rio Grande rift, New Mexico.

Manuscripts in Review
- Tectonic and climatic controls on Neogene nonmarine depositional sequences, Albuquerque Basin, Rio Grande rift, north-central New Mexico
  S. Connell*, G.A. Smith, J.W. Geissman and W.C. McIntosh
  Submitted to New Perspectives on the Rio Grande rift: From tectonics to groundwater, edited by M.R. Hudson and V.J. S. Grauch
- Stratigraphy and paleogeography of Oligocene to early Miocene sedimentation in the Jemez Mountains region, north-central New Mexico
  S.A. Kelley, K.A. Kempter, W.C. McIntosh, F. Maldonado, G.A. Smith, S.D. Connell*, D.J. Koning and J. Whiteis
  Submitted to New Perspectives on the Rio Grande rift: From tectonics to groundwater, edited by M.R. Hudson and V.J. S. Grauch

Timothy Wawrzyniec, Research Scientist

External funding activities
- Secured several grants in support of the research and educational missions of the University of New Mexico. These included $116,000 in research dollars related to lidar lab activities, and $805,750 in software license gifts in support of the petroleum geology curriculum.
- Secured MOVE suite of software produced by Midland Valley. Used broadly in the petroleum industry for visualizing subsurface, and three dimensional models of geologically complex structures, discount value of $236,750
- Secured Petra and Petraseis Industry software (IHS, Inc.) for subsurface geologic investigation in support of petroleum related research and education, educational discount value of $569,000.
- Cooperative agreements with UNAVCO, $12,000/year, established September 2008.
- USGS – Off Road Vehicle impact studies using geospatial techniques, PI, $12,000, sub award September 2008. Project PI Richard Grauch, USGS.
- Cooperative agreements with Arizona State University, and the University of Minnesota, $12,000/year, established September 2008.
- US Army Corps of Engineers – Bank Erosion Monitoring, Co-PI, $80,000, awarded June 2008.
Research projects in progress

PI for an on-going study of the opening of the Gulf of Mexico and related shear zones found along the west coast of the Mexican State of Chiapas. Working with a UNAM collaborator, Dr. Wawrzyniec is responsible for discovering the Tonala shear zone, which he contends is a paleo transform fault that was later reactivated as a strike-slip boundary between mainland Mexico, and the Chortis block (what is now known as Guatemala). He is serving as co-PI or senior personnel for several projects lead by Dr. Weissman (Hydrology). In these studies, Dr. Wawrzyniec is applying lidar technology to generate 3D images of geologic outcrops. These images are used to resolve high-resolution interpretations of lithofacies. The facies maps are then used in modeling efforts by Weissman and colleagues to generate flow models of contaminants in groundwater.

Gary Weissmann, Associate Professor

Manuscripts submitted or in preparation


Peer-reviewed articles

Stratigraphic record of drainage basin stream capture and piracy in fluvial fan deposits at the Lawrence Livermore National Laboratory, in the Livermore Basin, California, USA. Mikesell, L.R., Weissmann, G.S., and Karachewski, J.A. Geomorphology, in press.
A Cretaceous feather from the Upper Cretaceous (lower Campanian) Point Lookout Sandstone, San Juan Basin, northwestern New Mexico.
Williamson, T.E., Kues, B.S., Weissmann, G.S., Stidham, T.A., and Yurchyk, S.L.,

An Upper Cretaceous (lower Campanian) feather from the Point Lookout Sandstone, northwestern New Mexico
Williamson, T.E., Kues, B.S., Weissmann, G.S., Stidham, T.A., and Yurchyk, S.L.,

On-going research projects

Detailed aquifer characterization using lidar and high-resolution sedimentologic description. Funded through SURP and DOE-BES grants listed above. Collaboration with T. Wawrzyniec. Several presentations completed during 2008 and submission of Nichols et al. and Klise et al. based on these results. Two follow-up proposals will be submitted in 2009.

Geochemical and physical aquifer property heterogeneity: a multi-scale sedimentologic approach to reactive solute transport. Funded by DOE. We are collaborating with Richelle Allen-King (University of Buffalo) and several scientists at the Pacific Northwest National Laboratory to evaluate the influence of physical and geochemical heterogeneity on movement of a carbon tetrachloride plume at the Hanford Site, Washington.

Fluvial depositional models in active continental sedimentary basins. This research is working to change the current paradigm for fluvial facies models, proposing that the current models are flawed since they were not developed in active sedimentary basins. Collaboration with A. Hartley (University of Aberdeen), G. Nichols (Royal-Holloway, London), and L. Scuderi (UNM). We submitted a proposal for this work to potential petroleum industry partners. We expect several publications to be submitted in 2009.
5. ACTIVITIES IN PROFESSIONAL SOCIETIES

Carl Agee, Professor

Society committees
Executive Committee, Vice-Chair, COMPRES 2007-2010.

Meetings attended

Adrian Brearley, Professor

Professional meetings attended

Mars Sample Return Workshop, Albuquerque, NM, April 21-23, 2008.

Microscopy and Microanalysis 2008 meeting, August 3-7, 2008 Albuquerque, New Mexico, presented invited talk and coauthored one talk.


Presented talk ‘Amorphous Carbon-rich Grains in the Matrices of the Primitive Carbonaceous Chondrites, ALH77307 and Acfer 094.

Coauthored talk with Neyda Abreu, Petrologic and Chemical Effects of the Onset of Aqueous Alteration on the Matrices of CR Chondrites: GRA 95229.

Coauthored talk with Rena Ford, ‘Element Exchange Between Matrix and a CAI in the Allende Meteorite’.

Coauthored talk with Jana Berlin and Rhian Jones ‘Fe/Mn Systematics of Chondrule Olivine: Significant Differences Between Type II Chondrules in CO, CR, and Ordinary Chondrites’.

Coauthored poster with Crystal Donnelly “Minor and Trace Elements in Sulfides in Reduced and Oxidized CV3 Carbonaceous Chondrites: Potential Recorders of Nebular and Parent Body Processes”.

August 3-7, 2008 Microscopy and Microanalysis meeting, Albuquerque, New Mexico

Coauthored talk with Jana Berlin, Rhian Jones and Mike Spilde: Determining Bulk Chemical Compositions of Chondrules by Electron Microprobe: Modal Recombination versus Defocused Beam Analyses.


Presented invited talk: Comparison of Wild 2 grains with carbonaceous chondrites.

American Geophysical Union Meeting, San Francisco 10-14th Dec 2007

Other activities

Associate Editor, Mineralogical Magazine.
Associate Editor, Meteoritics and Planetary Science.

Laura J. Crossey, Professor

Society committees:

GSA Nominations Committee
Association for Women Geoscientists (lecturer (since 1989))

Maya Elrick, Associate Professor

Editorial board


Amy Ellwein, Lecturer III, Natural Science Program

Membership

Geological Society of America
American Geophysical Union
National Association of Geoscience Teachers
New Mexico Geological Society
Association for Women Geologists.

Meetings attended

Annual GSA meeting (Fall 2009), one regarding dissertation research and one on recent SEIS professional development activities for in-service K-12 teachers.

Committee

Judging committee, GSA 2008 Biggs Earth Science Teaching Award
**Wolfgang E. Elston**, Professor Emeritus, Senior Research Professor

**Meetings attended**

Los Alamos Geological Society, annual meeting. Invited keynote address, Giant volcanoes of southwestern New Mexico, January 26.

New Mexico Geological Society, annual spring meeting, Socorro, NM. Participated in symposium on Rio Grande Rift. Read paper, The Rio Grande Rift in Mexican perspective, April 18.


New Mexico Geological Society, 59th annual field conference, Silver City, NM. Invited keynote address, When batholiths exploded: the mid-Cenozoic ignimbrite flareup in southwestern New Mexico. Contributed to the guidebook (see Item 2, above) and to discussions at several localities, October 22-25.

**Invited talks**

Albuquerque Geological Society. Exploration of the Lightning Dock KGRA (Known Geothermal Resources Area), Animas Valley and Pyramid Mountains, Hidalgo County, New Mexico, February 6.

Albuquerque Society of Engineers. Giant volcanoes of southwestern New Mexico, October 13.

**Tobias Fischer**, Associate Professor

**Professional societies**

Guest Editor of Journal of Volcanology Geothermal Research for special issue on Magmas and Gases volume related to Taiwan workshop held in April 2007. This JVGR volume is now out Journal of Volcanology, Geothermal Research 178.

Associate editor of GSA Bulletin

Member of Editorial Board for Journal of Volcanology and Geothermal Research

Editor for the IAVCEI Commission on the Chemistry of Volcanic Gases (CCVG)

Web master for the IAVCEI Commission on the Chemistry of Volcanic Gases (CCVG)

Member of Editorial Board for Colombian Journal of Geology

**Joseph Galewsky**, Assistant Professor

**Meetings attended**

European Geosciences Union Meeting, Vienna, April 2008.


**Abstracts of talks and posters (*=invited; #=student author)**

Probing ENSO influences on subtropical humidity using tracers of last saturation
J.V. Hurley# and J. Galewsky
EGU, Vienna, April 2008.

Feedbacks between atmospheric moist convection and surface processes in semi-arid regions
J. Galewsky*
EGU General Assembly, Vienna, April 2008.

Large-scale water vapor transport and distribution, AGU Chapman Conference on atmospheric
water vapor and its role in climate
J. Galewsky*

Circulation and Temperature Influences on Subtropical Humidity: Last Saturation Water Vapor
Tracers and ENSO.
J.V. Hurley# and J. Galewsky

Stable isotope paleoaltimetry of high relief terrain: An atmospheric dynamics perspective
J. Galewsky

Water vapor isotopes measurements at Mauna Loa, Hawaii: Comparison of laser spectroscopy and
remote sensing with traditional methods, and the need for ongoing monitoring

John W. Geissman, Chair and Professor

Professional societies

Member, Steering Committee, Integrated Solid Earth Sciences (ICES)
Member, Advisory Board, Building Stronger Geoscience Departments
Member, Council of the Geological Society of America
Chair, Publications Committee, Geological Society of America
Associate Editor, Tectonics, 2004 to present
Science Editor, Eos, American Geophysical Union, 2000 to present
Member, American Geophysical Union "Committee of 50"
University of New Mexico representative, DOSECC, Inc.
Geoscience "consultant", Albuquerque Petroglyphs, U.S. Park Service
Member, New Mexicans for Science and Reason, and Technical Consultant
Member, Coalition for Excellence in Science Education
Consultant, National Center for Science Education
Member, Earthscope Education and Outreach Committee

Rhian H. Jones, Associate Professor

Talks presented

Presented talk, "Trace elements in aluminum-rich chondrules from the Mokoia CV chondrite."

Attended conference, "Ground Truth from Mars: Science Payoff from a Sample Return Mission".
Albuquerque, NM, April 29–May 2 2008.

Presented talk, “Making the most of small extraterrestrial samples: Chemical and isotopic information obtained from multiple microbeam techniques. Microscopy and Microanalysis Conference, Albuquerque, NM, August 2008.

Professional societies

Council Member, Meteoritical Society. 2007 – present.
Attended council meetings in Houston, TX, March 2008 and Matsue, Japan, August 2008.
Associate Editor, “American Mineralogist”, 2005 – present.
Member, Nomenclature Committee of the Meteoritical Society, 2003 – 2008.

Karl E. Karlstrom, Professor

Professional societies

I am active with Geological Society of America: as GSA Bulletin senior science editor, member of the Publications Committee, fieldtrip leader, topical session convener, and invited speaker.

Barry S. Kues, Professor

Professional societies

New Mexico Geological Society:
Secretary (attended four Executive Committee meetings); Publications Committee
Attended annual Fall Field Conference, spoke at one stop during conference

Grant A. Meyer, Associate Professor

Professional meeting attended

Convened symposium for GSA Cordilleran Section and Rocky Mountain Section Joint Meeting: “Geomorphic Responses to Holocene Climate Change in the Western USA”, Las Vegas, NV (March 21, 2008).

Invited talks


The Yellowstone “Supervolcano”: Is an eruption imminent?: University of New Mexico-Gallup Science Seminar Series, May 1, 2008.


Grant proposal review

NSF Geomorphology and Land-Use Dynamics Program (3/2008)
NSF Postdoctoral Research Program (10/2008)
Leslie D. McFadden, Professor

Professional meetings attended

Geological Society of America Cordilleran-Rocky Mountain Section Meetings (March, 2008)
British Society of Geomorphology, University of Exeter, UK (July, 2008)
Geological Society of America Annual Fall Meetings (October, 2008)

Matthew Nyman, Assistant Professor/Lecturer

Membership

Geological Society of America
American Geophysical Union
National Association of Geoscience Teachers
National Science Teachers Association

Victory Polyak, Senior Research Scientist

Professional meetings attended

Attended Karst from Recent to Reservoirs meeting, Karst Waters Institute, in Rapid City, South Dakota.
Reviewed two NSF proposals and several papers for various journals.

Frans Rietmeijer, Research Professor

Professional papers read

Refractory deep metastable eutectic vapor phase condensates evolve to amorphous, but not quite, equilibrium minerals, 39th Lunar and Planetary Science Conference

Time, temperatures, and pressure indicated by metastable iron-sulfide nanophases in melted STARDUST aerogel, 39th Lunar and Planetary Science Conference

An experimental study of phyllosilicate modification in comets during perihelion could be relevant to ferric iron-rich layer silicate formation at the Martian surface, Workshop on Ground Truth from Mars: Science Payoff from a Sample Return Mission

Processing of the smallest Wild 2 particles in hot silica aerogel, Goldschmidt Conference 2008

Challenges and results of real comet dust analyses: The Stardust mission, Microscopy and Microanalysis 2008

Professional meetings attended

39th Lunar and Planetary Science Conference, League City (TX), March 10-14
Workshop on Ground Truth from Mars: Science Payoff from a Sample Return Mission, Albuquerque (NM), April 21-23, 2008
Microscopy and Microanalysis 2008, Albuquerque (NM), August 3-7, 2008
Mousumi Roy, Associate Professor

Professional meetings attended

CIG Workshop on Mantle convection and long-term tectonic modeling (Roy, Fleharty, Sanders) July 2008
AGU Chapman (Lherzolite) Meeting (Roy, Ringler), September, 2008
AGU Fall Meeting (Roy, Ringler) December, 2008

Louis A. Scuderi, Associate Professor

Meeting discussant

Climate, Ecosystems, and Resources of Eastern California
Plenary Session II: Ecosystem Responses, November 5-8, 2008, Bishop California

Jane Sellercstone, Professor

Professional societies

Dana Medal selection committee, 2007-2009, Mineralogical Society of America
Member, Editorial Board for Geology, Geological Society of America
Named to Committee on Young Scientist Award, Geological Society of America for 2009-2012

Zachary Sharp, Professor

Editorship

American Journal of Science

Gary A. Smith, Professor

Invited presentations

Evolving Geologic Understanding of The Española Basin, Rio Grande Rift, Northern New Mexico, New Mexico Geological Society Spring Meeting, Socorro, NM, April 18, 2008

Timothy Wawrzyniec, Research Scientist

Activities in professional societies:

Co-editor of the Structural Geology and Tectonics Division of the Geological Society of America.
Responsible for the collection of publishable materials, generation of the document for the fall edition, and web published the digital versions of both the Spring and Fall Newsletters.

Meetings attended

Served as a co-author to several professional papers presented at a range of national meetings.
Gary Weissmann, Associate Professor

Meetings attended

Geological Society of America National Meeting, Houston, TX, October 2008.
American Geophysical Union, Fall Meeting, San Francisco, CA, December 2009.

Manuscript reviews conducted for

Ground Water
Vadose Journal
Sedimentary Geology
Water Resources Research
Journal of Sedimentary Research

Proposal reviews

National Science Foundation, Hydrology division.
Netherlands Organization for Scientific Research (NWO).

Associate Editor

Associate Editor, Groundwater.
Associate Editor, Environmental Geosciences

Other

GSA Hydrogeology Division liaison to SEPM.
6. OTHER PROFESSIONAL ACTIVITIES

Carl Agee, Professor

Professional meetings Attended


Adrian Brearley, Professor

Reviews

Reviewed 4 proposals submitted to NASA Cosmochemistry Program.
Reviewed 2 proposals submitted to NASA SRLIDAP Program
Reviewed 1 proposal submitted to NASA MFRP program
Reviewed 1 proposal submitted to IGPP program
Reviewed 2 proposals submitted to the NASA Laser program
Reviewed 2 proposal submitted to the United Kingdom Particle Physics and Astronomy Research Council
Member, NASA Laser Program Review Panel

Laura J. Crossey, Professor

Manuscripts

Geology (1)
GSA Bulletin (4)

Proposals

National Science Foundation (5): Hydrologic Sciences, Inst. & Facilities, Low-T Geochemistry
NSF Review Panel: Hydrologic Sciences

Other professional activities

New Mexico Geological Society Foundation Board, Treasurer, 2007-2010
Maya Elrick, Associate Professor

Journal and grant reviews

- Palaeogeography, Palaeoclimatology, Palaeoecology (2)
- Sedimentary Geology (1)
- Journal Mass Spectrometry (1)
- NSF (2)

Wolfgang E. Elston, Professor Emeritus, Senior Research Professor

Other

- Participated in filming by Pioneer Productions, London, UK, of a program on the Santa Fe impact structure for TV History Channel, June 14.

Amy Ellwein, Lecturer III, Natural Science Program

Reviews

- Reviewed papers submitted to the Journal of Geoscience Education, Geosphere, and Eos.
- Reviewed NSF proposal for Opportunities for Enhancing Diversity in the Geosciences Program.
- Reviewed textbook currently used in NTSC263L.

Other

- Board member of the Science Education Institute of the Southwest (SEIS). SEIS is a science education collaborative that includes personnel from UNM, Sandia National Laboratories, the New Mexico Museum of Natural History and Science, the Albuquerque BioPark, and local school districts. M. Nyman (NTSC and E&PS) and Ellwein are active members conducting the majority of planning and grant writing. Over the past 5 years, SEIS has offered 6 different professional development programs for over 400 in-service teachers.

Peter J. Fawcett, Associate Professor

Reviews

- Panelist for CRDF Program (Reviewed 18 proposals from former Soviet Union)
- Reviewed manuscripts for: Geology, Quaternary Science Reviews
- Reviewed 3 proposals submitted to the National Science Foundation, 1 proposal submitted to the Petroleum Research Fund

Invited presentations at other departments

- Department of Geosciences, Northern Arizona University, Flagstaff AZ, November.

Professional meetings Attended

- American Geophysical Union, Fall Meeting, San Francisco, CA., December.
Tobias Fischer, Associate Professor

Reviews

Reviews of 3 NSF proposals
6 scientific manuscripts for Bull. Volc., JVGR, Geology, Lithos.

Meeting organization/session chair

Session chair ('Volatiles in Magmas') at IAVCEI General Assembly, Reykjavik, Iceland 2008.
Largest session in terms of abstract contributions of entire meeting.

Off campus talks

Key Note speaker: Goldschmidt conference Vancouver, Canada 2008
Seminar speaker: Laboratoire de Magmas et Volcans, Clarmont-Ferrant, France Feb 2009

Joseph Galcwsky, Assistant Professor

Reviews

Reviewed 2 proposals for Netherlands Organisation for Scientific Research
Reviewed papers for J. Climate, J. Hydrometeorology, Weather and Forecasting.

Off-campus talks

Invited seminars at Arizona State University, New Mexico Tech, UNM Mathematics & Statistics, UNM Economics Department, Southwestern Undergraduate Mathematics Research Conference.
Presented report to NRC panel on research agenda for links between atmospheric sciences and geomorphology communities, (with G. Roe, U. Washington)

Other professional activities

Member of the Terrestrial and Cyberinfrastructure Working Groups for Community Surface Dynamics Modeling System (CSDMS), 2007-present.
Panel member, NRC Research Associateship Programs, 2008-present.

John W. Geissman, Chair and Professor

Reviews of manuscripts and proposals

Reviewed proposals for National Science Foundation (14)
American Chemical Society (1)
The Third World Academy of Sciences (2)
Reviewed manuscripts for Journal of Geophysical Research (2)
Earth and Planetary Science Letters (3)
Tectonics (1)
Canadian Journal of Earth Science (2)
Geophysical International (2)
Geology (1)
Geoarcheology (1)
New Mexico Geological Society (1)
American Mineralogist (1)
Other professional activities

Adjunct or associate-type positions at other institutions: Adjunct Full Professor, University of Michigan, Ann Arbor
Other: Technician (half-time), UNM Paleomagnetism and Rock Magnetism Laboratory

Professional talks:

Earthscope Science Café, September 23rd, Deming, NM

David Gutzler, Professor

Manuscript reviews


Grant proposal reviews (other than review panel assignments)

National Science Foundation (1).

Proposal review panels:

Los Alamos National Laboratory Institute for Geophysics and Planetary Physics, June.

Other professional activities (Invited presentations to professional audiences)

“A river runs through it: Seasonal climate predictions and streamflows in the land of the 6-inch monsoon”, University of Wisconsin, Madison, Feb 4.

“Southwest climate change in the 21st Century”, Western Coalition of Arid States winter meeting, Albuquerque, Feb 20.

“Southwest climate change in the 21st Century”, New Mexico Tech, Socorro, May 1.
“Analyzing and discussing climate change: Lessons from the Southwest”, Oregon State University, Corvallis, Sep 25.

“Climate change scenarios for New Mexico's forests” (with J. Coonrod), New Mexico Forestry and Climate Change Workshop, Albuquerque, Nov 20.

World Meteorological Organization Monsoon Panel member.

Meeting co-organizer, Joint Climate Diagnostics and Drought Prediction Workshop, Lincoln NE, Oct 21-24.

NOAA Climate Prediction Program for the Americas (CPPA) science guidance:
Scientific Steering Committee Member.

Principal Editor, CPPA Science Plan.
Invited participant in workshop on dendroclimatic reconstruction of streamflows in New Mexico (sponsored by U. Arizona Tree Ring Research Lab and NOAA Paleoclimate Program), Albuquerque, May 30.

**Rhian J. Jones, Associate Professor**

**Reviews**

2 manuscripts for Meteoritics and Planetary Science  
1 manuscript for Geochimica et Cosmochimica Acta  
1 manuscript for Science  
2 proposals for NASA / Cosmochemistry Program  
2 proposals for Science and Technology Facilities Council (STFC), U.K.  
1 proposal for IGPP

**Karl E. Karlstrom, Professor**

**Other professional activities**

Editorial Board for Precambrian Research, 1990 to present.  
New Mexico Geologic Mapping Advisory Board, 1999 to present.  
Science editor for Geological Society of America Bulletin - third year of 4-year term. This job requires about 10-12 hours per week, 52 weeks per year.  
Aspen Anomaly workshop convener (CREST and LANL as sponsors)  
Convener for Trail of Time weekly conference calls and occasional workshops  
Invited speaker for several topical sessions at GSA National Meeting, Denver, Colorado and AGU meeting

**Review activities**

NSF proposals  
Geology  
GSA Bulletin  
Precambrian Research

**Barry S. Kues, Professor**

**Editorial duties**

Editorial Board, New Mexico Geology.

**Reviews**

1 paper for New Mexico Geological Society Guidebook.

**Other professional societies**

Associate Curator, N.M. Museum of Natural History.  
Research Associate, N.M. Bureau of Geology and Mineral Resources.  
Hosted visit of Dr. Alex Nutzel, Professor, Bayerische Staatsammlung fur Palaontologie und Geology, Munich, Germany, Oct. 10-15, for collaborative research.
Grant A. Meyer, Associate Professor

Undergraduate student mentoring

Assisted Paula Watt with mentoring of UNM-Gallup undergrads April Longhair and Mark Toledo in NSF-funded field studies of uranium mill tailings contamination in alluvial sediments.

Leslie D. McFadden, Professor

Peer reviews of articles and proposals

Reviewed 1 paper for Artic, Antarctic and Alpine Research
Reviewed 1 paper for the Journal of Quaternary Sciences
Reviewed 1 paper for Geomorphology
Reviewed 1 paper for Earth Surface Processes and Landforms

Editorial activity and other service to the profession

Reviewed Candidate in Department of Earth Sciences at Southern Methodist University for Tenure and Promotion

On-campus professional activity

Participant, Mentoring Conference, sponsored by the UNM Mentoring Institute, Oct. 22-24

Off-campus professional activity

Presented lecture to the Ghost Ranch Archeology Class.
Presented invited lecture to Department of Geography, University of Liverpool, UK
Presented invited lecture to School of the Environment and Society, Swansea University, Wales

Matthew Nyman, Assistant Professor/Lecturer

Reviews

Review and provided text for NM2012, a report and plan for science and math education (July 2008). Information can be found at http://www.sfafs.org/nmproject2012_documentation.asp
Reviewed manuscript for EOS.
Reviewed textbook on the Geology of the National Parks for Cynthia Brown (UNM Masters alumnus).

Other professional activities

Participated on judging committee for the GSA 2008 Biggs Earth Science Teaching Award.
National Science Foundation Panelist for Robert Noyce Fellowship proposals (June 2008).
Victor Polyak, Senior Research Scientist

Other professional activities

Two interviews by film crews for National Geographic on Grand Canyon work. Several phone interviews with radio and newspaper media.

Frans Rietmeijer, Research Professor

Peer review of scientific papers

Astronomy and Astrophysics (1)
Icarus (2)
Meteoritics and Planetary Science (1)

Proposal reviews

NASA Astrobiology Science and Technology Instrument Developments and Mission Concept Studies (ASTID) (1)
Panels attended NASA Origins of Solar Systems/TPF Program (6)
NASA Sample Return Laboratory Instrument and Data Analysis Program (7)

Professional Services

38th Lunar and Planetary Science Conference Program Committee
Scientific Organizing Committee of the Meteoroids 2010 Conference, Boulder (CO)
Volunteer Foreign Language Editor for American Geophysical Union

Other professional activities

ASTROBIOLOGY Editorial board member

Mousumi Roy, Associate Professor

Invited talks

UNM Physics Department, December, 2008
Earthscope Workshop: Explore New Mexico Geology and Geophysics with EarthScope, August 2008

Other professional service

Reviewed 5 proposals for NSF
Co-Chair, Long-term tectonics working group, Computational Infrastructure for Geodynamics (CIG); will rotate off in 2009
Louis A. Scuderi, Associate Professor

Journal review


Review for National Funding Organizations/National Science Foundation

National Science Foundation: Climate Dynamics, Geosciences, Solar-Terrestrial, Polar Programs, ILI-IP Equipment Grants

Editor

Quaternary Research- Special Issue, Inner Mongolia.

Other service

National Geographic Research

Jane Selverstone, Professor

Manuscripts reviewed

Journal of Petrology
Tectonics
Journal of Metamorphic Geology
GSA Bulletin
Geology

Proposals reviewed

Proposals reviewed (10 total): National Science Foundation Postdoctoral Program; NSF Continental Dynamics Program, NSF Geochemistry and Petrology Program, NSF Tectonics Program, NSF Instrumentation Program, NSF Geomorphology and Land-Surface Dynamics Program, Norwegian Scientific Research Council

Reviewer

External reviewer for tenure and promotion case, Cornell University

Other professional activities

Member, Committee of Visitors for Deep Earth Processes section, National Science Foundation, June 2008
Member of Editorial Board for Journal of Metamorphic Geology
Member of Editorial Board for Geology
Invited participant, Earth Science Literacy Initiative Online Workshop, 5/12/08-5/23/08
Presented departmental colloquium talk at University of Southern California, 5/08
Zachary Sharp, Professor

Reviewed papers for international refereed journals


Reviewed proposals

NSF (I review NSF proposals for I&F and EAPSI panel. These total well over 100/year)
NASA, 3
Swiss Science Foundation, 1

Invited lectures

Frontiers of Geoscience Lecture (Los Alamos)
Carnegie Institution of Washington, (Geophysical Laboratory), Washington DC.
Rice University

Conference

AGU Annual Fall Meeting
4th International Symposium on Isotopomers (Japan, Sponsored and Invited)

Gary A. Smith, Professor

Reviews

Reviewed research proposals for the National Science Foundation (1).
Reviewed manuscripts for: Geological Society of America Bulletin (1), Geosystems (1), New Mexico Geological Society Guidebook (1)

Other professional activities

Research Associate, New Mexico Bureau of Geology and Mineral Resources

Timothy F. Wawrzyniec, Research Scientist

Other professional activities

Head of a nation leading research laboratory that employs the use of lidar technology to conduct a range of geospatial investigations. Most of this work focuses on change detection and lithofacies mapping. Peer institutions routinely request presentations on our work, two were provided in 2008:

University of New Mexico, Civil Engineering, Fall 2008
Chronotopographic analysis to address centimeter scale hill slope process using TLS Lidar data, Black Mesa, NE Arizona

Kansas University, Department of Geology, Spring 2008
Chronotopographic analysis to address centimeter scale hill slope process using TLS Lidar data, Black Mesa, NE Arizona
Gary Weissmann, Associate Professor

Invited presentations

Hydrology Seminar Series, University of California, Davis, November 2008.

Other Presentations

SEPM Outcrop Analog Conference, Kilkee, Ireland (2 presentations)
GSA Annual Meeting, Houston, Texas (1 presentation)
AGU Fall Meeting, San Francisco, California (1 presentation)
7. NON-TEACHING UNIVERSITY SERVICE

Carl Agee, Professor, Director of Institute of Meteoritics

Department

Director of Institute of Meteoritics
Curator Meteorite Museum

Department committee

Dean's Committee for Informational Technology
Admissions Committee EPS

Yemane Asmerom, Professor

Department committee

Facilities Committee
Graduate Committee
Analytical Lab steering committee

University committee

President of the Black Faculty Alliance
Faculty Senate Graduate Committee (Spring 2009)
Faculty Senate Library Committee

Adrian Brearley, Professor

Departmental service

Managed selection, purchase and installation of $1.5M FEI Quanta 3D FEGESEM/FIB. Designed, managed and coordinated all aspects of laboratory renovation to house new instrument.
Co-Associate Chair, Department of Earth and Planetary Sciences.
Member - Departmental Facilities Committee

University service

Member, Faculty Senate

Laura J. Crossey, Professor

Department committee

Undergraduate Advisor: E&PS BS/BA, Environmental Science BS
Undergraduate Honors Advisor
Undergraduate Committee
Facilities Committee

**College of Arts and Sciences**

Arts and Sciences Committee on Math and Science Education for Teachers.

**University committee**

Research Study Group (RSG) (2008)
Sigma Xi Board Member (2004-present)

**Maya Elrick, Associate Professor**

**Departmental committees**

Undergraduate Committee
Undergraduate Scholarship Committee Chair (for D. Gutlzer)
Graduate Admissions Committee

**Amy Ellwein, Lecturer III, Natural Science Program**

**University service**

Worked with UNM faculty from the Math Department and the College of Education writing a proposal for $5M to the NSF Math and Science Partnerships (MSP) program with M. Nyman.

**Department**

Help design and plan the Natural Science Program classroom and offices in the proposed Science and Math Learning Center.

Prepared an extensive Natural Science Program report for Associate Dean Sherman Wilcox.

Wrote 18 letters of recommendation for students as they’ve applied to the College of Education or applied for scholarships.

**Wolfgang E. Elston, Professor Emeritus, Senior Research Professor**

**Department**


**Peter J. Fawcett, Associate Professor**

**Department**

Chair, Faculty Awards Committee
Member, Graduate Committee
Tobias Fischer, Associate Professor

**Departmental**

Member: Productivity committee, Graduate committee, Awards committee, Instrumentation committee
Coordinator, UNM-LANL Volcanology Program

**University**

Member: Research Allocations Committee (RAC).
Member: Consortium of the Americas for Interdisciplinary Science, University of New Mexico.

Joseph Galewsky, Assistant Professor

**Departmental**

E&PS Computer Committee (Chair)
Faculty Representative to Caswell Silver Foundation Board

John W. Geissman, Chair and Professor

**University service**

Chair, UNM Honorary Degree Committee, 2008-09.

**Departmental**

Department Faculty Productivity Assessment Committee.

**Special projects**

Administrative Positions.

**Other Service**

Secretary, Caswell Silver Foundation Board.

David Gutzler, Professor

**Department service**

Hydrology faculty search committee: Spring.
Computer committee: Spring, Fall.
Undergraduate committee: Spring, Fall (Chair).
EPS representative at UNM Senior Day, Sep 13.
University service

UNM Water Resources Program, Program committee, Spring, Fall.

Rhian H. Jones, Associate Professor

Departmental service

Member of Graduate Committee (Spring, Fall 2008).

Karl E. Karlstrom, Professor

Departmental

EPS vehicle coordinator
Faculty Senate Graduate Committee
Arts and Sciences, Senior Promotion and Tenure Committee

Barry Kues, Professor

University service

Recorded interview on Silver Family Geology Museum for the UNM Marketing website, Sept. 15.

Department service

Library Liaison
Curator of departmental fossil, mineral, rock, and thesis collections
Faculty Awards Committee

Leslie D. McFadden, Professor

Departmental service

On administrative and sabbatical leaves during the AY 2008
Hosted two visiting research scientists.

College of Arts and Sciences service

Member, Advisory Council of the Albuquerque Teachers Institute
Member, Board of Associated Scholars, Center for the Southwest

Grant A. Meyer, Associate Professor

Departmental service

Departmental Graduate Admissions Committee Chair
Matthew Nyman, Assistant Professor/Lecturer

Departmental Service

Advisor for second abstract for PhD examination of Leah Johnson

Served on E&PS Undergraduate committee

Nyman and Ellwein are working with UNM faculty from the Math Department and the College of Education writing a proposal for $5M to the NSF Math and Science Partnerships (MSP) program.

Nyman and Ellwein help design and plan the Natural Science Program classroom and offices in the proposed Science and Math Learning Center.

Nyman and Ellwein prepared an extensive Natural Science Program report for Associate Dean Sherman Wilcox when he replaced Dr. Mark Ondrias.

In the past 12 months, Nyman has written 4 letters of recommendation for students’ application for acceptance in the College of Education.

Assisted Dr. Maya Elbrick, Earth and Planetary Sciences, University of New Mexico in developing a science teacher education program for his application for the NSF Career proposal, January 2009.

University Service

Assisted Dr. Rouzbeh Allahverdi, Department of Physics and Astronomy, University of New Mexico in developing a science teacher education program for his application for the NSF Career proposal, July 2008.

Victor Polyak, Senior Research Scientist

Other Service

Paula Provencio and I manage a project for the Sandia Grotto of the National Speleological Society to survey and inventory lava tube caves in and for El Malpais National Monument.

Aurora Pun, Adjunct Assistant Professor

Departmental Service


Frans Rietmeijer, Research Professor

The Minor Planet Center of the International Astronomical Union, New asteroid naming (2008), Asteroid 179678 Rietmeijer
Mousumi Roy, Associate Professor

Department service

Search Committee for the Hydrologist Faculty Position (S08)
Graduate Admissions committee (S08)
Computer Committee (CY 2008)
Grad Advisor (S08)

a. Associate Chair (F08)
b. Unix/Linux system administration (CY 2008) – provided mentoring, supervision, and support and dealing with hardware failures and software issues, purchasing related to the Linux machines, etc. In 2008, Roy supervised in the following tasks:
   • Reconfigured all 8 Linux machines that are shared between faculty. These 8 machines presently run CentOS 5 and Ubuntu.
   • Hardware maintenance on Linux computers. This has consisted primarily of replacing failing hard drives, fans, and video cards.
   • Software maintenance on the Linux computers including: NFS/NIS, Hardware drivers, Printer support, MATLAB, Portland Group Compilers, Gale (Fluid mechanics code), MPICH2 (Support for parallel computation), GMT (Generic Mapping Tools), Citcom, D-Rex, NetCDF, NCAR Graphics
   • Maintaining a secure computing environment through the use of firewalls and other general security precautions.
   • Maintaining (purchasing) enough disk space to backup of all user data.
   • Parallelized D-Rex. This new parallel version of D-Rex implemented in FORTRAN using MPI has allowed the group to run larger simulations in shorter times than would have otherwise been possible. The speed up with 4 processors is a factor of 3.2 and it is scalable to many more processors.
   • Configured a high performance Linux workstation.
   • Made modifications to Gale so that it can be used to study strike slip boundaries. These modifications should be implemented in subsequent releases of Gale.

Louis A. Scuderi, Associate Professor

Departmental service

Field Computational Equipment, Committee Chair, Graduate Committee, Member, Faculty Assessment Committee, Member

University committee

Arts and Sciences Dean’s Computer Technology Committee

Administrative duties

Director, Center for Rapid Environmental Assessment and Terrain Evaluation (CREATE). Supervise staff (2) and graduate students (6).
CREATE 2 Annual Report (October 2008)
A&S Dean’s Chair/Directors Council and Associate Dean’s Directors Council
Jane Selverstone, Professor

**Departmental committees and service**

Graduate committee; Graduate chair and advisor as of April 9, 2008; this included development of Outcomes Assessment plan for our graduate programs
Associate Chair through June 30, 2008
Faculty productivity committee

**University committees**

Arts and Sciences Tenure and Promotion Committee

**Other service**

Presented talk at Success in the Classroom conference ("Use of a mock National Science Foundation panel meeting to enhance critical writing skills"), February, 2008.

Zachary Sharp, Professor

**University**

Committee for Promotion to Full Professor (Chairman)
Academic Freedom and Tenure Committee
2007 Sevilleta LTER REU Faculty Mentor

**Departmental Committees**

Instrumentation and Facilities (chair)
Graduate Admissions Committee
Long Range Strategic Planning Committee

**National/International**

National Resource Council Postdoctoral Fellowship Committee (4 times/yr, once w/ travel to Washington DC)
NSF panelist – EAR Instrumentation and Facilities (2 times/year)
NSF panelist – EAR Graduate Research Fellowship Program (January ’08)
Outside reviewer for promotion to Reader (England)
Tenure promotion review (Michigan)
“Canadian Foundation for Innovation” review
LANL Scientific Review Team

Gary A. Smith, Professor

**Department service**

Faculty Senate Teaching Enhancement Committee
Accreditation Task Force, Criterion 3 Committee (Chair, Criterion 3b Subcommittee)
Classroom Modernization Task Force
Title V Faculty Committee
Mentoring Institute Advisory Committee
Undergraduate Committee, Earth and Planetary Sciences
Collections Committee, Earth and Planetary Sciences

Timothy F. Wawrzyniec, Research Scientist

Computer committee

Department of Earth and Planetary Sciences, University of New Mexico, 2003-Present. Assist in guiding the on-going development of the Departments computing infrastructure.

Gary Weissmann, Associate Professor

Department committee

Hydrology Search Committee, Chair
Graduate Acceptance Committee

University committee

Research Allocation Committee (RAC) – Fall 2006-present.
8. SCHOLASTIC HONORS AND FELLOWSHIPS

Laura J. Crosscy, Professor

Elected as Geological Society of America Fellow (inducted fall 2008)

Amy Ellwein, Lecturer III, Natural Science Program

GSA Jackson Research Award

David Gutzler, Professor

Award for teaching excellence, UNM College of Arts and Sciences, June, 2008.

Grant Meyer, Associate Professor

University of New Mexico, University Libraries Faculty Acknowledgment Award, March 27, 2008.

Mousumi Roy, Associate Professor


Louis A. Scuderi, Associate Professor

Publications awards

Jules Reiver Literary Award for best article in the John Reich Collectors Journal, 2008.

9. SABBATICALS AND TRAVEL

Carl Agee, Professor, Director of Institute of Meteoritics

Travel

- Houston TX.
- Colorado Springs CO.
- Vancouver BC.
- Oslo Norway.
- San Francisco CA.

Adrian Brearley, Professor

Travel

- Mars sample return workshop, Albuquerque, New Mexico, April 20-21, 2008.
- Microscopy and Microanalysis meeting, Albuquerque, New Mexico, August 3-7, 2008.

Laura J. Crossey, Professor

Travel

- Math Science Advisory Council, Socorro, January 11
- Co-lead a Grand Canyon Press tour for Dutch National Geographic, January 12-17
- Co-lead GK-12 Mid-year Workshop, Sevilleta Field Station, January 25-26
- New Mexico Geological Society Foundation meeting, Albuquerque, February 1
- Guest Lecture at Denison University, February 7-8
- Mount Taylor Quadrathon, February 16
- Math Science Advisory Council, Albuquerque, February 22
- Trail of Time on-site evaluation at Grand Canyon, February 25-29
- Invited lecture Indiana University, March 2-4
- GSA fieldtrip to Grand Wash Trough, March 17-24
- NSF Hydrological Sciences Panel, April 2-4
- New Mexico Geological Society meeting, April 18
• Hosted EPS Undergraduate Research Symposium, May 9
• Freshman Learning Communities Institute and 2 day workshop, May 20-21
• Math Science Advisory Council, Santa Fe, May 22
• CREST workshop in Santa Fe, May 23-24
• taught EPS Advanced Field Geology course, June 9-30
• Invited PI representative at the American Geophysical Institute at the Coalition for NSF-Washington DC, June 24-26
• Sevilleta LTER Field Station Summer REU Mentors meeting, June 3
• Trail of Time design team meeting in Fort Collins, July 6-9
• Gravel fieldtrip with Tom Hanks and George Billingsley, July 10-16
• Trail of time bronze marker installation, July 19-20
• Trail of Time on-site evaluation at Grand Canyon, June 21-24
• NSF Informal Science Education PI Summit in Washington DC, June 25-27
• Math Science Advisory Council, July 1
• Invited presentation Sevilleta LTER REU, July 3
• NSF PI meeting, Informal Science Education Division, July 25-26
• Colorado River research trip, July 29-August 20
• Attended Ron McNair Mentor Breakfast, September 3
• CREST workshop in Santa Fe, September 12-14
• EarthScope Science Café at Aztec NM, September 17
• Grand Canyon Fieldtrip with Freshman Learning Communities, September 26-28
• GSA Annual Meeting meeting in Houston, Oct. 4-9
• Invited presenter at the Albuquerque Pipeline for Diversity Workshop, Oct. 10
• Bronze marker installation for Trail of Time at Grand Canyon, Oct 16-19
• Attended UNM Mentoring Institute, Oct. 22-23
• Represented EPS: Explore a Major Fair, UNM SUB, Oct. 27
• Invited Panel Presentation UNM OSET Workshop, Oct. 28
• Trail of Time Design team meeting in Colorado, Oct 31- Nov. 1
• Guest lecture at University of Oregon, November 12-13
• Math Science Advisory Committee meeting in Santa Fe; Hosted G-K-12 dinner and Explornite, November 21
• Trail of Time marker installation, Nov 27-30
• AGU meeting in San Francisco, Dec. 14-19
• Field work, Sierras, CA., Dec. 19-24
• Field research in Grand Wash Trough, Dec 30-31

Amy Ellwein, Lecturer III, Natural Science Program

Travel
Fieldwork related to dissertation, summer 2008 (two months).
Denver at the USGS OSL lab processing OSL samples, summer 2008 (one week).
Math and Science Day at the Roundhouse in Santa Fe, February, 2009.
NMPED meeting for professional development providers at the Bosque del Apache, March, 2009.

Wolfgang E. Elston, Professor Emeritus, Senior Research Professor

Other teaching

Seminars on The amazing Proterozoic Bushveld Complex, South Africa: a tale of two catastrophes.
University of the Witwatersrand, Johannesburg, South Africa, September 11.
University of Pretoria, South Africa, September 18.
New Mexico Tech, Socorro, NM, October 2.

Participated in UNM German Summer School, Taos Ski Valley.
Led a geologic excursion to the UNM Harding Mine and the Rio Grande Gorge (explanations and discussions in German), July 5-6.

Guided University of Michigan group (students and faculty) to the Santa Fe meteorite impact structure, Sangre de Cristo Mountains, October 9.

Travel

South Africa, to attend international conference on Large Impacts and Planetary Evolution IV and for geological field work on the Bushveld Complex. Host institution: University of Pretoria, August 11-September 23.

Personal travel to Panama; London, UK; Gainesville, FL; Cape Cod (twice), Webster, MA, and Seattle, WA.

Tobias Fischer, Associate Professor

Travel

Field work 3.5 weeks July/August 2008, Iceland.
Field work 1 week March 2008, Costa Rica.
Conference 3 days June 2008, Vancouver, Canada.
Conference: 4 days April 2008, Indiana.
MARGINS workshop, 4 days, October 2008, Oregon.

Peter J. Fawcett, Associate Professor

Travel

Chihuahua Mexico, Field Work, January 2008.
Flagstaff AZ., Department Seminar, November 2008.

Joseph Galewsky, Assistant Professor

Travel

Scientific visitor at the Mesoscale and Microscale Meteorology Division, National Center for Atmospheric Research, Boulder, Colorado, July 2008.
John W. Geissman, Chair and Professor

Summer teaching


Travel

- GSA Publications Committee Meeting, Boulder; February 8-10.
- Washington, DC, Congressional Science Visits Days; March 3-5.
- Council Meeting, Geological Society of America Headquarters, Boulder; May 3-5.
- New Mexico, southern Colorado, UNM Introductory Field Geology course; May 17-June 7.
- Field work, north-central New Mexico; June 19-21.
- Wyoming, University of Michigan, Field Camp; July 8-August 2.
- Earthscope Meeting, Las Vegas, NV; September 6-7.
- Earthscope talk, Deming; September 23-24.
- Geological Society of America Annual Meeting, Houston; October 3-8.
- San Francisco, AGU Fall Meeting; December 13-18.

David Gutzler, Professor

Travel

- Invited colloquium speaker, Univ. of Wisconsin Department of Atmospheric and Oceanic Sciences, Madison WI, Feb 3-5.
- Proposal review panel meeting, Los Alamos NM, June 1-3.
- Invited public presentation, Silver City NM, June 5-6.
- Invited colloquium speaker, Oregon State University, College of Atmospheric and Oceanic Sciences, Corvallis OR, September 24-26.

Rhian H. Jones, Associate Professor

Travel


Karl E. Karlstrom, Professor

Travel

- Led a Grand Canyon Press tour for Dutch National Geographic, January 12-17
- EPS 307 structural geology fieldtrip, February 2
- GSA Publication Committee, Boulder, CO., February 8-10
- Mount Taylor Quadrathlon, February 16
- Trail of Time design meeting in Fort Collins, February 22
- Trail of Time on-site evaluation at Grand Canyon, February 25-29
• EPS 307 structural geology fieldtrip, March 2
• EPS 307 fieldtrip, March 10
• GSA fieldtrip to Grand Wash Trough, March 17-24
• Trans-continental transect meeting in Austin, May 3
• Rob Sanders defense, May 14
• Freshman Learning Communities Institute and 2 day workshop, May 20-21
• CREST workshop in Santa Fe, May 23-24
• Taught EPS Advanced Field Geology course, June 9-30
• Trail of Time design team meeting in Fort Colins, July 6-9
• Gravel fieldtrip with Tom Hanks and George Billingsley, July 10-16
• Trail of time bronze marker installation, July 19-20
• Trail of Time on-site evaluation at Grand Canyon, June 21-24
• NSF Informal Science Education PI Summit in Washington DC, June 25-27
• Colorado River research trip, July 29-August 20
• CREST workshop in Santa Fe, September 12-13
• EarthScope Science Café at Aztec NM, September 17
• Grand Canyon Fieldtrip with Freshman Learning Communities, September 26-28
• GSA meeting in Houston, Oct. 4-9
• Bronze marker installation for Trail of Time, Oct 16-19
• Trail of Time Design team meeting in Colorado, Oct 31- Nov. 1
• Trail of Time marker installation, Nov 27-30
• AGU meeting in San Francisco, Dec. 14-19
• Field research in Grand Wash Trough, Dec 30-31

Barry S. Kues, Professor

Travel

• NMGS Executive Committee meeting, Socorro, January 18, 2008.
• Tucson (AZ) Gem, Mineral, and Fossil Show, February 14-17, 2008.
• Field research in Lake Valley, NM area, February 24, 2008.
• NMGS Executive Committee meeting, Socorro, April 17, 2008.
• NMGS Executive Committee meeting, Socorro, June 27, 2008.
• To NM Bureau of Geology & Mineral Resources, Socorro, to review an upcoming publication, July 2, 2008.
• To Taos area for field research with visiting professor A. Nutzel, October 12, 2008.
• To Alamogordo area for field research with A. Nutzel, October 13, 2008.
• Led a visiting University of Michigan geology class through the Jemez, Mountains, October 20, 2008.
• NMGS Fall Field Conference, Silver City area, October 22-25, 2008.
• Field research, Abo Pass area, November 17, 2008.

Grant A. Meyer, Associate Professor

Travel

• Field work in Centennial Valley, Montana, Holocene beaver activity and effects on small streams, August 10-11, 2008.
• Numerous other short field research trips to Río Chama, Río Grande, Llano de Albuquerque-Río Puerco, Sandia Mountains, and etc.
• Guest lecturer in several E&PS and ENVS classes, UNM-Gallup, 2008.
Leslie D. McFadden, Professor

Travel

- Field trip to the NSF – LTER site at the Sevilleta Wildlife Refuge to review results of graduate student research; March 13.
- Several day-long field trips to the Sandia Mountains associated with research I am supervising that involve several graduate students; January through November.
- Participation in Geological Society of America Cordilleran-Rocky Mountain Section Meetings, Las Vegas, NV; March 20-21.
- Field work in northeast Arizona involving studies of Holocene landscape evolution; May 14-16.
- Presentation to Ghost Ranch Archeology Seminar Class, Ghost Ranch, NM; July 23.
- Participation in Geological Society of America Annual Fall Meeting, Houston, Tx; October 4 – 8.

Matthew Nyman, Assistant Professor/Lecturer

Travel


Aurora Pun, Adjunct Assistant Professor

Travel


Franz Rietmeijer, Research Professor

Travel

- NASA Sample Return Laboratory Instrument and Data Analysis Program, Washington (DC), October 5-8, 2008.
Mousumi Roy, Associate Professor

Travel

• Travel to Lamont-Doherty Earth Observatory, Columbia University, June, 2008.
• Travel to CIG Workshop, Davis, CA, July, 2008.
• Travel to AGU Chapman (Lherzolite) Meeting, Shasta, CA, September, 2008.
• Travel to Fall AGU Meeting, December 2008.

Jane Selverstone, Professor

Travel

• Los Angeles to present departmental seminar at University of Southern California, May 4-5, 2008.
• Madison, WI, to attend Microbeam Analysis Society workshop on EBSD techniques, May 19-22, 2008.
• Washington DC to serve on NSF Committee of Visitors for Deep-Earth Processes section, June 8-12, 2008.
• Fieldwork in the Ivrea and Sesia Zones of Italy (with grad student M. Halick), June 17 – July 3, 2008.

Zachary Sharp, Associate Professor

Travel

• Field work in Iceland (1 week)
• Field work in Hawaii (4 days)

Gary A. Smith, Professor

Travel

• Attended Tucson Gem and Mineral Show, Tucson, Arizona, February 14-17.
• Attended New Mexico Higher Education Assessment and Retention Conference, Albuquerque, NM, February 28-29.
• Cultivating Student Access and Success, Institute for Higher Education Policy, Summer Academy, Birmingham, Alabama, July 20-24.

Timothy F. Wawrzyniec, Research Scientist

Travel

October, 2008, traveled to Poza Rica, Mexico to offer regular week-long class on Intrabasinal Tectonics. The class was attended by 20 working professional engineers, geologists, and geophysicists most of whom work for PEMEX, the national oil company of Mexico. The class was offered through ESPOil, a consulting company based in Venezuela with offices in the United
States. The class focuses on the deformation processes related to the movement of salt and shale within the western Gulf of Mexico.

**Gary Weissmann, Associate Professor**

**Travel**

10. PUBLIC SERVICE

**Yemane Asmerom, Professor**

Public service

Featured in hour-long National Geography TV program on Grand Canyon
Our work on sun and climate featured in newspapers and popular science programs, such as the Discovery channel.

**Laura J. Crossey, Professor**

Public service

Continued to make major progress in 2008 towards establishing the Trail of Time at Grand Canyon—a major geoscience exhibition.
Gave several invited presentations on enhancing diversity in STEM fields
Gave numerous presentations at local middle schools on geologic topics
Filming for the geologic component of the Grand Canyon National Park visitor center documentary is under way.
Outreach through the EarthScope Science Café at Aztec NM
Soccer Referee, USSF Grade 6, NM State Referee, NM State Cup referee, NISOA Collegiate Referee (1997-current), NM State High School Referee

**Amy Ellwein, Lecturer III, Natural Science Program**

Public service

Assisted the NMPED in “anchor pulling” for the high school section of the New Mexico Standards Based Assessment (SBA) administered under the No Child Left Behind Act, 2001 (Spring 2008).

Assisted Project WET personnel in developing a proposal and a plan to disseminate professional development materials to UNM faculty who train elementary education majors in science and science education. The proposal was funded. (Fall 2008).

One of four New Mexican science educators nominated by the Science Specialist, Dr. M.J. Daniel at the NM Public Education Department, to represent New Mexico in the development of the National Assessment of Educational Progress (NAEP) often referred to as "the nation's report card". For more info on the NAEP: [http://nces.ed.gov/NATIONSREPORTCARD/](http://nces.ed.gov/NATIONSREPORTCARD/)

Science fair judge for New Mexico's K-12 schools.

**Maya Elrick, Associate Professor**

Community service

Geoscience education presentations in elementary schools.
Wolfgang E. Elston, Professor Emeritus, Senior Research Professor

Community service

Lymphoma and Leukemia Society (LLS), New Mexico and El Paso Chapter: Set up Elston Family Fund in Memory of Richard Elston to support research into Hodgkin’s lymphoma.

May 3: Guided LLS members on a geologic excursion through the Valles Caldera.

New Mexico Human Rights Project: Participated in efforts to further tolerance, principally in public schools. Gave talks on experiences growing up in Nazi Germany and becoming a refugee in wartime Britain at age 10. Distributed essays on these topics (Goldschmidt Schule, Berlin-Grunewald, 1938-39; Memories of Stoatley Rough School, Haslemere, Surrey, England, 1939-45; Berlin Revisited, 2002) and on becoming reunited with parents in 1945 (Welcome to the New World):

2. Students from Roswell High School, at Harwell Arts Center, Albuquerque, February 21.
3. Mountain View Middle School, Rio Rancho, 7th grade, March 19.
4. Espanola High School, April 14.
5. New Mexico Holocaust and Intolerance Museum, women from Morocco, December 19.

Helped edit and contribute to Wolfenden, Barbara, 2008, Little Holocaust survivors and the English school that saved them: Greenwood World Publishing, Oxford, UK, 311 p. This inappropriately titled book (we were fortunate to be refugees, not Holocaust survivors) deals with Stoatley Rough School, the extraordinary boarding school for refugees founded by former leaders of the Frauenbewegung, the Women’s Movement of pre-Hitler Germany.

Peter J. Fawcett, Associate Professor

Public service

AYSO Soccer Coach

John W. Geissman, Chair and Professor

Public service

Alumni Advisory Board, University of Michigan
Worked with Career Enrichment Center, APS, to establish “Geology of New Mexico”, which has now started
Geoscience Advisor, Albuquerque Petroglyphs National Monument committee.
Geologic Field Excursion Leader, miscellaneous elementary school groups
Participant, Jefferson Middle School, Special Educational Events Day
Participant, Rio Rancho High School Career Days
Member, Coalition for Excellence in Science Education
Various geoscience talks to local Boy Scout groups

David Gutzler, Professor

Invited presentations to nonspecialist audiences

“Climate Change in New Mexico”, Tu B’Shevat Environmental Lecture, Congregation Nahalot Shalom, January 22.


“Climate change in southwestern New Mexico”, Gila Conservation Coalition, Silver City, June 5.

Science Advisor to NM Environment Department and Office of the State Engineer, New Mexico Climate Change Initiative.

Presented testimony on climate change in New Mexico to the state Legislative Finance Committee, Santa Fe, May 7.

Guest Interviewee on climate change and monsoons, KUNM Children's Hour, August 2.

Guest Interviewee on climate change and coastal storm intensity, KUNM Native America Calling, September 8.

Numerous interviews throughout the year for regional print and broadcast media regarding summer rainfall, El Niño/La Niña, drought, global warming, and other weather-related and climate-related topics.

Rhian H. Jones, Associate Professor

Public service

Gave several tours of the Meteorite Museum for visiting groups.
Identified suspect meteorites and answered enquiries about meteorites for members of the public.


Karl E. Karlstrom, Professor

Public service

We continued to make major progress in 2008 towards establishing the Trail of Time at Grand Canyon—which will be one of the world's largest geoscience exhibitions.

Filming for the geologic component of the Grand Canyon National Park visitor center documentary is under way.

Outreach through the EarthScope Science Café at Aztec NM

Barry S. Kues, Professor

Public service

Identified geological specimens and answered geological questions for the public.
Leslie D. McFadden, Professor

Public service

Member, Coalition for Excellence in Science Education (CESE)

Responded to several requests for advice and assistance from the public concerning issues related to soils and geology.

Grant A. Meyer, Associate Professor

Public service

Yellowstone Association Institute three-day summer field course for general public, “Shaping the Northern Yellowstone Landscape”, August 12-14, 2008.

Victor Polyak, Senior Research Scientist

Public service

Volunteer work for El Malpais National Monument.
Volunteer work for Grand Canyon National Park (with Carol Hill, and Bob and Debbie Buecher).
Volunteer work at Fort Stanton Cave science and exploration project.

Aurora Pun, Adjunct Assistant Professor

Public service

Participated as a Facilitator in “Technology in the Classroom” and “Teaching with Clickers” workshops organized by the Office of Support for Effective Teaching (OSET).

Mousumi Roy, Associate Professor

Public service

Spoke to the public and private school teachers in an NSF-sponsored workshop: Explore New Mexico Geology and Geophysics with EarthScope, August 2008

Timothy F. Wawrzyniec, Research Scientist

Public service

Guest lectures on the role of petroleum in our society with an emphasis on the non-energy uses of petroleum products and by-products. He also volunteered and participated in 2008 election activities for the party of his choice.
A. GRADUATE PROGRAMS AND STUDENT SCHOLARSHIPS
(Calendar Year 2008-2009)
SUMMARY OF THE GRADUATE PROGRAM

The total number of graduate students in the Department in Fall, 2008 was 62, a number that reflects a modest increase in our typical 50 to 55 number for our graduate student population over the past decade or so. It is important in this discussion to emphasize that, beginning in the mid-1990’s, the Department agreed to make certain that each and every graduate student was provided a sustainable financial aid package for a realistic time period (e.g., two years for a M.S., student, and four years for a Ph.D., student with a M.S., degree). As of Spring of 2009, again well over 50% (38 of 62) of the graduate students were women, a continuation of a trend that began during the last decade. Also, about 50 percent of the graduate students are in the doctoral program. Data summarizing our graduate program are included in the Table 2 and other lists (i.e. scholarship and award recipients) included in this section. For Fall, 2009, our total graduate student enrollment has decreased slightly.

The last several annual reports have emphasized that the Department of Earth and Planetary Sciences regards the education and training of graduate students as modern scientists as important and integral teaching and research functions. Through classroom, laboratory, and field experiences, graduate students acquire the mentoring, expertise, and skills required to become successful professional scientists in many employment opportunities, including industry, environmental and geological consulting companies, government organizations, and academia. Notably, the job opportunities in the broad realm of the geosciences are excellent and continue to grow (e.g., Geologist Salaries at Record Highs, 2008, geology.com; In the Geosciences, Business is Booming, 8 August, 2008, Science), but at a somewhat reduced pace due to the economic downturn of last year. Individualized teaching opportunities in a broad range of undergraduate level laboratory sections, and opportunities to present the results of their graduate research at professional earth science meetings and in numerous publications all further enhance interpersonal skills and abilities of graduate students to discuss their knowledge of and research in the geosciences in a range of settings and situations. A long term concern of all academic departments is the potential for a healthy academic hiring market over the next several years, and what will happen to the current and immediate future crop of PhD students who aspire to employment in academia.

Considerable evidence shows that the E&PS graduate program continues to be quite strong. Again, during the 2008-2009 academic year, many of our students won prestigious national fellowships or research awards, from sources such as the Geological Society of America, American Association of Petroleum Geologists, and Sigma Xi. Of note, Ms. Nina Lanza and Ms. Ann Ollila, graduate students in the Institute of Meteoritics, received the 2009 Zonta International Amelia Earhart Fellowships. Each student received $10K fellowships. In addition, the Department again received a large number of applications to the Graduate Program (over 60), another measure of the quality of our program. At least the top half of these applicants have outstanding academic records, and ALL of them receive several competing offers from top Earth Science Departments elsewhere in the nation. Averaged over several years, our success in attracting quality students to the Department is quite good. For Fall, 2009, some 30 percent of the applicants to whom we made TA or RA offers ultimately accepted and entered our program. This is a relatively low percentage, but is a function of many factors.

As might be expected from graduate students of this caliber, they have also succeeded in publishing numerous papers in many journals, some as senior authors and some in very prestigious journals in the earth sciences. They are also co-authors on numerous published abstracts. Such student co-authors are indicated by an asterisk in papers included in section III.
TABLE 1. Bachelor's, Master's and Doctoral Students Degrees, Fall, 2008–Spring, 2009.

**Doctoral Student (2009)**

Jana Berlin

**M.S. Students (2008)**

Hollis A. Kovach  
Andrew N. Yuhas

**M.S. Students (2009)**

Nicholas B. Engdahl  
Jack S. Grow  
Travis Naibert  
Amy Williams

**Bachelor of Science (2008)**

Alexandra L. Kirk  
Leslie A. Livengood

**Bachelor of Science (2009)**

Molly V. Beard  
Caitlin Q. Lachance  
Alex E. Resovsky  
William H. Woodruff  
Laura J. Van Alst

**Bachelor of Arts (2008)**

Aaron D. Coffman  
Calli D. Freerer  
James R. McAdams

**Bachelor of Arts (2009)**

Brian C. Kramer  
Levi Lementino  
John D. Nance

**Bachelor of Science in Environmental Science (2008)**

Rose Afandi  
Christopher Chavez  
Angelica V. Gurule  
Miguel Montoya  
Dylan H. Rose-Coss  
Roxane J. Skalski

**Bachelor of Science in Environmental Science (2009)**

Anna M. Keener  
Renee K. Martinez  
Tessia O. Robbins  
Antonio G. Trujillo

<table>
<thead>
<tr>
<th>FALL 2008 GRADUATE APPLICANTS</th>
<th>(GRADUATE APPLICATION SUMMARY DATA)</th>
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<tbody>
<tr>
<td>APPLICANTS TOTAL</td>
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<tr>
<td>29</td>
<td>M.S.</td>
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<td>27</td>
<td>Ph.D.</td>
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<td>56</td>
<td>TOTAL</td>
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<td>FEMALE APPLICANTS</td>
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<tr>
<td>16</td>
<td>M.S.</td>
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<tr>
<td>12</td>
<td>Ph.D.</td>
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<td>28</td>
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<td>Ph.D.</td>
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<tr>
<td></td>
<td>Female M.S.</td>
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<td>Male M.S.</td>
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<td></td>
<td>Male Ph.D.</td>
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<td></td>
<td><strong>Total</strong></td>
<td><strong>62</strong></td>
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</table>
Many Graduate and Undergraduate students were supported by scholarships, fellowships, and other awards during the 2008-2009 year in fact are mentioned in the UNM Foundation. During the 2008-09 year, the total value of fund awards was well over $50,000.00. Many scholarships are derived from various funds that have been established for this purpose by alumni and other friends of the Department. The Department augments these awards with travel scholarships that partially offset the expenses of travelling to professional meetings (and often provides free use of vehicles to these meetings), and other scholarships supporting use of the analytical instruments and other research expenses. Many students, of course are also the recipients of funds from the University, as well as prestigious research awards fund organizations like the Geological Society of America. Recipients of these awards are listed below.

Graduate and Undergraduate Scholarships and Awards

Geology Alumni Fellowship Fund

<table>
<thead>
<tr>
<th>Graduate Scholarships</th>
<th>Undergraduate Scholarships</th>
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<tbody>
<tr>
<td>Laura Burkemper</td>
<td>Andy Darling</td>
</tr>
<tr>
<td>Stephen Elardo</td>
<td>Melissa Halick</td>
</tr>
<tr>
<td>Molly Wick</td>
<td>Owen Shufeldt</td>
</tr>
<tr>
<td>Nina Lanza</td>
<td>Ann Ollila</td>
</tr>
<tr>
<td>Euan Mitchell</td>
<td>Julian Dillon</td>
</tr>
<tr>
<td></td>
<td>Stephanie Mason</td>
</tr>
<tr>
<td></td>
<td>Linda Donoho-Hurley</td>
</tr>
<tr>
<td></td>
<td>Bethany Theiling</td>
</tr>
<tr>
<td></td>
<td>Ashley Edelman</td>
</tr>
<tr>
<td></td>
<td>Zachary Wallace</td>
</tr>
<tr>
<td></td>
<td>Karen Hutchins</td>
</tr>
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<td></td>
<td>Mark Tyra</td>
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Harry and Mabel Leonard Scholarship

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<th>Graduate Scholarships</th>
<th>Undergraduate Scholarships</th>
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<tbody>
<tr>
<td>Tara Aran</td>
<td>Steven Aumack</td>
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<tr>
<td>Holly Buchler</td>
<td>Barbara Culp</td>
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<tr>
<td>Zachary Gallegos</td>
<td>Nicolas K. George</td>
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<tr>
<td>Marla Lohmann</td>
<td>Lauren Massengill</td>
</tr>
<tr>
<td>Dillon L. Reardon</td>
<td>Amanda M. Rice</td>
</tr>
<tr>
<td>April Tafoya</td>
<td>Karen Balduini</td>
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<tr>
<td></td>
<td>Linda Dreeland</td>
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<tr>
<td></td>
<td>Andrew Jochems</td>
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<td></td>
<td>Robert McCall</td>
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<tr>
<td></td>
<td>Sharon Schmidt</td>
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<td></td>
<td>Stephen W. Brown</td>
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<td></td>
<td>Jane Gallegos</td>
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<tr>
<td></td>
<td>Jessica Larsen</td>
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<tr>
<td></td>
<td>Elizabeth McConaghy</td>
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<td></td>
<td>Emanuel Storey</td>
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General Thomas Campbell Award

<table>
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<tr>
<th>Graduate Scholarships</th>
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<tbody>
<tr>
<td>Jacob Baggerman</td>
<td>Reyna Banteah</td>
</tr>
<tr>
<td>Chad Garcia</td>
<td>Brian Kramer</td>
</tr>
<tr>
<td>Noel Nix</td>
<td>Amanda M. Rice</td>
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<tr>
<td>Glenn Tortalita</td>
<td>Laura Van Alst</td>
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<td></td>
<td>Christina Batson</td>
</tr>
<tr>
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<td>Evan Locke</td>
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<tr>
<td></td>
<td>Sarah L. Schaefer</td>
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<td></td>
<td>Joshua D. Faulconer</td>
</tr>
<tr>
<td></td>
<td>Melanie Locke</td>
</tr>
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</table>

James Drew Pfeiffer Memorial Award

April Tafoya

Outstanding Student of the Year Award

Stuart A. Northrop Award (Alexandra L. Kirk)
Sherman A. Wengert Award (Linda Dreeland)
J.P. Fitzsimmons Award (Sharon Schmidt)
V.C. Kelley, Outstanding Field Geologist (John D. Nance)
Outstanding Environmental Science Graduate (Tessia O. Robbins)
Roger Y. Anderson Award (Dillon Reardon)
New Mexico Geological Society, Lucille Pipkin Senior Scholarship (Nicole Thomas)
Other Graduate and Undergraduate Student Awards

New Mexico Geological Society, Lucille Pipken Book Scholarship

Tara Aran
Jane Gallegos
Amanda Rice

Albuquerque Gem and Mineral Club Scholarship

Stephen Soltero

New Mexico Geological Society, Fall Field Conference Scholarship

Linda Dreeland
Levi Lementino

Bachelor of Science
Departmental Honors – Senior Thesis

Alexandra L. Kirk, summa cum laude, Fall 2008 – “Complex Alteration of Fe-Ni Metal in Meteorites.” Advisor: Dr. Adrian J. Brearley.


Roxane J. Skalski, summa cum laude, Fall, 2008 – “Variations in Geochemistry: Red River, New Mexico” Advisor: Dr. Laura J. Crossey.


Graduate Student Scholarship and Awards

Outstanding Master of Science Student

Christine Laudadio
Albert M. Kudo Outstanding Teaching Assistant
Amy Williams

Outstanding Beginning Teaching Assistant
Rebekah Levine

Jean-Luc Miossec Memorial Scholarship
Andy Darling Christine Laudadio

Vincent C. Kelley Memorial Scholarship
Ben Swanson Nick Engdahl

Rodney C. Rhodes Memorial Scholarship
Euan Mitchell

Alexander and Geraldine Wanek Scholarship
Eileen Embid Nicholas Engdahl Michelle Olson Elizabeth Premo
Amy Jo Williams J. Maarten DeMoor Leah Johnson

Jerry Harbour Memorial Endowed Scholarship Fund
Leah Roberts Linda Donohoo-Hurley

Sherman A. Wengerd Travelling Fellowship
Rebekah Levine Mark Tyra John Hurley

Richard P. Van Memorial Scholarship
Justin Dodd

New Mexico Geological Society, Fall Field Conference Scholarship
Justin Dodd Stephanie Mason
Graduate Degrees Awarded

The following students received M.S. and Ph.D. degrees in Earth and Planetary Sciences, Fall 2008 and Spring, 2009 (no summer degrees are listed). Thesis/dissertation titles and faculty advisors are also indicated.

Master of Science


Jack S. Grow, Spring, 2009 — “Paleomagnetic Data Bearing on the Evolution of the Walker Lane Belt Transfer Zone From Mid-Miocene to Present: An Investigation of the Inferred Southern and Eastern Boundaries.” Advisor: Dr. John W. Geissman.


Travis Naibert, Spring, 2009 — “Timing and Emplacement of the Philipsburg Batholith, SW Montana, and a Comparison of Two Magnetic Fabric Techniques.” Advisor: Dr. John W. Geissman.


Andrew N. Yuhas, Fall, 2008 — “MODIS Derived NDVI Characterization of Drought-induced Evergreen Dieoff in Western North America.” Advisor: Dr. Louis Scuderi.

Doctor of Philosophy

Jana Berlin, Spring, 2009 — “Mineralogy and Bulk Chemistry of Chondrules and Matrix in Petrologic Type 3 Chondrites: Implications for Early Solar System Processes.” Advisor: Dr. Adrian Brearley.

Outcomes

Study in the Department’s graduate programs prepares students for a wide variety of careers in the geosciences and related fields. Below are listed the positions obtained by Ph.D. and M.S. students who graduated in 2008-2009:

Ph.D.

• Jana Berlin

M.S.

• Nicholas B. Engdahl — In Ph.D., Program in Hydrologic Sciences at the University of California, Davis.
• Jack S. Grow — Joined Shell Oil in Houston, Texas.
• Hollis A. Kovach — Completed her teaching certificate after she finished her MS and is currently teaching physics in an APS high school.
• Amy Williams — In Ph.D., Program in Geological Sciences at the University of California, Davis.
• Andrew N. Yuhas — Working for a private Environmental Consulting Company in Bernalillo, NM.
Travis Naibert – Currently unemployed, is weighing options between employment in the environmental industry, the ski industry, and future endeavors in graduate school.

A. DONATIONS TO DEPARTMENT
(Calendar Year 2008-2009)
DONATIONS TO DEPARTMENT

July 1, 2008 to June 30, 2009 Fiscal Year

Geology Chair Account

Kurt J. Steffen  
John M. Lucas  
Charles C. Scott, Jr.  
William L. Chenoweth  
Richard Lee Ford  
Brian L. Salem  
Lawrence Henry Wagner  
Wolfgang E. Elston  
Bill P. Lovejoy  
Stephen Ralph Maynard  
Rima Petrossian  
John D. Bloch  
Rodney C. Ewing  
Lenore R. Pardee  
John Lee Berkley  
Michael L. Davies  
Harvey R. DuChene  
Teresa Marie Royek  
Stephen F. Elston  
Dawn Marie Martin-Miller  
William C. Carrigan  
David M. Devoe  
John Stephen Alexan  
Jane Pedrick Dawson  
Anne Celeste Tillery  
Jennifer E. Edmunson  
Charles Mike Hulgren  
Richard H. Chin  
James Lee Martin  
Birgit Krause Landin  
Duane M. Moore  
Nancy L. Robinson  
James W. Caylor  
Crista S. Carroll  
John G. Kuhn  
Joyce Whelchel  
Elaine S. Brouillard  
Theodore J. Bornhorst  
Leslie D. McFadden  
Robin E. Broomfield  
Cabot Oil and Gas Corporation  
RBC Dain Rauscher

Harding Pegmatite Mine

Neil N. Carlston  
David London  
Judith A. Copeland  
Steven L. Racicot  
Mary Jo Hackett  
Gordon B. McDonough  
Brooke Hatfield  
Deanna M. Teraoka  
Gerald E. Schultz  
John H. Burris  
James N. Miller  
Dept., of Natural & Env. Sciences  
Boy’s Scott Troop #129

Sherman & Florence Wengerd Traveling Fellowship

Harry F. Pomeroy, Jr.

Douglas Brookins Memorial Scholarship

Jeffrey Bernard West

Geology Museum and Collections

Anonymous

Ronald G. Boyd Memorial Endowment in Mineralogy

Virginia M. Boyd

Alumni Endowment Spending Fund

Kirsten E. Sanders
APPENDIX I

MUSEUM AND HARDING PEGMATITE LOG

2008-2009
## Geology Museum Register

**JULY 1, 2008 – JUNE 30, 2009**

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<tr>
<th>DATE</th>
<th>ORGANIZATION</th>
<th>GRADE</th>
<th># OF STUDENTS</th>
<th># OF ADULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/08/08</td>
<td>Youth Day Camp</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; - 8&lt;sup&gt;th&lt;/sup&gt;</td>
<td>50</td>
<td>6</td>
</tr>
<tr>
<td>7/14/08</td>
<td>Youth Day Camp</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; - 4&lt;sup&gt;th&lt;/sup&gt;</td>
<td>40</td>
<td>6</td>
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<tr>
<td>7/30/08</td>
<td>LaPetite Academy</td>
<td>K-5&lt;sup&gt;th&lt;/sup&gt;</td>
<td>7</td>
<td>1</td>
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**JULY, 2008 TOTAL**

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<tr>
<td></td>
<td>97</td>
<td>13</td>
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**AUGUST, 2008 TOTAL**

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<tbody>
<tr>
<td>NO VISITS FOR THE MONTH OF AUGUST</td>
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<th>GRADE</th>
<th># OF STUDENTS</th>
<th># OF ADULTS</th>
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<tbody>
<tr>
<td>9/17/08</td>
<td>Dennis Chavez Elementary</td>
<td>K-5&lt;sup&gt;th&lt;/sup&gt;</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>9/23/08</td>
<td>Oñate Elementary</td>
<td>5&lt;sup&gt;th&lt;/sup&gt;</td>
<td>18</td>
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**SEPTEMBER, 2008 TOTAL**

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<th>GRADE</th>
<th># OF STUDENTS</th>
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<tbody>
<tr>
<td>10/17/08</td>
<td>University of Michigan</td>
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**OCTOBER, 2008 TOTAL**

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<tr>
<td>11/03/08</td>
<td>Cottonwood Classical</td>
<td>6&lt;sup&gt;th&lt;/sup&gt; - 10&lt;sup&gt;th&lt;/sup&gt;</td>
<td>100</td>
<td>20</td>
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<tr>
<td>11/05/08</td>
<td>Adobe Acres Elementary</td>
<td>4&lt;sup&gt;th&lt;/sup&gt;</td>
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<td>5</td>
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<td>Bosque School</td>
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<td>2</td>
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<td>11/13/08</td>
<td>Laguna Middle School</td>
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<td>3</td>
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<td>Salem Academy</td>
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**NOVEMBER, 2008 TOTAL**

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<td>12/09/08</td>
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<tr>
<td>12/22/08</td>
<td>Classical Coop</td>
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**DECEMBER, 2008 TOTAL**

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<tbody>
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**JANUARY, 2009 TOTAL**

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# Geology Museum Register

**JULY 1, 2008 – JUNE 30, 2009**

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University of New Mexico
Department of Earth and Planetary Sciences
Harding Pegmatite Mine
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2008 - 2009: 432 College / University / other Visitors Total
THE ANNUAL REPORT
OF THE
INSTITUTE OF METEORITICS

July 1, 2008 to June 30, 2009

Carl B. Agee, Director
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    - Meteorite Museum .................................................................................................................................................................................... 40
This year the Institute of Meteoritics (IOM) continued its success in securing new sources of external funding for research. IOM Director was awarded two new grants totaling $639,050 from the National Science Foundation to study the properties of silicate melts at high pressure. One of the grants was an award funded under the American Recovery and Reinvestment Act of 2009 (ARRA). Dr. Charles Shearer received a new grant of $306,000 from NASA's Lunar Advanced Science and Exploration Research (LASER) program to study volatiles in samples from the Moon. Our graduate students were also extremely successful in competing for prizes and awards, with several receiving New Mexico Space Grant awards. Graduate students Nina Lanza and Ann Ollila were both honored with Amelia Earhart Fellowships from Zonta International. Nina was also the recipient of a NASA Graduate Research Fellowship. This year we reached an all-time funding record for the IOM with 25 active external grants totaling $6,460,370.

Our research activities continue to have a significant impact on the field of planetary materials research. We produced 24 peer-reviewed publications that appeared in internationally recognized scientific journals. The staff and students were active in disseminating our new results through the presentation of 69 research papers at numerous high-profile scientific meetings. For example, we presented 25 research papers at the annual Lunar and Planetary Science Conference in Houston. Our contributions at this prestigious meeting were highlighted in wide range of sessions on studies of the surface and deep interior of Mars and the Moon. We also expect to see our base research effort further enhanced through participation in NASA's new program to return to the Moon. In the near term, Drs. King and Newsom will be participating in the NASA Mars Science Laboratory Mission to be launched in 2011 as team scientists on the ChemCam and APXS instruments that will analyze the martian surface rocks and minerals in the search for environments that could harbor life.
FACULTY AND STAFF
FACULTY AND STAFF

Director, Institute of Meteoritics
Dr. Carl B. Agee

Senior Research Scientists III
Dr. David Draper
Dr. Penelope King
Dr. David Lescinsky
Dr. Horton Newsom
Dr. Charles Shearer

Senior Research Scientist I
Dr. James Karner
Dr. Shawn Wright

Research Scientist III
Michael Spilde

Research Specialist
Paul V. Burger

Research Professors
Dr. V. Rama Murthy
Dr. James Papike
Dr. Robert Reedy
Dr. David Rubie

Administrative Personnel
Shannon Clark, Program Coordinator
Lee Ann Lloyd, Administrative Assistant II
Nicole Wilson, Student Employee

Graduate Students
Laura Burkemper (PhD)
Megan Duncan (MS)
Steven Elardo (MS)
Karen Hutchins (PhD)
Nina Lanza (PhD)
Ann Ollila (PhD)

Additions to Staff
Dr. Shawn Wright, Senior Research Scientist I
(Start Date: February 3, 2009)

Separations from Staff
Dr. David Draper, Senior Research Scientist III
(Date of Separation: May 31, 2009)
Dr. David Lescinsky, Senior Research Scientist III
(Date of Separation: August 1, 2008)
1. RESEARCH
RESEARCH

Research activities of staff and students of the Institute of Meteoritics cover a wide range of topics, mostly aimed at understanding the origin of solar system bodies and the evolution of the planets. More specifically, we have major research initiatives to investigate crust/mantle differentiation and surface processes on Mars and the Moon, and experimental studies of planetary interiors.

Our research during the report period has resulted in the publication of scientific articles in major national and international journals, as well as in the publication of abstracts of papers presented at national and international conferences. The extensive involvement of students in original research projects in the Institute of Meteoritics is particularly important for their education and advanced training.

Funded Research
25 total active awards during this Annual Report period: $6,460,370

Static Compression of CO₂-bearing Silicate Liquids
Funded by NSF EAR Petrology and Geochemistry Program. PI: Carl Agee, Co-PI: Penelope King
Total Award Amount: $312,205, Award Period: June 9, 2009 - May 3, 2012
This award is funded under the American Recovery and Reinvestment Act of 2009 (Public Law 111-5)

This research focuses on the problem of how carbon dioxide physically interacts with magma when dissolved under very high pressures in the Earth's deep interior. The main physical property that we will be measuring is the density of compressed magma with varying amounts of carbon dioxide under a wide range of pressure and temperatures. We will determine the degree to which carbon dioxide alters the magma density, thus revealing how readily CO₂-bearing magmas will become buoyant relative to surrounding rock. The experiments will greatly improve our ability to predict the conditions under which magmas rise to the Earth's surface and erupt as lavas or form volcanoes that emit carbon dioxide and other gases into Earth's atmosphere. The experimental data will also provide new insight into the way in which gases such as carbon dioxide were sequestered deep in the rocky part of our planet and how much was de-gassed from the early Earth during its formation stage. This effort employs experimental techniques that span the entire range of pressure and temperature conditions that exist for melting and magma production in the Earth's upper mantle.

Collaborative Research: High Pressure Experimental Melt Density
Funded by NSF EAR Cooperative Studies of the Earth's Deep Interior Program, Pls: Carl Agee¹, Thomas Ahrens², Paul Asimow², Rebecca Lange³
¹University of New Mexico, ²Caltech, ³University of Michigan
Total Award Amount to PI Agee: $326,845 Award Period: May 1, 2009 - April 30, 2012

This research is a highly coordinated, multi-lab, collaborative effort to measure the density and compressibility of magmas that form during melting in the Earth's interior. The measurements will greatly advance our ability to predict the conditions under which magmas will rise buoyantly to the Earth's surface and erupt as lavas or form volcanoes. The measurements will also reveal the conditions and depths where magmas are too dense to rise to the surface, remaining either trapped by neutral buoyancy, or sinking further into our planet's deep interior. The experimental data will also provide new insight into the way in which the Earth was differentiated into crust, mantle, and core during its primordial formation stage. The collaborative effort combines experimental techniques that span the entire range of pressure and temperature conditions that exist for melting and magma production in the Earth. The highest pressures, simulating the deepest regions of Earth's mantle, will be done under dynamic compression at the Caltech Shockwave Laboratory, the intermediate pressures will be carried out under static compression in large presses at the University of New Mexico's High Pressure Laboratory, and the near-surface magmatic conditions will be studied in high temperature furnaces with ultrasonic techniques at the University of Michigan's Experimental Petrology Laboratory.
Experimental Studies of Planetary Magmas at High Pressure
Funded by the Cosmochemistry Program, NASA. PI: Carl Agee
Total Award Amount: $360,000; Award Period: May 1, 2007 – April 30, 2010

This work focuses on three main tasks: 1) Partitioning of volatile elements between mantle and core, 2) Compressibility of hydrous and carbonated, iron-rich silicate liquid and density crossovers in volatile-bearing planetary mantles, 3) High pressure melting experiments constraining mantle source regions for martian basalts. All three tasks will be carried out in the high-pressure and analytical laboratories at the Institute of Meteoritics, University of New Mexico. Results from these studies should advance our understanding of the differentiation and the role volatiles in the Earth, Mars, and other planetary bodies.

Astromaterials Institute at the University of New Mexico
Funded by NASA. PI: Carl Agee

This project includes upgrades and new equipment acquisition for analytical and experimental laboratories in New Mexico's unique, NASA-focused center. Astromaterials research includes the study of returned samples from missions to Mars, the Moon, and other parts of the solar system, meteorites, and laboratory-synthesized samples. The proposed activities of the Astromaterials Institute are highly relevant to NASA's new vision that emphasizes solar system exploration and robotic and human missions to the Moon and Mars.

Static Compression of Hydrous Silicate Liquids
Funded by NSF EAR Petrology and Geochemistry Program and Geophysics Program. PI: Carl Agee
Total Award Amount: $250,000; Award Period: June 1, 2005 – May 31, 2008, no cost extension to May 31, 2009

The primary goal of this project is determine the density and compressibility of hydrous silicate liquids at high-pressure. This will be accomplished by performing static compression sink/float experiments in piston-cylinder and multi-anvil devices at pressures from 0.5 to 20 GPa. These measurements will give new insight into the structure and physical properties of hydrous silicate liquids, and the mobility of water-bearing magmas in the Earth's mantle.

Experimental Simulations of Lunar Magma Ocean Crystallization
Funded by the Cosmochemistry Program, National Aeronautics and Space Administration. PI: David Draper
Total Award: $300,000; Award Period: April 1, 2008 – May 1, 2011

This program of high-pressure experimentation will simulate the crystallization of an early lunar magma ocean. Despite the widespread acceptance of the Giant Impact – Lunar Magma Ocean concept to understand the geologic history of the Moon, crystallization of the magma ocean has never been tested experimentally. This project will provide stronger constraints on such important unresolved questions in lunar science as: What was the extent of the initial lunar magma ocean? Did the entire Moon melt, or only the upper few hundred km, or something in between? What is the relationship between the compositions and depths of source rocks for mare basalts vs. those for picritic glass beads? What is the origin of magnesian KREEP-rich basalts? Results from the experiments will be integrated with treatments of post-magma ocean processes such as cumulate overturn to strengthen the framework in which lunar samples, both those already in our possession and those that may be returned in future robotic and human missions, may be understood.

Extended Calibration of the APXS for the MSL Mission
Funded in part by the New Mexico Space Grant Consortium Scholarship. PI: Penelope King; Co-I: Laura Burkelmer
Total Award Amount: $5,000; Award Period: January 2008 – December 2008
APXS has been used by NASA since the Mars Pathfinder mission to determine the chemistry of rocks and soils on Mars. Thorough analysis of the BT-2 basalt calibration target flying on the NASA Mars Science Lab mission is necessary to monitor APXS performance while on Mars. Further investigation of matrix and textural effects will assist with APXS data reduction. This research is being conducted as part of the second project for the PhD program. Work has been completed on the first part of the project using the electron microprobe lab at UNM and free NIH image software.

Further Analysis and Characterization of Sulfates and Sulfides Using Multiple Spectral Techniques
Funded by NASA-MFR. Consultant: Penelope King; PI: Melissa Lane, Planetary Science Institute
Total Award Amount: $255,000; Award Period: June 1, 2006 – May 31, 2009

There exists theoretical, chemical, and spectroscopic evidence that abundant sulfate occurs on Mars; however, only a few specific types (chemistries) of sulfate minerals have been identified in only a few places on Mars. For example, jarosite has been reported to occur in Meridiani Planum (Mars Exploration Rover Mössbauer instrument) and kieserite or gypsum or both are thought to be present in northeast Meridiani, Aram, Valles Marineris, and the northern circumpolar deposit (Mars Express OMEGA instrument). The sulfate chemistry in the Martian dust and soil is uncertain but has been suggested to include magnesium, calcium, iron, and sodium varieties with unknown degrees of hydration. The key to understanding the sulfate history on Mars is to first identify and determine the sulfate composition, then to draw from geologic clues about the environment of formation. The purpose of this work is to analyze and characterize a large suite of sulfates and potential precursor sulfide minerals using a wide variety of techniques including major element analysis, X-ray diffraction, extended-visible/near infrared/midinfrared reflectance spectroscopy, thermal emission spectroscopy, Mössbauer spectroscopy and midinfrared micro-transmission spectroscopy. Such a complete study of sulfates using these various techniques will provide well-characterized sample spectra that will be critical for interpreting past and future data from Mars. The results of this proposal will lay the necessary groundwork for future mission data interpretation that will allow for the determination of which sulfates exist on Mars and their environments of formation.

Infrared Spectroscopy Of Silicic Glasses & Melts: Deriving Volcano-Scale Processes from Laboratory-Scale Measurements
Funded by the National Science Foundation, EAR. Consultant: Penelope King; PI: Michael S. Ramsey, University of Pittsburgh
Total Award Amount: $261,003; Award Period: July 1, 2007 – June 30, 2010

Active silicic volcanoes commonly produce glass-rich lava domes that are emplaced either as relatively volatile-rich lavas with a range of vesicularities, or as relatively degassed, piles of glass-rich rubble and blocks. To predict the hazards associated with an active lava dome, it is critical to know which type of dome is present; however, it is often risky to collect samples. Remote techniques for monitoring active lava dome petrology are much more desirable and the best-suited technique for these measurements is thermal infrared (TIR) spectroscopy. TIR wavelengths are sensitive to the characterization of silicate material because of the presence of strong absorption bands (dominantly Si-O and also Al-O) in the 8-12 μm region (1250-830 cm-1). However, for TIR spectroscopy to be an accurate monitoring tool of dome surfaces, the factors that affect the emitted TIR energy must be better understood. Specifically, TIR emission is influenced by the formation of cooled/cooling glassy crusts, and the structure and percentage of glassy matrix. In order to accurately analyze the spectra from active lava domes and quantitatively extract the fundamental physical properties of the lava (e.g., surface vesicularity, phenocryst composition/percentage, glass composition/percentage, and temperature) it is necessary to understand the role of the fundamental Si-(AI)-O units in the emitted IR energy of volcanic surfaces. We propose a follow-on laboratory and field-based research study to characterize the contributions from these fundamental Si-(AI)-O units in the glassy crusts, and minerals/interstitial matrices of analog (synthetic) and natural silicic samples. Specifically, we will provide the first systematic characterization of the diagnostic absorption band positions and spectral shapes of these materials. The second task of the research proposed is to apply these results to field and satellite data of silicic domes.
Research to Interpret Data Measured Using the APXS for the Mars Science Lab Mission
Funded by the Space Science Exploration Program, Canadian Space Agency (CSA). PI: Penelope King
Total Award Amount: CDN $150,000; Award Period: April 1, 2006 – March 30, 2009

In 2009, NASA will launch a rover mission called Mars Science Laboratory (MSL) that will carry the alpha particle X-ray spectrometer (APXS) to Mars. The APXS determines the chemical composition of rocks and soils and an updated edition of the instrument is being developed. This grant aims to maximize the information that we obtain from the APXS by using a combination of theoretical modeling and new calibration methods. The proposed research will advance our understanding of the processes controlling the chemistry of the martian surface. It is necessary to understand the surface chemistry on Mars to search for life, predict past and future climate, and determine possible toxicity of the surface dust and resources available for a planned human mission to Mars.

Using LIBS to Understand the Role of Cold Evaporates and Ice-Mineral Mixtures on the Martian Surface
Funded in part by the following sources:
1) NASA Graduate Student Research Program Fellowship. PI: Nina Lanza
Total award amount: $90,000; Award period: 1 August 2008 – 31 July 2011

2) Zonta International Amelia Earhart Fellowship. PI: Nina Lanza
Total award amount: $20,000; Award period: 1 September 2008 – 31 August 2010

Laser-Induced Breakdown Spectroscopy (LIBS) is an emission spectroscopy technique used to determine the elemental composition of a target material. The ChemCam instrument selected for the Mars Science Laboratory (MSL) rover scheduled for launch in 2009 includes a remote LIBS instrument. LIBS is sensitive to environmental conditions such as atmospheric composition and pressure. Thus, the ChemCam LIBS must be calibrated in the laboratory for martian conditions to return good results. Currently, I am examining carbonate minerals with LIBS at Los Alamos National Laboratory (LANL) to better understand the signature of these materials should MSL encounter them. Recent results show that LIBS can distinguish carbonates in a martian environment, and can also distinguish between rock types using multivariate analysis statistical techniques. Future work will include examining mixtures of carbonate and sulfate minerals in order to understand the effect of the major anion on the LIBS spectra, as well as freezing these materials in water ice to simulate martian conditions. This research is being conducted as part of my PhD dissertation under the supervision of Dr. Horton Newsom.

Examining cemented inverted channel deposits in Green River, UT as an analog for inverted terrain on Mars
Funded by sources 1) and 2) listed above

There have been numerous observations of long, relatively sinuous, positive relief landforms on Mars that appear morphologically similar to inverted channel deposits (ICDs) on Earth that represent exhumed fluvial sediments. ICDs initially form as bed sediments within active stream channels that subsequently become cemented, commonly by carbonates, iron oxides, or amorphous silica precipitated during evaporation. Subsequent deflation by aeolian processes reveals these sediments as positive relief features. While carbonate is an unlikely cementing agent on Mars, both iron oxide and silica have been observed on Mars. I seek to better understand how terrestrial ICDs appear to remote sensing instruments that are similar to the ones currently orbiting Mars, and whether they have morphologic or spectroscopic characteristics that could help to identify them from orbit as fluvial deposits. Of particular importance are the differences between the remote and in situ studies, and the implications these have for identifying similar features on Mars. An analog site for martian inverted landforms may be found in ICDs in the Cedar Mountain formation in Green River, Utah. Preliminary results from sampling these materials indicate that the cement is primarily an amorphous silica rather than a carbonate. This research is being conducted as part of my PhD dissertation under the supervision of Dr. Horton Newsom.
ChemCam LIBS for the Mars Science Laboratory, Mission Phase B,C
Funded by NASA, Jet Propulsion Laboratory, Los Alamos National Laboratory. Co-I: Horton Newsom
Total Award Amount: $48,000; Award Period: Jan. 1, 2007 – Dec. 31, 2009

The ChemCam LIBS instrument will fly to Mars on NASA’s nuclear powered Mars Science Laboratory for a two-year mission to explore for previously habitable environments on Mars. ChemCam uses a laser beam to remove dust from rock surfaces, enabling remote sensing unhindered by the ubiquitous Mars dust. The suite combines LIBS elemental analyses with a remote micro-imager (RMI) yielding the highest resolution images ≥ 2 m from the rover. Dr. Newsom is a co-investigator and science team member for this instrument.

Chemical Fractionation Due to Impact Processes on the Earth, Moon and Other Planetary Bodies
Funded by the Planetary Geology and Geophysics Program, NASA. PI: Horton Newsom
Total Award Amount: $333,500; Award Period: January 1, 2008 - December 31, 2010

This project, directed by Dr. Horton Newsom, involves the study of processes involving water and impact craters on Mars, the Moon, and other bodies using remote sensing data and terrestrial analogues. Hydrothermal systems are good locations to search for evidence of biotic or prebiotic chemistry, and may also be connected with the formation of the Martian soil. Studies of terrestrial analogue craters can provide important insight and constraints into processes involving impact craters on Mars. The mineralogy and chemical transport processes at the crater are studied using Scanning Electron Microscopy, Electron Microprobe, and stable isotope studies. Studies of larger impact craters include the Chicxulub crater in Mexico, the Bosumtwi crater in Ghana, and the newly discovered Santa Fe impact structure.

Educational Activities for the DAWN Mission to Asteroids Ceres and Vesta
Funded by the Office of Space Science, NASA. PI: Horton Newsom
Total Award Amount: $65,200; Award Period: October 29, 2007 - November 1, 2015

Dr. Newsom is a member of the educational team for the DAWN mission and is providing information on the connection between meteorites and asteroids for the creation of web sites and educational activities. The DAWN mission will be the first dedicated mission to the main asteroid belt. The “Find a meteorite” web activity has been developed for NASA’s DAWN website.

Impact Crater Hydrothermal Systems
Funded by the Planetary Geology and Geophysics Program, NASA. PI: Horton Newsom
Total Award Amount: $30,000; Award Period: January 1, 2005 – April 2, 2008

This project, directed by Dr. Horton Newsom, involves the study of processes involving water and impact craters on Mars, using remote sensing data and terrestrial analogues. Hydrothermal systems are good locations to search for evidence of biotic or prebiotic chemistry, and may also be connected with the formation of the Martian soil. Studies of terrestrial analogue craters can provide important insight and constraints into processes involving impact craters on Mars. We are studying the only well-documented crater in basaltic terrain, the Lonar Crater, India. The investigation of the Lonar Crater impact melts is providing information on the formation of a crater in a basaltic terrain analogous to Mars. The mineralogy and chemical transport processes at the crater are studied using Scanning Electron Microscopy, Electron Microprobe, and stable isotope studies. The data from the Lonar Crater will be compared with data obtained by current Mars spacecraft such as the Mars Exploration Rovers. Studies of larger impact craters include the Chicxulub crater in Mexico, and the Bosumtwi crater in Ghana.
Slow Motion Field Test of Laser-Induced Breakdown Spectroscopy (LIBS) and Other Instruments For Geological Mapping of Rocks and Surficial Materials at the Haughton Impact Structure, Devon Island, Canada
Funded by NASA, Moon and Mars Analogue Mission Applications program. PI: Horton Newsom
Total Award Amount: $50,000; Award Period: July 1, 2008 - June 30, 2009

The Haughton impact structure on Devon Island, Canada, provides a unique setting for demonstrating remote geological and geochemical analysis of complex outcrops produced by impact processes. We will participate in an ongoing field campaign at Haughton to provide samples and imagery to simulate a remote investigation of one or more important outcrops. Over the course of the field season at Haughton, the field science team will acquire images of outcrops and samples needed for later analysis by techniques such as LIBS during the progress of the test. Laser-Induced Breakdown Spectroscopy (LIBS) is a new technology for both geological and geochemical exploration. The remote science team will use the imagery and analytical data to interpret the nature of the outcrop. Iteration of the process to simulate up to approximately 10 days of rover operation will allow a good test of the remote team's ability to understand the chemistry and geology of an outcrop that has been extensively studied by traditional methods, and will allow feedback from the field team on how the remote investigation could have been improved.

Detection of Organics Under Mars-Like Conditions using LIBS
Funded by New Mexico Space Grant. PI: Ann Ollila
Total Award Amount: $10,000; Award Period: 2009

This work was presented at the EPS department seminar and will be presented at AGU Dec 2009. Ann is currently still collecting and analyzing data.

Microbeam Studies of Planetary Materials
Funded by Cosmochemistry Program, NASA. PI: James Papike; Co-Is: Charles Shearer, James Karner, Paul Burger
Total Award Amount: $1,080,000; Award Period: April 1, 2006 – April 1, 2010

Our new 4-year Cosmochemistry proposal concerns comparative planetary mineralogy and vanadium valence oxybarometry (VVO) studies. Here we emphasize the potential of individual mineral phases as recorders of igneous processes for four planetary bodies, Earth, Moon, Mars, and 4 Vesta. VVO studies utilize the multi-valence states of vanadium V2+, V3+, V4+, and V5+, and can record fO2 conditions from the most reduced solar nebula conditions (~IW-7) to the oxidized Earth and Mars (~IV+6). Task II concerns the Moon. We use XANES measurements of Cr and Ti valence statues in natural pyroclastic glass beads and synthetic glasses produced over a range of fO2. The results will be compared to our previous results for V in the same materials. The combined results will give us better estimates of lunar mantle fO2 and provide insight into possible reduction reactions during lunar pyroclastic eruptions.

Cosmic-Ray-Produced Nuclide Systematics on Earth
Funded by the National Science Foundation Earth Sciences Directorate. PI: Robert Reedy
Total Award Amount: $90,001; April 1, 2005 – March 31, 2009

The Cosmic-Ray Produced Nuclide Systematics on Earth (CRONUS-Earth) project is a large, multi-year, international collaboration to develop good production-rate systematics for cosmogenic nuclides made in situ in the Earth's surface. Some cosmic-ray particles penetrate the top few meters of the Earth's surface and produce nuclides. These cosmogenic nuclides are ideal for measuring the lengths of time that a sample has been on or very near the Earth's surface, typically a few thousand years to a few million years. Surface exposure dating is used for recently-formed igneous rocks and for material recently exposed by processes such as earthquakes, glaciers, and landslides. Computer codes and nuclear data are used to numerically simulate the interactions of cosmic-ray particles with the Earth's surface and the production of nuclides. Work has been done on measuring and updating cross sections for the production of these nuclides. Comparisons with measurements using artificial and natural terrestrial samples have been and will be used to improve these calculations.
Extraterrestrial Studies Using Nuclear Interactions
Funded by NASA Cosmochemistry Program. PI: Robert Reedy
Total Award Amount: $189,000; Award Period April 1, 2006 – March 31, 2009

Nuclides made by energetic cosmic radiations are used to study the recent histories of meteorites and lunar samples and of these energetic particles. Two types of energetic particles in space – the galactic cosmic rays and solar energetic particles – have nuclei (mainly protons) with enough energy to induce nuclear reactions. Product nuclei used for such studies include the rare stable isotopes Ne-21 and 1.4 Myr radioactive Be-10. The emphasis of the work being done at UNM has been to develop and test good models for these nuclear interactions, especially the rates for making cosmogenic nuclides. Recent work has been to update the cross sections used in these model calculations. The results of these models are then used to interpret measured concentrations of cosmogenic nuclides, such as when meteorites were ejected by impacts. Nuclides made in the top centimeter of lunar samples are used to study the average fluxes of energetic particles from the Sun over the last few million years.

Mapping Martian Elemental Compositions Using Gamma Rays and Neutrons
Funded by the Mars Odyssey Program, NASA, through the Mars Gamma-Ray team office at the University of Arizona in Tucson. PI: Robert Reedy
Total Award Amount: $267,000; Award Period: October 1, 2004 – September 30, 2008

Gamma rays detected in orbit by the Mars Odyssey Gamma Ray Spectrometer are studied to determine the abundances of elements in the top ~20 cm of the martian surface. The gamma rays are made by the decay of naturally-occurring radioelements (K, U, and Th) or by cosmic-ray interactions (mainly neutron-capture or inelastic-scattering reactions). Work at UNM includes determining backgrounds. The abundances of H, Si, Cl, K, Fe, Th, Ca, Al, S, and U have been mapped in the martian surface.

Exploring Lunar Volatile Reservoirs: Analysis, Sampling, Preservation, and Curation
Funded by the LASER Program, NASA. PI: Charles Shearer; Co-I: Penelope King
Total Award Amount: $306,000; Award Period: September 2008 – August 2011

We are using new analytical approaches to analyze mineral and glass surfaces of Apollo lunar samples that have been uniquely collected, handled, and stored. Specifically, we will characterize volatile element behavior by analyzing delicate surface coatings on mineral and glass surfaces. The preservation of such fragile coatings depends on sample handling and the conditions under which the samples were collected and preserved. Using new analytical approaches and unique samples, we will address the nature of lunar volatiles and capabilities in their preservation through three tasks that have profound implications for both the scientific understanding of volatile reservoirs on the Moon and the human exploration-habitation of the Moon.

- Task 1) Determine the behavior of volatile elements in the lunar regolith.
- (Task 2) Record the indigenous mantle volatiles preserved in lunar pyroclastic deposits.
- (Task 3) Characterize the role of sampling, handling and curation on the collection, preservation and return of lunar samples containing volatile elements.

Collaborative Research: RUI: Biogenic Cave Carbonates: Identifying Surface Carbon Input to Subsurface Ecosystems
Funded by the National Science Foundation. Co-I: Michael N. Spilde, with Diana E. Northup (Biology Dept) in collaboration with P.J. Boston, NM Institute of Mining & Technology and L.A. Melim, Western Illinois University
Total Award amount: $112,982; Award Period: Sept 1, 2007 to Aug 31, 2010

Microbially mediated carbonate precipitation is globally important and can provide a mechanism for understanding and potentially manipulating carbon sequestration. Arid-land caves, as semi-closed systems stripped of the influence of surface weathering, provide a particularly valuable window into the world of carbonate-precipitating microorganisms. Our research seeks to understand how carbon moves from the surface to the subsurface, and how it is preserved in the subsurface in carbonate precipitates.
These precipitates, many of which are biogenic, record microbial influences, surface climate, and ecosystem changes.

**Snowy River Comprehensive Science and Management Plan**
Funded by BLM Cave Assistance Projects-Statewide New Mexico. PI: Michael N. Spilde, on subcontract to NM Institute of Mining & Technology
Total Award Amount: $399,019; Award Period: July 15, 2008 to July 14, 2013

This research is a subcontract to a larger grant of $794,755 award to NM Tech to oversee the development of cave and karst scientific research, management tools, engineering infrastructure, and public education and outreach for the protection and understanding of cave and karst resources in New Mexico. Focus areas include: 1) the geologic history of Ft. Stanton Cave in particular, 2) the age of the cave system, 3) the hydrology and paleohydrology, 4) origin and age of the spectacular Snowy River formation, the largest calcite formation in the world, 5) identification of the unusual microbiological communities, 6) microbiological indicators of human impact, and 7) micrometeorological behavior of the cave.
2. PUBLICATIONS
PUBLICATIONS

Peer-reviewed Publications
(Institute staff/students in bold)


Abstracts
(Institute staff/students in bold)


3. PROFESSIONAL TRAVEL
PROFESSIONAL TRAVEL

Carl Agee, Director and Professor

- COMPRES Workshop, Tempe, AZ. March 2-4, 2009.

Paul Burger, Research Specialist


David Draper, Senior Research Scientist III

- Venus Exploration and Analysis Group meeting and Venus Geochemistry workshop, Houston, TX. February 24-28, 2009.

James Karner, Senior Research Scientist I


Penelope King, Senior Research Scientist III

University of Western Ontario, London ON, Canada
- Field work:
- Attended meetings:
  - American Geophysical Union Spring Meeting, Toronto, Canada. June 2009.

Horton Newsom, Senior Research Scientist III

- Presented one talk, 3rd Mars Science Laboratory landing site meeting, Pasadena, CA. September 15-17, 2008.
- Mars Exploration Program Analysis Group, Pasadena, CA. September 18, 2008
- Pyroclastic rock seminar, Cal. Tech, Pasadena, CA. January 5–9, 2009
- Visit to JPL to see Mars Science Laboratory, Pasadena, CA. May 18, 2009.
• Presented one talk, Workshop on Modeling Martian Hydrous Environments, Houston TX. June 1-3, 2009.

**James Papike, Research Professor**


**Robert Reedy, Research Professor**

• Work on analysis of the Kaguya (SELENE) gamma-ray data, Waseda University, Tokyo, Japan. July 22-25, 2008.
• The 71st Annual Meeting of the Meteoritical Society, Matsue, Japan. July 28 - August 1, 2008.
• Work on irradiations with high-energy neutrons of targets relevant for solar-system studies, Research Center for Nuclear Physics, University of Osaka, Japan. August 4-5, 2009.
• Seminar on cosmogenic nuclides, Planetary Science Institute, Tucson, AZ. September 17, 2008.
• Seminar on gamma-ray spectroscopy in space, Los Alamos National Laboratory, Los Alamos, NM. September 30, 2008.
• Cosmic-Ray Produced Nuclide Systematics on Earth (CRONUS-Earth) Project Fifth Annual Meeting, University of California, Berkeley, CA. December 13-14, 2008.
• Meeting on the analysis of the Kaguya (SELENE) gamma-ray data, Waseda University, Tokyo, Japan. January 13, 2009.
• Meeting on the Kaguya (SELENE) gamma-ray team, Tokyo Institute of Technology, Minato-ku, Tokyo, Japan. January 16, 2009.
• Second working group on Nuclear Planetology, International Space Science Institute, Bern, Switzerland. February 16-20, 2009.
• Seminar on solar energetic particles, Los Alamos National Laboratory, Los Alamos, NM. April 21, 2009.
• Work on analysis of data from Mars analogue thick-target irradiations, Santa Fe, NM. June 15-19, 2009.

**Charles Shearer, Senior Research Scientist III**

• LEAG Science Goals Meeting, Houston, TX. September 3-5, 2008.
• LEAG Annual Meeting Organizing Meeting, Houston, TX. September 4, 2008.
• Lunar Exploration Analysis Group Meeting, Cape Canaveral, FL. October 2008
Michael Spilde, Research Scientist III

- Presented 2 invited talks and co-organized a day-long session, Microscopy and Microanalysis 2008 Conference, Albuquerque, NM. August 3-7, 2008.
- Presented paper, 2008 Annual Geological Society of America meeting, Houston, TX. October 5-8, 2008.
- 100th Anniversary of Jewel Cave National Monument, Custer, SD. October 24-26, 2008.
- Field sampling, Ojo Caliente, NM. April 10, 2009.

Shawn Wright, Senior Research Scientist I

- Presented a poster at the American Geophysical Union annual meeting, San Francisco, CA. December 2008.
- Mars Exploration Rover science team meeting (+ 5 year anniversary), Pasadena, CA. January, 2009.
- Led field trip for Cornell planetary science course on geology of Meteor Crater, AZ. March 2009.
- THEMIS science team meeting, Boulder, CO. May 11-13 2009.
- Lunar Reconnaissance Orbiter (LRO) Targeting meeting, Tempe, AZ. June 2009.
4. FACILITIES
FACILITIES

Curation and Meteorite Museum

The meteorite collection is an extremely valuable asset for research conducted in the IOM. The curator is Director Agee and Dr. Jim Karner is the assistant curator. Researchers around the world also make extensive use of our collection; this year we have had the opportunity to loan specimens to scientists in Canada, Italy, and Australia, as well as to US researchers at the Johnson Space Center, the University of Arizona, Washington University in St. Louis, UCLA, and Purdue. We also maintain several loans to permanent educational exhibitions around the country.

The collection now includes samples of approximately 600 different meteorites. We continue to expand the collection and acquire new meteorites, which is achieved through trading, making purchases and receiving donations of material. Discoveries of hundreds of new meteorites in North Africa in recent years have made many rare types of meteorites available to our collection through meteorite dealers. Our meteorite catalog is now available on the internet, downloadable as a pdf file. The searchable catalog is interfaced with the current collection database, so it is continuously updated.

Electron Microprobe and Scanning Electron Microscope Laboratories
Managed by Michael Spilde, Research Scientist III

The Electron Microprobe Laboratory houses a JEOL 8200 microprobe, equipped with 5 wavelength dispersive (WD) spectrometers and an ultrathin-window energy dispersive spectrometer. The WD spectrometers are fitted with multiple analyzing crystals to provide quantitative analysis of all elements from Be to U. The Scanning Electron Microscope Laboratory contains a JEOL 5800LV scanning electron microscope (SEM), equipped with secondary and backscattered electron and cathodoluminescence imaging detectors, a Link Analytical ultrathin-window Energy Dispersive Spectrometer (EDS) and an Oxford Isis 300 X-ray analytical system.

Both the SEM and microprobe labs provide analytical and microscopy imaging service to faculty and graduate students for their research. In addition, both labs are "service labs" that offer analytical services to researchers and students from outside of UNM and to the general public. Lab personnel can provide analytical service for academic and non-academic clients or may train and assist users on the two instruments.

The instruments were utilized by the following UNM departments:
- Anthropology
- Biology
- Civil Engineering
- College of Pharmacy
- Earth & Planetary Science
- Institute of Meteoritics
- Physics and Astronomy

Analyses were conducted for (or personnel used the instruments) from the following external academic and government clients:
- Bureau of Reclamation (SEM)
- Colorado School of Mines (microprobe)
- Los Alamos National Laboratory (microprobe)
- Marshall Spaceflight Center, Huntsville, AL (SEM & microprobe)
- New Mexico Tech, Socorro, NM (SEM & microprobe)
- Sandia National Laboratories (SEM & microprobe)
- University of Massachusetts (SEM & microprobe)
• University of Utah (SEM & microprobe)
• University of Western Ontario, London, Ontario, Canada (SEM & microprobe)
• Vrije Universiteit, Amsterdam, Netherlands (microprobe)
• Western Illinois University, Macomb, IL (SEM & microprobe)

As part of our outreach to the community, analyses were conducted the following commercial entities:
• Alien Science & Technology, Chicago, IL (SEM)
• Alpha-Omega Corp., Albuquerque, NM (SEM)
• Bio-Tec Environmental, Cedar Crest, NM (SEM)
• Cabot Superior Micropowders, Albuquerque, NM (SEM)
• HT-Micro Devices, Albuquerque, NM (SEM)
• Insight Lighting, Albuquerque, NM (SEM)
• SWCA, Albuquerque, NM (SEM)
• TPL, Inc. Albuquerque, NM (SEM)
• Wonik Quartz, Albuquerque, NM (SEM)
• ZioTech, Peralta, NM (SEM)

In addition to providing analytical services to the community, the labs were also involved in educational classes and public outreach programs, hosting students from local schools for demonstrations on the SEM.

**Experimental Planetary Interiors Laboratory**
Managed by David Draper, Senior Research Scientist III

The Experimental Planetary Interiors Laboratory features solid-media, high-pressure equipment (multi-anvil and piston-cylinder presses) and a 1-bar Deltech high-temperature vertical muffle tube furnace that has gas-mixing capabilities. The bulk of the experimental work presently under way in our group, funded by NASA and NSF, involves investigations of the conditions of formation of magmas that might be parents to the martian meteorites; studies of lunar and martian magma ocean formation and evolution; investigations of the origins of lunar ultramafic glasses; studies of the physical properties of silicate liquids; and exploration of possible partitioning of chlorine into core-forming metallic liquids. Researchers in the lab include manager Draper, IOM Director Carl Agee, Research Professor V. Rama Murthy, and graduate students Laura Burkemper, Megan Duncan, Karen Hutchins, and Steve Elardo.

**Laser Induced Breakdown Spectroscopy and Digital Imaging Laboratory**
Managed by Horton Newsom, Senior Research Scientist III

The laboratory was renovated in early 2008 with an exhaust system to accommodate use of planetary atmospheres, especially CO₂. The principal instrument designed by Dr. Sam Clegg at the Los Alamos National Laboratory, to be delivered in 2008, will involve focusing the emission from a Kigre laser (25mJ/pulse max, 4ns, ~100μm laser spot) onto the sample to generate the LIBS plasma. The samples will be placed in a vacuum chamber that can simulate conditions on the lunar or martian surface. The LIBS emission will be collected with an optical fiber (1 m long, 100μm, 0.22NA) directed into a Catalina Scientific echelle spectrometer and recorded with an Andor ICCD. The laboratory also houses a digital SLR image system with lighted copy stand and macro imaging capability.

**The New Mexico IR Analysis (New MIRA) Laboratory**
Managed by Penelope King, Senior Research Scientist III

The New Mexico IR Analysis (New MIRA) Laboratory has continued to be upgraded and equipment has been added. It now contains:
1) A Nicolet Nexus 650 Fourier Transform infrared (IR) spectrometer with Continuum microscope configured for the mid- to near-IR. Dependent on the configuration chosen we may collect data over the range of 400-8200 cm$^{-1}$, although the typical range for micro-IR is 650-4000 cm$^{-1}$. The entire system may be purged continuously with dry air (~5 ppm CO$_2$) and analyses may be made in a custom-made sample compartments to improve analysis of H$_2$O and CO$_2$.

The instrument has both Globar and white light sources, CaF$_2$ and XT-KBr beamsplitters, and the main bench has a DTGS detector. The microscope has an MCT-A detector and a new MCT-A* detector (2009) that has a significantly higher detectibility. Accessories include a micrometer, diamond compression cell, highly attenuated total reflection cell, video system, image analysis system, vacuum tweezers, and IR and visible light polarizers. A Pike AutoDIFF accessory with a custom-made purge compartment is available for biconical reflectance analysis and may do up to 60 samples in automated mode.

2) An Olympus binocular microscope has been custom-modified to capture digital images of samples in reflected light and polarized transmitted light. It is equipped with a computer interface and software for digital image analysis.

3) Sample preparation materials: a high-precision analytical balance, sample press and dies, etc. The laboratory also houses several relative humidity chambers, a chiller (>80 °C), a 200 °C oven, a controllable furnace (<1700 °C) and a one-atmosphere controlled-atmosphere furnace (<1650 °C).

4) Field equipment for collecting environmental and geographic data are available: a handheld GPS, two SPER Scientific 800014 humidity-temperature dataloggers, walkie-talkies, a digital camera, and a Fisher Symphony multimeter with pH, conductivity, dissolved oxygen, temperature, total dissolved solids, salinity, barometric pressure probes and various ionic species (Na$^+$, NO$_3^-$, Cl$^-$, etc.).

Laboratory use
The laboratory continues to have many users. Five graduate students from the IOM, and three graduate students and two undergraduates from EPS have been trained in the facilities. Three students from the University of Western Ontario and one from the University of Pittsburg have used the facilities also. Finally, a teacher from Carlsbad High School was trained in the facilities.

**Secondary Ion Mass Spectrometry Laboratory**
Managed by Charles Shearer, Research Scientist III

The SIMS lab provides in-situ, trace element analytical services to members of the Institute of Meteoritics, Department of Earth and Planetary Sciences, and external clients as well.
5. TEACHING
TEACHING

Carl Agee, Director and Professor

Courses

Fall 2008: EPS 365, Exploring the Solar System

Spring 2009: EPS 465/565, Mars Evolution

Graduate Student Committees

Laura Burkemper
Megan Duncan
Stephen Elardo
Karen Hutchins
Nina Lanza

David Draper, Senior Research Scientist III

Graduate Student Committees

Caitlin Callahan (Earth and Planetary Sciences)
Laura Burkemper
Megan Duncan
Karen Hutchins

Penelope King, Senior Research Scientist III

Courses

Summer 2008: Ad-hoc lectures on bulk geochemical analysis methods (5 students, 2 lectures)

Fall 2008: EPS 551, Problems Course
Developed a reading and analysis course for one student (Laura Burkemper)
Guest lectures: Blue Planet (Weissman, one lecture); Volcanology (Fisher, two lectures), Planetary Materials (Jones, one lecture)

Developed a new course from scratch with six students. Coordinated with other units on campus (Research Services, Library, CAPS, etc.), Gary Smith, and invited outside speaker.

Students

Supervision
Tara Aran, summer undergraduate student. Taught how to use IR spectrometer.
Cory McDowell, undergraduate student. Taught how to use IR spectrometer.

Co-supervision
J. Maarten de Moore (PhD with Gary Fisher and Zachary Sharp)
Zachary Gallegos (undergraduate with Horton Newsom)
Advisory Committees
Laura Burkemper
Amber Hawkins
Karen Michelsen
Kareen Prade
Mark Tyra

Principal advisor
B. Hyde – MSc, University of Western Ontario (September 2006-May 2009)
C.D.M. Schofield – Research Assistant, University of Western Ontario (June, 2008 – Aug. 2009)

Co-advisor
I.S. Foster – MSc, University of Western Ontario with G. Southam (September 2007-June 2009)
M. Izawa – MSc, University of Western Ontario, with R. Flemming (September 2006-completed August 2008)

Horton Newsom, Senior Research Scientist III

Graduate Student Committees
Nina Lanza (PhD), supervisor (advanced to candidacy, Fall 2007)
Ann Ollila (PhD), supervisor
Eric Tegtmeier, Master's student, committee member

Undergraduate Student Advisement
Eric Tegtmeier (completed honors thesis with Dr. Newsom and graduated Fall 2008)
Zachary Gallegos

Charles Shearer, Senior Research Scientist III

Courses
Fall 2008: Planetary Materials, Guest Lecturer
Electron Microprobe, Guest Lecturer

Michael Spilde, Research Scientist III

Courses
Fall 2008: CE350 2 Civil Engineering class laboratory sessions on SEM, Nov 11 & 12, 2008.

Graduate Student Committees
Ara Kooser
6. GRADUATE STUDENTS
GRADUATE STUDENTS

Laura Burkemper (PhD)

MS, Saint Louis University, entered the PhD program in Fall 2007. Laura’s dissertation research involves looking at siderophile element metal-silicate partitioning in order to better understand terrestrial planet core formation. Her expected graduation date is Spring 2011.

Megan Sallie Duncan (MS)

BS, Clemson University 2007; currently enrolled in MS program at the IOM-EPS at UNM. Megan’s thesis is an experimental study of the effect of carbon dioxide on the mantles of terrestrial planets. With high pressure, “sink/float” experiments on a basic alkali basalt composition, Megan will add to the knowledge of volatile effects on magmas.

Stephen Elardo (MS)

BS, State University of New York-Sony Brook, 2008. Stephen’s course work of the M.S. degree will be completed by the end of the current semester, and good progress is being made on his thesis research. Lunar magma ocean experiments are being completed successfully as well as the necessary analytical work. At least one manuscript should be completed and submitted to a journal by the end of the calendar year.

Stephen attended the 40th Lunar and Planetary Science conference in March and gave an oral presentation entitled “Crystallization of a Lunar Magma Ocean: Preliminary Experimental Results”

He has also submitted an abstract to the fall meeting of the American Geophysical Union Entitled “Experimental Constraints on Early Lunar Magma Ocean Cumulates as Possible Source Lithologies for the Mg – Suite.”

Karen Hutchins (PhD)

BS, California State University-Sacramento, 2004; MS, San Diego State University, 2006. Karen is currently a graduate student with the IOM and enrolled in the PhD program with the EPS department at UNM. For her thesis work, Karen will be conducting high pressure and temperature experiments to simulate crystallization of the martian mantle from a magma ocean, as well as constrain the source regions of the martian meteorites.

Ann Olliila (PhD)


Nina Lanza (PhD)

Nina received a BA in Astronomy from Smith College in 2001 and an MA in Earth and Environmental Science from Wesleyan University in 2006. She entered the PhD program at the IOM-EPS at UNM in Fall 2006. Nina is currently working on calibrating the ChemCam LIBS (Laser-Induced Breakdown Spectroscopy) instrument for evaporite minerals and frozen phases. The ChemCam is part of the
instrument suite on board the Mars Science Laboratory rover, scheduled for launch in 2009. In addition, Nina is also continuing her master's work on martian hillside gullies. She is investigating the genesis of these features using terrestrial analog measurements on high-resolution images of the martian surface from the new instrument HiRISE onboard the Mars Reconnaissance Orbiter. Recent results suggest that some martian gullies may represent debris flows, which require liquid water to form. In addition to this work, Nina is also examining inverted channel deposits (ICDs) in Green River, Utah as a potential analog to similar features on Mars. These terrestrial ICDs are cemented with amorphous silica rather than carbonate, similar to cements that would be expected for ICDs in the martian environment.
7. DEPARTMENTAL
AND
UNIVERSITY ACTIVITIES
DEPARTMENTAL AND UNIVERSITY ACTIVITIES

Carl Agee, Professor and Director

- Graduate Student Committee (EPS).
- Facilities Committee (EPS).

James Karner, Senior Research Scientist I

- Served as a volunteer assistant coach for the University of NM Ice Hockey Club for the 2008-2009 season.

Penelope King, Senior Research Scientist III

Earth & Planetary Sciences Department

- Set up a formal Collaborative Research Agreement between UNM and the University of Western Ontario (UWO) so that personnel may visit UWO and vice versa with the appropriate visa/health care documentation.

Centennial Library LibGuide


Other positions

- Research Professor, Department of Earth and Planetary Sciences, University of New Mexico.
- Adjunct Research Professor, Department of Earth Sciences, University of Western Ontario.

Charles Shearer, Senior Research Scientist III

- Member, Earth and Planetary Sciences Facilities Committee.

Michael Spilde, Research Scientist III

- Manager of the Electron Microprobe and Scanning Electron Microscope Labs.
8. PROFESSIONAL ACTIVITIES
PROFESSIONAL ACTIVITIES

Carl Agee, Professor and Director
- Chair, Executive Committee, Mineral and Rock Physics Focus Group, American Geophysical Union.
- Vice Chair, Executive Committee, COMPRES.

Paul Burger, Research Specialist

James Karner, Senior Research Scientist I

Penelope King, Senior Research Scientist III

Mineralogical Society America (MSA)
- Councilor (elected), 2008-10.
- Kraus Award Committee Chair, 2008-09.

Geochemical Society, Goldschmidt Conference
- International Program Committee for Experimental Petrology theme - 8 sessions, 2008.

Mineralogical Association Canada (MAC)
- Councilor, 2005-08.

Association of Women in Science

Lunar & Planetary Science Conference
- Session chair, SNC Meteorites, 2009.

American Geophysical Union
- Session co-convener, Mineralogy of Mars: Missions, Meteorites, & Terrestrial Analogues, 2009.

Canadian Space Agency
- Provided input on science objectives for future Mars Robotic Missions.

Mars Science Laboratory Mission
- Initiated and coordinated cross-calibrations between science teams and hosted telecon discussions.
- Provided custom-made calibration standards for the mission.
- Provided input and wrote sections of the initial calibrations report for the Alpha Particle X-ray Spectrometer and responded to questions in Review Panel telecon.
- Participated in two SAPE training sessions.

Reviewed:
- Chapter for the Reviews in Mineralogy & Geochemistry Series "Minerals, Inclusions and Volcanic Processes."
• Chapter for the Mineralogical Association of Canada Short Course Series "Secondary Ion Mass Spectrometry in Earth Sciences."
• Grants for NSF EAR Geochemistry and Petrology (2); NASA Mars Data Analysis and Planetary Geology & Geophysics programs and for Canadian NSERC.

Other
• Invited to write a review paper for Elements Magazine.
• Invited to give a talk at New Mexico Tech.
• Invited to give talks at a conference on martian geochemistry (declined due to lack of funds).

**Horton Newsom, Senior Research Scientist III**

• Educational Outreach Coordinator, Institute of Meteoritics.
• Developed educational outreach programs for the Institute of Meteoritics, funded by NASA.
• Met with numerous members of the public who brought in suspect meteorites.

**James Papike, Research Professor**


**Robert Reedy, Research Professor**

• Deputy Team Leader, Mars Odyssey Gamma-Ray Spectrometer Flight Investigation Team.
• Co-Investigator, Kaguya (SELENE) Gamma-Ray Spectrometer experiment.

**Charles Shearer, Senior Research Scientist III**

• Member, Planetary Science Subcommittee of the NASA Advisory Committee.
• Adviser to Director of Lunar and Planetary Institute.
• Chair, Curation and Analysis Planning Team for Extraterrestrial Materials (CAPTEM).
• Vice-chair, Lunar Exploration Analysis Group.
• Member, Lunar Exploration Analysis Group Executive Committee.
• Member, NASA Advisory Council (NAC), Planetary Science Subcommittee.
• Member, NAC, Science within Lunar Architecture Workshop Committee.
• Chair, NASA-CAPTEM Sample Return Technology Working Group.
• Organizer for OSEWG-CAPTEM-LEAG Workshop on "Architecture Issues Associated with Sampling."
• Organizer for LPI-CAPTEM-MEPAG Workshop on "Ground truth for Mars. Scientific Payoff for Mars Sample Return."
• Organizer for LEAG 2008 and 2009 Meetings.
• Member, National Academy of Science, Inner Solar System Subcommittee for the NRC Decadal Panel.

**Michael Spilde, Research Scientist III**


**Shawn Wright, Senior Research Scientist I**

9. EDUCATIONAL OUTREACH
AND
PUBLIC SERVICE
EDUCATIONAL OUTREACH AND PUBLIC SERVICE

**Meteorite Museum**

The Meteorite Museum is the most important focus of the Institute of Meteoritics' public service and outreach efforts. Several thousand people of all ages visit the Museum each year and many school parties visit the Museum to enhance scientific projects in Earth Sciences and Solar Systems studies. IOM personnel commonly volunteer to give guided tours of the Museum and laboratories to groups of visiting students, from preschool age to senior citizens.

**Paul Burger, Research Specialist**

- SIMS lab tours were conducted for visiting students, professors, and undergraduate and graduate classes in the University of New Mexico.

**Penelope King, Senior Research Scientist III**

- Mentored Beverly Marrs, Head of Science, Carlsbad High School, NM for 6 weeks with the SEIS Program (UNM/Sandia Nat. Labs)

**James Karner, Senior Research Scientist III**

- Assistant Curator of the meteorite collection in the Institute of Meteoritics.
- Continued to help identify suspect meteorite samples as a service to the general public.
- Headed up several volunteers for IOM displays at community events such as the NM Museums Open House for Teachers and Albuquerque Founder's Day.
- Gave a presentation on meteorites and Antarctica to the Oasis group, which is an educational lecture series available for seniors in Albuquerque.
- Classified a newly discovered New Mexican meteorite and submitted the classification for recognition by the Meteoritical Society. The meteorite has been officially named La Luz (for the small southern NM town it was found near), and is the 216th meteorite discovered in New Mexico.

**Charles Shearer, Research Scientist III**

- SIMS lab tours were conducted for visiting students, professors, and undergraduate and graduate classes in the University of New Mexico.

**Michael Spilde, Research Scientist III**

- Participated in NASA 2009 Spaceward Bound: Mojave Desert Expedition, working with K12 teachers and other researchers from across the US to provide a "field research experience for teachers." March 22-27, 2009.
- Helped a Carlsbad, NM high school student with his project for the 2009 International Science and Engineering Fair. April 2009.

**Shawn Wright, Senior Research Scientist I**

- Attended Albuquerque's Star Days and hosted a booth for IOM / Meteorite Museum.
ANNUAL REPORT

Department of Economics
University of New Mexico

July 1, 2008 – June 30, 2009

Robert P. Berrens
Chair
THE ANNUAL REPORT OF
THE DEPARTMENT OF ECONOMICS
July 1, 2008 – June 30, 2009

Robert P. Berrens, Chair

1. Significant Developments During the 2008-09 Academic Year

The Department was pleased to hire a new tenure-track, Assistant Professor in March 2009; Brady Horn (PhD, Washington State University), specializes in microeconomics and econometrics, and does research in the area of addictions. Brady joins the department as of the Fall 2009 semester (with a 100% tenure line), and also has a joint appointment with the Center on Alcoholism, Substance Abuse and Addictions (CASAA) at UNM.

Professor Christine Sauer was the recipient of the 2009 UNM Outstanding Teacher Award. Professor Kate Krause previously won the 2008 UNM Outstanding Teacher Award. So, the Department is very pleased to have award recipients in each of the last two years.

Department staff for 2008-2009 included: Michelle Durham (Department Administrator II) Maria Daw (Administrative Assistant II), and Shoshanna Handel (Academic Advisor).

A number of faculty members held administrative positions. Within the Department for 2008-2009, Robert Berrens served as the Chair, Janie Chermak served as the Graduate Director, and Melissa Binder served as the Undergraduate Director. Alok Bohara was the Director of the Nepal Study Center (NSC), and David Brookshire was the Director of the Science Impact Laboratory for Policy and Economics (SILPE).

Outside of the Department, Professor Phil Ganderton, served as the Interim Associate Dean for the College of Arts and Sciences in 2008-2009, and well as the Director of the BAMD program. Other Economics faculty members who were appointed to administrative positions include Professor Richard Santos serving as Chair of Spanish and Portuguese (2008-2009), and Professor Christine Sauer serving as the Director of the International Studies Institute (three-year term). Professor Robert O. Valdez, under a secondary appointment (0.0 FTE in Economics) served as the Executive Director of the Robert Woods Johnson Foundation Center for Health Policy.

With these various administrative appointments outside of the Department, the effective size of the Economics faculty for 2008-2009 was 12, which would appear to be at or near the lowest level since the late 1970’s.

There were a number of significant international initiatives in the Department, including several foreign learning experiences for students. In Summer 2009, lead by the Nepal Study Center (NSC) and Professor Alok Bohara and Associate Professor Jennifer Thacher, a group of undergraduates traveled to Nepal as part of an ECON 203 class. The visit helped extend collaborations between UNM and Katmandu University (KU). Professor Christine Sauer also
lead of group of students to Schloss Dyck, Germany to take an ECON 478 class at the UNM cooperative facilities there.

In May 2008, the Department passed a new Strategic Plan (on file with the College of Arts and Sciences), in response to a university-wide initiative. The Department continued implementing the Graduate Handbook changes from 2007, reflecting several changes in graduate exams.

For 2008-2009, the Department of Economics continued recent trends in to achieving record high levels of undergraduate majors (n=294) and total student credit hours (SCHs), as detailed in Section 6 (below) of this Annual Report. Undergraduate majors have grown a net total of 155% (from 115 to 294) over the last decade. Graduate students (60) also continued to hover near record levels for the Department. For the first time in the history of the Department, SCHs were over 6,000 for both Fall and Spring Semesters. The Fall and Spring combined semester total was 12,786 SCHs, and further combined with the Summer 09 semester to total 13,458 SCHs. All of these were records for the Department.

Finally, as detailed below in Sections 3-5 of this Annual Report, faculty continued to publish significant peer-reviewed research and generate research grants (again over $1.1 million of outside support), and sustain important service and community engagement activities.

2. Significant Plans and Recommendations for the Near Future

Assistant Professor Kristine Grimsrud will be completing the Tenure and Promotion (to associate professor) review during the 2008-2009 academic year.

Associate Professor Kate Krause will be completing the Promotion (to full professor) review during the 2008-2009 academic year.

In Fall 2009, the Department is cooperating with the English Department, in the College of Arts and Sciences, to host an on-campus visit for a New Mexico Higher Education Department Minority Doctoral Loan-for-Service Program Scholar.

The Department continues with the Success Initiative including a Success Economics 106 class taught by Dr. Kate Krause, with 9 associated laboratory/recitation sessions to be taught by 3 graduate assistants, 2 of which are funded under the Success program. Dr. Melissa Binder will continue to teach the Success Economics 105 course, with similar student training and support.

The Department is continuing efforts on Outcomes Assessment under the leadership of Associate Professor Binder (Undergraduate Director) and Professor Thacher (Graduate Director)

The Department continues to increase our connections and engagement with the RWJ Center for Health Policy. In 2008-2009, we had 6 PhD Doctoral Fellows, and 1 Dissertation Fellow in our PhD program receiving support from the Center. In addition, three faculty members (Professor Alok Bohara, Associate Professor Kate Krause, and Assistant Professor Matias Fontenla) have had research proposals funded by the Center (all with additional research assistant [RA] support
for graduate students. We will continue to develop our relationships with this Center and its innovative programs.

Economics Faculty will continue to produce new knowledge and support graduate students through successful research grant application and awards. The equivalent of nine (0.5 FTE) graduate students, excluding those [7] supported by the RWJF Center, will be supported by funded research in Fall 2009, with a similar number expected for Spring 2010. The department will continue to house two different centers, the Nepal Study Center (NSC) [Professor Alok Bohara, Director] and Science Impact Laboratory for Policy and Economics (SILPE) [Professor David Brookshire, Director], which both have current grant funded research for 2009-2010. Multi-year grant activities include, a set of long-running (both going on 10 years) grants: SAHRA grant with the NSF (Professor Brookshire) and a joint venture research agreement with the USDA’s Forest Service’s Rocky Mountain Research Station (Professor Berrens and Associate Professor Thacher). There is also a large grant with the American Water Works Association (Associate Professor Thacher and Professor Chermak), and a significant new grant, which will eventually total more than 1.8 million, with the MRDC, through funding from the Gates Foundation (Associate Professors Krause and Binder).

3. Publications

**Dr. Robert Berrens: (* denotes graduate student co-author)**


Dr. Melissa Binder:


Dr. Alok Bohara:


Dr. David Brookshire:

SAHRA -- Year 9 progress report -- 3 components-- 1)Water Leasing Vince (Tidwell, Doug Boyle, Don Coursey, Craig Broadbent), 2) Integrated Modeling (Hoshin Gupta) and 3) Urban Water Demand) (Janie Chermak, Kate Krause, Steve Stewart)), part of the annual reporting process;

USEPA – “Integrated Modeling and Ecosystem Valuation”, (Jen Thacher, Craig Broadbent and the research team), part of the annual reporting process;

“Rio Mimbres: Establishing a Real Time Water Leasing Market”, (Vince Tidwell, Doug Boyle, Don Coursey, Craig Broadbent) -- Sandia and USGS Report part of the annual reporting process;

Science Impact Laboratory for Policy and Economics (SILPE) – Center report, part of the annual reporting process.

Dr. Janie Chermak:

Grimsrud, Kristine., Janie Chermak, Jason Hansen, Jennifer Thacher and Kate Krause. “A Two-agent dynamic model with an invasive weed diffusion externality: An application to Yellow


**Dr. Scott Findley:**


**Dr. Kristine Grimsrud:**


**Dr. Kate Krause**


**Dr. Richard Santos:**


**Dr. Jennifer Thacher:**


4. Outside Professional Activities

**Dr. Robert Berrens:**

Served as Associate Editor, *Water Resources Research*.

Served as Co-Editor of *Contemporary Economic Policy*.

Served as Member, Technical Advisory Panel, Collaborative Forest Restoration Program, US Department of Agriculture, Forest Service, Region 3, Albuquerque, NM.


Koirala, B.*, A. Bohara and R. Berrens. “Estimation of Maximum Willingness to Pay for Improved Quality of Trekking Manag, Nepal by International Trekkers.” Third Annual Himalayan Policy Research Conference (36th South Asian Conference at the U. of Wisconsin), Nepal Study Center, University of New Mexico, Madison, October, 2008 (presented by Koirala)

**Dr. Melissa Binder:**

Interdisciplinary Committee for Latin American Studies (ICLAS), at UNM


**Dr. Alok Bohara:**

Served as editor, *Himalayan Journal of Development and Democracy (HJDD)*, and *Liberal Democracy Nepal Bulletin (LDNB)*

Koirala, B.*, A. Bohara and R. Berrens. “Estimation of Maximum Willingness to Pay for Improved Quality of Trekking Manag, Nepal by International Trekkers.” Third Annual...
Himalayan Policy Research Conference (36th South Asian Conference at the U. of Wisconsin), Nepal Study Center, University of New Mexico, Madison, October, 2008.

Coordinated and helped organize the Third Annual Himalayan Policy Research Conference (36th South Asian Conference at the U. of Wisconsin), Nepal Study Center, University of New Mexico, Madison, October, 2008.

Member of the editorial board, Proceedings and Paper Abstracts of the Third Annual Himalayan Policy Research Conference (37th South Asian Conference at the U. of Wisconsin), Nepal Study Center, University of New Mexico Madison, October, 2008

Dr. David Brookshire:

“Integrated Modeling and Ecosystem Valuation”, Universidad de Guanajuato, Escuela de Economia, David Brookshire, Jen Thacher, Craig Broadbent, and the research team), April 2008;

“Water Leasing in the Mimbres Basin”, for the Office of the State Engineer, David Brookshire, Vince Tidwell, Craig Broadbent, Don Coursey, September 2008;

“Ecosystem Valuation and Markets”, (David Brookshire, Jen Thacher, Craig Broadbent, Vince Tidwell, Don Coursey and the rest of the team), ACES Pre-conference #2, Naples, Florida, USGS, July 2008;

“Overview of Ecosystem Valuation, Decision Support Systems and Water Leasing: Movement Towards a Market Approach”, (David Brookshire, Jen Thacher, Craig Broadbent, Vince Tidwell Don Coursey and the rest of the team), ACES Pre-conference #3, funded by SILPE and USGS, October 2008;

“Water Leasing in the Mimbres”, SAHRA Annual Meeting, (Vince Tidwell and Doug Boyle, David Brookshire, Don Coursey, Craig Broadbent), October 2008;

“Markets for Ecosystem Services: Water Leasing Applications (presented by Craig Broadbent, Don Coursey, Doug Boyle), ACES: A Conference on Ecosystem Services, Naples, FL, December 2008:


Through SILPE, contributed to the organization of numerous sessions at ACES: A Conference on Ecosystem Services, Naples, FL, December 2008

Poster: “Establishing Prototype Water Leasing Markets in New Mexico”; Sustainability of semi-Arid Hydrology and Riparian Areas annual meeting, October 2008, (Craig Broadbent, David Brookshire, Don Coursey, Vince Tidwell, Ramon Vasquez);


Member: National Research Council’s Committee on “FEMA Flood Maps: Accuracy Assessment and Cost-Effective Improvements”

**Dr. Janie Chermak:**

Organizer, AERE Session “Extensions and New Applications of the Hotelling Model,” at the 120th Meeting of the American Economic Association, New Orleans, LA.


**Dr. Don Coes:**

LAII, UNM, Operations Committee.

Speaker, "What Caused the Financial Crisis?" UNM School of Law, October 2008.


**Dr. Scott Findley:**


Speaker, "What Caused the Financial Crisis?" UNM School of Law, October 2008.

Roundtable discussion with mayor of Albuquerque Martin Chávez and his financial staff on the current economic conditions, October 2008

Dr. Matias Fontenla:


Roundtable discussion with mayor of Albuquerque Martin Chávez and his financial staff on the current economic conditions, October 2008.

Speaker, "What Caused the Financial Crisis?" UNM School of Law, October 2008.


Dr. Kristine Grimsrud:


Member, Steering Committee, Climate Leadership Initiative, University of Oregon, Institute for a Sustainable Environment

CASAA Interdisciplinary Faculty Search Committee

Dr. Kate Krause:
“Affording Sustainability: Confronting the Economic Issues,” American Association for the Advancement of Science, Southwestern and Rocky Mountain Region Meeting, Albuquerque, NM. April 11, 2008.

“WAC and QUAC in a large lecture course.” Success in the Classroom UNM Conference, February, 2008.


Panelist, “Eye on New Mexico” The proposed downtown arena project. KOAT-TV. July 27, 2008.


**Dr. Richard Santos:**

Served on Editorial Board, Review of Higher Education.

**Dr. Christine Sauer:**

Liaison between UNM (Provost’s Office and Accounting) and Schloss Dyck Foundation to complete paper work (incl. tax forms) and finalize arrangements for UNM payment for the 2008 UNM Summer School at Schloss Dyck, August-September 2008.


Organizer, Fundraiser, and Host, “Global Instability: Causes, Consequences, and Cures,” ISI Fall Lecture Series (7 lectures), October 20-23, 2008.

Research Allocation Committee, Member, 4/07 to present.

Ad Hoc Committee on International Initiatives in College of Arts & Sciences, Member, 9/07 to 8/08.

Study Abroad Advisory Committee, Member, 11/08 to present.

Faculty Advisor, UNM World Affairs Delegation, 1/05 to present.

Faculty Advisor, UNM Committee on Foreign Affairs, 1/05 to present.
Liaison and Organizer, “Consequences of the Financial Crisis for the City of Albuquerque,” roundtable discussion of UNM faculty with Mayor Martin Chavez and his cabinet, Economics Department, October 15, 2008.

Interviewee for article on “Fannie Mae/Freddie Mac Bailout” by Benito Aragon, New Mexico Independent, September 2008.

Member, Executive Board of the Albuquerque Committee on Foreign Relations, 7/07 to 7/08.

Dr. Jennifer Thacher:

“Integrated Modeling and Ecosystem Valuation”, Universidad de Guanajuato, Escuela de Economia, David Brookshire, Jen Thacher, Craig Broadbent, and the research team), April 2008;

“Ecosystem Valuation and Markets”, (David Brookshire, Jen Thacher, Craig Broadbent, Vince Tidwell, Don Coursey and the rest of the team), ACES Pre-conference #2, Naples, Florida, USGS, July 2008;

“Overview of Ecosystem Valuation, Decision Support Systems and Water Leasing: Movement Towards a Market Approach”, (David Brookshire, Jen Thacher, Craig Broadbent, Vince Tidwell, Don Coursey and the rest of the team), ACES Pre-conference #3, funded by SILPE and USGS, October 2008;


Water Utility Advisory Council, ABCWUA, Albuquerque

5. Research Grants and Contracts Funded

The department received the following grants to fund faculty and graduate research during this academic year. Total of $1,128,108

US Forest Service
“Attitudes, Beliefs, and Values towards National Forests and National Forest Management”
Berrens, R., Thacher, J.
Inception to Date: $207,000
$12,000
July 2008 – June 2009
Year 4 Funding

US Forest Service
“A Continuing Research into Understanding Behavioral and Economic Responses to Forest Restoration Programs in the Southwest”
Berrens, R, Thacher, J.
Inception to Date: $206,216
$50,000
July 2008 – June 2009
Year 3 Funding

US Forest Service
“Economic Analyses in Support of National Forest Planning”
Berrens, R., Thacher, J.
Inception to Date: $106,500
$22,000
July 2008 – June 2009
Year 4 Funding

US Forest Service
“Habitat use of Mountain Goats (Oreamnos americanus) in the Kenai Mountains, South-Central Alaska”
Bohara, A., Thacher, J.
$38,850
July 2008 – June 2009
Year 1 Funding

SAHRA
“Sustainability of Water Resources in Semi-Arid Regions”
Brookshire, D., Litvak, M.
Inception to Date: $875,510
$147,000
July 2008 – June 2009
10 Year Project, is Funded Each Year
USGS - SILPE
“Science Impact Laboratory for Policy & Economics (Category 1 Center/Institute)”
Brookshire, D.
Inception to date: $230,000
$50,000
July 2008 – June 2009
5 Year Project, is Funded Each Year

EPA-Birds
“Integrated Modeling and Ecological Valuation”
Brookshire, D., Thacher, J.
Inception to date: $386,212
$122,797
July 2008 – June 2009
Year 5 Funding

Sandia National Labs – MIMBRES
“Decision Support Modeling to Aid in Design of Water Banks for New Mexico”
Brookshire, D.
Inception to date: $101,445
$52,000
July 2008 – June 2009
Year 2 Funding

GILA (Funded by ISC)
“Gila Economic Forum”
Brookshire, D.
$19,717
January 2009 – June 2009

US Department of Agriculture – Weeds
“Strategic Behavior, Informational Asymmetries, and Spatial Variations in Invasive Species Management on Ranching Lands: An Evaluation of Incentives for Russian Knapweed and Yellow Starthistle”
Chermak, J., Thacher, J., Grimsrud, K., & Krause, K.
Inception to date: 200,000
$50,000
July 2008 – June 2009
Year 3 Funding

US Department of Agriculture – Black Canyon
“Valuation of Riparian, and Aquatic Resources, Black Canyon of the Gunnison National Park”
Chermak, J.
$54,924
July 2008 – June 2009
Year 4 Funding
US Department of Agriculture – Drought
Sub-Contract with University of Nebraska
“Drought Risk, Impact, and Mitigation Information System”
Chermak, J.
Inception to date: $50,949
$25,935
July 2008 – June 2009
Year 2 Funding

Water Resources Research Institute (WRRI) – New Mexico State University
“Predicting Land Use Change and its Effect on Nonpoint Source Pollution”
Chermak, J., Thacher, J.
Inception to date: $30,000
$20,000
July 2008-June 2009

Western Climate Initiative (WCI)
“Western Climate Initiative Economic Analysis”
Chermak, J., Thacher, J.
$23,108
May 2008-April 2009

MDRC
“A Demonstration of Performance Based Scholarships – University of New Mexico Site”
MRDC through the Bill and Melinda Gates Foundation (total over $1.7 million through 2011)
Krause, C., Binder, M.
$229,341
April 2008-March 2009

American Water Works Association (AWWARF)
“Setting Water Utility Investment Priorities: Assessing Customer Preferences and Willingness to Pay”
Thacher, J., Chermak, J., Thomson, B.
Inception to date: $324,972.00
$163,010
July 2008-June 2009

RWJF Center Funding
“Do Vulnerable Populations Enjoy Improved Health During Periods of Economic Growth”
Fontenla, M.
$10,000
June 2008-June 2008

RWJF Center Funding
“Health Policy and GIS Modeling Lab”
Bohara, A., J. Thacher.
$18,000
2008-2009

RWJF Center Funding
"Understanding the Social Costs of Natural Disasters"
Bohara, A., W. Hansen.
$19,426
2008-2009

6. Student Information

Bachelor of Arts Degrees Conferred
Bachelor of Arts degrees conferred in 2008-2009 academic year (61):

Ola M. Abou-Zekry
Christopher D. Anderson
Denise R. Arnold
Lovell A. Bannowsky
Leonard A. Baratta
Adam S. Barber
Chandler S. Brass
Joseph R. Buchow
Lucy T. Buecking
Kevin L Cappleman
Michelle L Corrigan
Shawn D. Cox
Jared M. Dickerson
Lorenzo D. Dominguez
Brandon C. Driscoll
Austin R. Duus
Christopher D. Dvorak
Brett C. Eaton
Michael H. Estrada
Russell T. Geter
Chase E. Gietter
Christa L. Goldsborough
Sarah M. Goldstein
Ryan J. Gonzales
Vincent M. Haslam
Lawrence C. Hernandez
Samuel J. Hinton
Summer B. Huff
Tranquilino A. Hurtado
Nicholas S. Jimenez
Adam K. Johnson
Christian D. Johnson
Jeremy Landrum  
Lucas E. Lautman  
Erica A. Logue  
Lance C. Lopez  
Joseph J. Lueras  
James L. Massengale  
Sean M. McDougle  
Christopher J. Merrick  
John P. Moleres  
Christine C. Ngo  
Kellie A. Nickerson  
Debbie A. O'Dell  
Sean S. Petranovich  
Nisha M. Rajan  
Robert E. Romero  
Allyson H. Ross  
Heather D. Salazar  
Vincent P. Salazar  
Paulina San Millan Mendez  
Rochelle E. Shanta  
Derek L. Skinner  
Sam M. Smith  
Mouad Srifi  
Kelly M. Stepetic  
Adam K. Summers  
Nicholas J. Tallent  
Matie A. Tiopi  
Justin M. Wahl  
Michelle E. Welles

Master of Arts Degrees Conferred
Masters of Arts degrees conferred in 2008-2009 academic year (5):
Katie Bass  
Elizabeth Cota  
John Gentry  
Amber Riter  
Justin Smith

Doctoral Degrees Conferred (Committee Chair)
Doctor of Philosophy degrees conferred in 2008-2009 academic year (3):
Craig Broadbent: Chair - Dr. David Brookshire; Members: Dr. Don Coursey, Dr. Philip Ganderton, Dr. Vince Tidwell
Jason Hansen: Chair – Dr. Janie Chermak; Members: Dr. Catherine Krause, Dr. Kristine Grimsrud, Dr. Robert Patrick, Dr. Jennifer Thacher and Dr. Bruce Thomson.

Michael Milligan: Chair– Dr. Alok Bohara; Members: Dr. Donald Coes, Dr. Wendy Hansen and Dr. Jennifer Thacher

J. Raymond Stuart Award
Travis Maestas
Hari Katuwal

Gerald Boyle Memorial Award
Dennis Barber

Regents Graduate Fellowship
Hari Katuwal
Bishwa Koirala

Distinguished Alumnus:
Cyrus Martinez  BA: 1998
Economics & Religious Studies; Magna Cum Laude, University of New Mexico

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Since the Department of English is creating a 200-page self-study for the upcoming APR, we are only providing a minimalist annual report this year, as our APR self-study should more than satisfy our obligation to report our successes and needs. We have two overarching rubrics, Undergraduate and Graduate Programs and six programmatic sections in the department: Rhetoric and Writing (RW), Core Writing, Creative Writing (CW), British/Irish Literary Studies (BILS), American Literary Studies (ALS), and Medieval Studies MS.

We have the following new administrators in the department: Gail Houston, Chair, Gary Harrison, Associate Chair for Curriculum (soon to be OGS Associate Dean), Jesse Aleman, Associate Chair for Tenure and Promotion, Dan Mueller, Undergraduate Director, Scott Sanders, Rhetoric and Writing Director, and Anita Obermeier, Graduate Director.

We had one person go up for full professor in 2008-09, Julie Shigekuni, and hers was a successful candidacy.

We had two separations, of lecturers Phil Tietjen, who decided to get his Ph.D. at Pennsylvania State, and Erin LeBacqz, who took a job at CNM. We had no retirements. Sabbaticals include: Carolyn Woodward (2 semesters), Barry Gaines, Gary Harrison, and Diane Thiel. Carmen Nocentelli was gone all year with a Newberry Fellowship and David Dunaway was a visiting professor at San Francisco State University in spring 2009. Peter White was appointed Secretary of Higher Education. Finnic Coleman continues as Interim Dean of Honors; Anita Obermeier continued as FRI Director, Greg Martin continued as BAMD Director and Gary Harrison also continued his commitment to them (offering one course a year for them).

We had a tense run-off for Chair of the Department in spring 2009 until Gail Houston and Sharon Warner proactively worked together to make it a positive situation for the department, meeting with the whole department and having a very frank and transparent discussion before votes were taken. The Department should be commended for the successful transition of the new Chair into her position and for most parties in the Department working together for that transition. There are a number of signs that indicate we are wanting to move forward and want the Lisa Chavez incident to be put firmly in the past: Houston’s individual meetings with faculty members indicated to her that about 90% of the faculty are ready to move on and want a professional program and want to handle matters professionally. A new Department Colloquia, started by Marissa Greenberg and Chuck Paine, suggests that we want to meet regularly and talk about professional, academic, and research matters; a new Theory Group, set up by Lecturer Ton·es, (with 40+ members) suggests our desire to engage with each other about theory rather than about past matters. Having a beginning of the semester picnic with faculty, staff, and grad students was a rousing success with 80 people there; clearly we are not that department that could barely stand to be with each other a year ago. We have not been in the newspaper or other media regarding the Chavez incident or any other negative incident. The only newspaper focus we’ve had that I know of was from the Lobo when it reported that the Department Chair had informed her faculty a number of times about how to handle the possible H1N1 flu outbreak. Thus, continued jokes and slurs about our Department are really unwarranted. Indeed, we have some excellent teaching occurring, fine research, and outsized service coming from this department. The Chair is working with all parties to the former troubles to ensure them that under her Chairship she will be neutral and supportive of the academic work, teaching, and service of all members of the faculty.

What the annual reports and the self-study highlights is the drastic reduction of faculty and the need for tenure-line (not PTIs or lecturers) to shore up and maintain the bare minimum of what we advertise as our teaching mission. None of our subgroups can be said to be healthy: we are all in a condition of drowning even though we as a Department are doing our very best, going beyond the call of duty in many cases, to fulfill our academic mission. The most crucial lines to replace right now are Phil Tietjen and Erin LeBacqz’s (lecturers who separated from UNM in 2008-09 and were not replaced) and Gary Harrison’s teaching of the core courses English 292, 293, since he now has a 1/1 load as new Associate Dean of OGS. His line can be replaced by hiring Manuel Montoya as an .5 line.
Two Lecturers resigned from our faculty in the past year: Erin LeBacqz resigned in early September to take an Associate Dean’s position at Central NM Community College, and Phil Tietjen resigned in late June to enter the PhD program in Rhetoric at Penn State University.

Ms LeBacqz served for several years as Associate Director of Core Writing Programs; Mr. Tietjen was one of our most active hybrid and online course developers and instructors, principally in professional writing courses.

We have not been approved to hire permanent replacements for either line. Instead, Ms Kyle Fiore taught as a Visiting Lecturer in Spring 2009, and, in August, was hired in a similar Visiting position for the 09/10 academic year. Ms Fiore teaches in Core Writing and in Professional writing, and she is working to bring some administrative cohesiveness to our several community outreach efforts whereby professional writing students work with non-academic businesses and non-profits writing proposals, designing brochures and posters, and writing a variety of documents. We hope eventually to retain the two lost Lecturer lines. There is much work to do.

The past year saw too few rhetoric and writing faculty holding too many administrative positions in and out of the English department. At one point, Professor Kells was both English Department Graduate Director and Director of Rhetoric and Writing. Professor Sanders was, at one time or another during the year, Director of Rhetoric and Writing, Director of Professional Writing, Director of Internships, and Interim Department Chair. Wanda Martin served ably as Director of Core Writing Programs, and Chuck Paine served the College as the Dean’s Special Assistant for Outcomes Assessment procedures.

David Dunaway was Distinguished Visiting Professor of Writing at San Francisco State University during the Spring 2009 term, which meant he was on leave from UNM during that period. This arrangement will likely be repeated in Spring 2011, and may possibly become a more or less permanent condition of his employment.

All of these administrative and extra-mural appointments involved some form of course release, so our faculty (also down a Lecturer line) was hard pressed to offer a full complement of courses across our range of programs. With the help of part time instruction, we managed.

Rhetoric and Writing sponsored the second iteration of the well-attended Civil Rights Symposium begun the year before and also put on WOW! (Write On! Workshops) for undergraduates that was similarly well attended. We began consulting with the Anderson School, placing two TAs in Rhetoric and Writing (Cyndi Murillo and Valerie Kinsey) with ASM as consultants to faculty and students. They worked with faculty on developing writing exercises and rubrics and with students on seeing how skills learned in English 219, Professional and Technical Writing (required for admission to ASM) carry over to ASM writing tasks. The program was successful and continues this year with Ms Kinsey as the sole consultant to ASM.

Professional Writing interns worked at a wide variety of venues ranging from Sandia and Los Alamos National Labs, various law offices, Sandia Prep School, the Leukemia and Lymphoma Society, ARCA of New Mexico, UNM Marketing and Communications, UNM Development Office, UNM Popejoy Presents Office, and other placements on and off campus.

The 2009-10 Ivan and Dale Melada Scholarships were awarded to Laura Fish and Michael George O’Leary, both seniors in Professional Writing. This year the endowment has grown to the point where the scholarships are worth $2000 each.

The Professional Writing Returning Student Award went to Sarah Schara and the Professional Writing Achievement Awards went to Cora Brittain, Alexis Dudelczyk, Dorian McKenzie, and Reyna Montoya. These awards are funded by the Professional Writing Bank of America UNM Foundation account, which also funds two internships in arts administration associated with the Taos Writers Conference.
Looking ahead to the coming year and the next, we will try to increase our endowed funds in part through events recognizing "25 Years of Professional Writing at UNM." The program was officially approved in the spring term of 1985; our first graduate was in May 1986. So we will observe 2010/11 as our 25th year and plan some events both in person and on our web page to recognize alumni and milestones in the program.

I. The Graduate Program

In F2008, Gary Harrison continued as Director of Graduate Studies (DGS). Working with the Graduate Committee, Core Writing Director and Creative Writing Director, the DGS implemented several new policies (below); wrote recommendations for e-portfolio guidelines for OGS; administered graduate examinations; led workshops for job seekers; awarded English Department RPT grants; assisted in scheduling for Spring graduate courses; and advised graduate students. In S2009, Michelle Kells took over as Interim DGS until May 15, 2009. Dr. Kells administered the annual admissions process; reviewed and awarded nominations and applications for graduate travel grants, awards, and fellowships; conducted outcomes assessment and monitoring the academic progress of graduate students; in collaboration with the Director of Core Writing awarded TAships and GAships; and oversaw the ongoing processing of petitions and proposals for individual reading lists, waivers, exceptions, and independent studies; and processed departmental and OGS forms required for the management of the graduate program.

I. Graduate Committee

Graduate Committee members, including representatives from all of the field group areas, consisted of Professors Gary Harrison (Chair and DGS), Mary Power, Anita Obermeier, Hector Torres, Scarlett Higgins, Julie Shigekuni, and Michelle Kells. Erin Murrah, PhD candidate, served as English Graduate Student Association (EGSA) representative. Ezra Meier, English Graduate Advisor, also served on the committee.

Graduate Committee Business. The Graduate Committee conducted regular business, including the writing and grading of the Fall MA examination, awarding RPT grants, and reviewing policy and procedures. The committee recommended some policy changes that were approved through the department level (see below) and which will require some minor revisions and additions to the English Department Graduate Studies Handbook. Members of the committee also participated in mock interviews for job seekers.

The Graduate Committee also heard and responded to the EGSA questionnaire about graduate students’ perception of whether or not their academic needs are being met. Erin Murrah, EGSA representative on the Graduate Committee, will bring forward some proposals from EGSA that they believe will strengthen the program, particularly with regard to consistency of advisement, communication between faculty and graduate students, and long-term course planning and scheduling.

New Policies / Procedures

1. PhD students are strongly encouraged to take one of their PhD area examinations based on an individualized list designed to accelerate their progress toward the dissertation. Replace the current language of the UNM English Department Graduate Studies Handbook,

   With the approval of the COS and the DGS, PhD students may use the available individualized lists for their own study and examinations (p. 32).

   with the following:

   Students are encouraged to substitute an individualized reading list based in their dissertation topic for one of their three examinations. All individualized reading lists must be approved by the COS and the DGS.

2. Applicants for the MA programs in English are no longer required to take the GRE Subject test.
3. UNM Department of English MA students who apply for the PhD program who have maintained a CGPA of 3.8 no longer are required to take the GRE Subject test. The following language needs to be added to the English Department Graduate Studies Handbook:

UNM Department of English Master’s students in Literature and in Rhetoric and Writing who apply for the PhD Program in English at UNM should use the "Change of Degree" form, rather than apply with a new application for admission. Such applicants must comply with all requirements and meet all deadlines for regular PhD admissions, except for the GRE Subject test in English which will be waived for MA students who have maintained a cumulative grade point average (CGPA) of 3.8 or above.

4. Academic Progress Report and process were finalized, having been approved by the Department in Spring 2008.

5. The DGS and Core Writing Director revised the Academic Progress Form and created a new "TA / GA Course and Schedule Preference Form" to be used for TA and GA selection beginning Spring 2008. They also created a new and separate TA application form for internal TA applicants (those applying for a TA for the first time or re- applying) as well as a new GA application form that may be used by any GA supervisor who so chooses. (See Attachments 3 and 4)

Pending Policy/Procedures Changes

1. The Graduate Committee also voted unanimously, with one abstention, to require English 592 as mandatory requirement for graduate students who want to teach literature courses at the 100 and 200 level. This requirement aims to improve the quality of instruction, particularly in English 250 and the surveys of literature. Presently 592 is considered to be a preference for selecting TAs to teach 150, 250 and the surveys, but it is not a pre-requisite.

This policy recommendation must be presented in January to the Executive Committee for departmental approval.

2. A subcommittee of the graduate committee consisting of Michelle Kells, Anita Obermeier, and Erin Murrah, along with Robin Runia, convened on October 27 to begin revising the Evaluation Criteria for the MA and PhD examinations, portfolios and dissertations. The goal is for the committee to convert these evaluation criteria into the language of Student Learning Outcomes and to write rubrics for each of the objectives in order to develop stronger assessment protocols for the graduate program. In response to College of Arts and Sciences call for an Assessment Plan, Gary Harrison drafted an overall plan, based upon ongoing practices, which the subcommittee will review and revise in Spring semester 2009. The attached MA and PhD Outcomes Assessment Plans were sent to Dr. Chuck Paine, College of Arts and Sciences Outcomes Assessment coordinator, in December 2008.

II. Graduate Admissions

The Committee utilized the following process for reviewing applications for graduate admissions:

1. Graduate Committee collaborates with field groups for admission. As in the past, departmental field groups made selections, forwarding their rankings to the graduate committee for further review. The graduate committee divided into two groups with each group reading half of all MA and PhD applications; the full committee then met to compare the field group rankings with the rankings of the graduate committee members. In some cases, the graduate committee recommended changes in the priorities of the field groups, leading to further discussion and final rankings. MFA applications were reviewed by the Creative Writing faculty, with the Graduate Committee providing oversight. The graduate committee used a scoring table devised by the DGS and the committee this year to rank candidates.

2. TAships/TA Extensions. TAships were apportioned by means of committee process, with the full graduate committee involved in discussions for all TAs. Generally dissatisfied with the letters of intent for Teaching Assistantship applications, the graduate committee devised a template of questions to help students address their teaching; this template has been added to the TA application form. The committee agreed that only candidates who have applied formally for TAships would or should be considered for TA positions. Furthermore, the committee agreed that the DGS should enforce the time limits for each program, to ensure rotation of teaching positions,
particularly for the most coveted classes. As reflected in the 2008-2009 policy manual, which reflects the policy decisions made by the 2007-2008 Graduate Committee, "extensions are granted only in exceptional circumstances, and they are contingent upon department teaching needs and budget, as well as the TA's teaching evaluations and academic performance. Under normal circumstances, all students teaching on extension will teach courses in Core Writing. Exceptions will be made only on the grounds of departmental teaching needs and budgetary constraints."

Admissions Data
197 total applications (13 not sorted, too incomplete to know degree; 44 MA: 14 too incomplete to know concentration, 16 Lit, 13 R&W, 1 Med St; 97 MFA: 15 too incomplete to know concentration, 51 fiction, 14 CNF, 17 poetry; 43 PhD: 10 too incomplete to know, 20 Lit, 11 R&W, 2 Med St).

PhD Program in English
- Total number of applications: 43
- Total number offered admission: 14
- Total number offered admission with TA: 12 (10 new TA offers; 2 from UNM MA)
- Total number accepting admission:
  - Men / Women [Ethnic Minorities]: 1 / 5 [0]

MFA Program
- Total number of applications: 97
- Total number offered admission: 15
- Total number offered admission with TA: 8
- Total number accepting admission:

Master's Program in English
- Total number of applications: 44
- Total number offered admission: 21
- Total number offered admission with TA: 8
- Total number accepting admission:
  - Men / Women [Ethnic Minorities]: 2 / 10 [2]

Field Group | Applied | Admitted | With TA*
--- | --- | --- | ---
MA Language/Literature | 16 | 7 | 5
MA Rhetoric/Writing | 13 | 5 | 3
MA Medieval Studies | 1 | 0 | 0
MFA | 97 | 6 | 5
PhD Language/Literature | 20 | 2 | 2
PhD Rhetoric/Writing | 11 | 2 | 2
PhD Medieval Studies | 2 | 2 | 2

*Admitted students who were initially offered a TA. We always offer more TAs than the positions that were available, recognizing that some students would decline our offers.

Admissions' Trends

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<tr>
<td>Number of Applications*</td>
<td>PhD/MFA/MA</td>
<td>PhD/MFA/MA</td>
<td>PhD/MFA/MA</td>
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<tr>
<td>PhD/MFA/MA</td>
<td>46 / 110 / 20</td>
<td>44 / 110 / 26</td>
<td>31 / 85 / 30</td>
<td>43 / 97 / 44</td>
</tr>
<tr>
<td>Number Offered Admission</td>
<td>9 / 14 / 7</td>
<td>16 / 15 / 13</td>
<td>21 / 21 / 22</td>
<td>14 / 15 / 21</td>
</tr>
<tr>
<td>Number Who Accepted Admission</td>
<td>9 / 14 / 7</td>
<td>8 / 15 / 10</td>
<td>11 / 8 / 10</td>
<td>6 / 6 / 12</td>
</tr>
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*Includes only complete applications (2007-2008 only).
III. Recruitment and Retention
We continue to advertise by sending out posters and letters to various colleges that may be feeder schools for UNM's MA and PhD program. There is no evidence that these posters are increasing interest in or applications to our graduate program. One of the ongoing projects should be to explore alternative ways to increase recruitment.

By removing the GRE Subject test requirement for applicants to the MA program and for internal MA applicants to the PhD program, we should increase the numbers of students—and particularly those in groups who typically score lower on these exams—applying to both programs, especially the MA program.

We have worked hard to improve communication with the graduate students in the program, and we have revised our process for selecting TAs and MAs to promote transparency and equity in the selection process. We have already heard from EGSA that such measures are being well received.

On August 20, 2008 the DGS in collaboration with the Core Writing Program held an orientation and hosted a welcome reception for incoming and returning students. The DGS and Graduate Advisor met with all new students for one hour to go over general policies and answer questions, then new students divided into field groups and met with the department's field group leaders for an hour. That meeting was followed by a general meeting for all new and returning graduate students (including TAs and non-TAs) to go over new policies and the new progress report. A reception followed.

In January 2009, Interim DGS Michelle Kells held a Welcome Back Tea for all Graduate Students.

IV. Graduate Enrollment F 2008
Fall Admissions data is included in the Graduate Program Annual Report for AY 2007-2008.

Total enrollment for the graduate program in English, including new graduate students and subtracting dropped students, during Fall 2008 was 109 broken down as follows by degree program:

- **MA Program**: 23 (10 RW 10 Lit, 2 Med Studies, 1 CW)
- **MFA Program**: 38 (15 fiction, 14 poetry, 9 creative nonfiction)
- **PhD Program**: 48 (31 Lit, 11 RW, 6 Med Studies)
- **Total**: 109

<table>
<thead>
<tr>
<th>Gender</th>
<th>Ethnicity</th>
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<tbody>
<tr>
<td>Male: 25</td>
<td>White: 72</td>
</tr>
<tr>
<td>Female: 84</td>
<td>Hispanic: 16</td>
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<tr>
<td></td>
<td>Native American: 5</td>
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<tr>
<td></td>
<td>Asian American: 2</td>
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<tr>
<td></td>
<td>African American: 1</td>
</tr>
<tr>
<td></td>
<td>Undeclared: 12</td>
</tr>
<tr>
<td></td>
<td>International: 1 (China)</td>
</tr>
</tbody>
</table>

Thus, 77% of the members of the graduate program are female. Excluding the international student and those with undeclared ethnicity, 25% of our students are from ethnic minority populations.

New graduate matriculants: We admitted the following numbers of students in Fall.

- **MA Literature**: 6
- **MA Rhetoric and Writing**: 3
- **MA Medieval Studies**: 1

**MFA**: 7
PhD English/American Literature: 7
PhD Medieval Studies: 1
PhD Rhetoric and Writing: 4

Note: After matriculating, one of the PhD students in Rhetoric and Writing moved to focus on American Literature; one of the American Literature PhD students moved to Rhetoric and Writing; and the Medieval Studies PhD switched to English Literature, with a concentration in Medieval Literature. The Graduate Committee and field group leaders may want to discuss whether or not we should impose some kind of restrictions or at least implement a formal process by which a student admitted under the aegis and declaring intent to study in one field group switches to another.

Dropped:
Three students have dropped from the program by not enrolling for three semesters: Joe Hale and Stephanie Martin (both MA in Rhetoric/Writing) and Robbie Touchstone (PhD in Literature). Martin and Touchstone informed us of their plan to leave; Hale did not. All three students left the program for personal, not for academic, reasons.

Graduate Enrollment Spring 2009

I. Total Number of Graduate Students Enrolled in the Program: 111
   • Total PhD Students Enrolled: 47
     Women: 34
     Men: 13
     Ethnic Minority: 7 (1 Amer Ind, 2 Asian, 4 hispanic)
     ABD:
   • Total MFA Students Enrolled: 38
     Women: 29
     Men: 9
     Ethnic Minority: 9 (3 Amer Ind, 1 Asian, 5 hispanic)
     ABD: 0
   • Total MA in Literature Students Enrolled: 10
     Women: 8
     Men: 2
     Ethnic Minority: 1 (1 Amer Ind)
     Medieval Studies Concentration: 2
   • Total MA in Rhetoric and Writing Students Enrolled: 12
     Women: 9
     Men: 3
     Ethnic Minority: 0

V. Graduation
In 2008-2009 we graduated a total number of 25 students as follows:

Summer 2009 Graduates
PhD: Kelvin Belitele, Candice Welhausen,
MFA: None
MA: Katherine Alexander

Spring 2009 Graduates:
PhD: Rachel Harmon, Rebecca Hooker, Katyna Johnson, Danizete Martinez, Michaelann Nelson, Robin Runia, Birgit Schmidt-Rosemann, Kristi Stewart
MFA: Kyle Churney, Chris Jones, Laura Matter, Valeri Santillanes, Micaela Seidel, Chris Wrenn, Christina Yovovich
MA: Alyssa Christy, Dan Cryer, Leslie Fishburn-Clark, Myrriah Gomez, Helen Huntley, Lisa Myers, Sarah Sayles

Fall 2008 Graduates:
PhD: Cindy Murillo
MFA: None
MA: None

VI. 2008-2009 Graduate Awards and Honors
Graduate awards are given in Spring semester; RPT grants are included under section X.

English Department graduate students who received academic awards and honors in AY 2007-2008 include the following:

**English Department Awards**
- Arms Endowed Fellowship: Xing Yu, Caroline Kuchera, Leigh Johnson
- Buchanan Arms: Marisa Sikes
- Howard Dean Everett: No Award
- Mark E. Everett Scholarship: Jeremy Zuni
- Joseph C. Gallagher Award: Annarose Fitzgerald
- Irene B. Kimball: Stephanie Spong
- Mary M. McDonald: Christine Kozikowski
- Katherine M. Simms: No Award
- New Mexico Folklore Award: Noreen Rivera
- Lynn Reyer Award: Tanaya Winder
- Vicente Ximenes Scholarship: Richard Raab-Faber
- Nomination for Dean’s Dissertation Prize: Danizete Martinez

**Medieval Studies Awards**
- English Medieval Studies Travel Awards: Christine Kozikowski, Marisa Sikes, Doug van Benthuyisen

**Rhetoric and Writing Awards**
- Rhetoric and Writing Award for Academic Excellence: Dan Cryer

**Graduate Program Awards:**
- Distinguished Graduate Student Award: Leah Sneider

**College/University Awards**
- College of Arts & Sciences TA Teaching Award: Leigh Johnson

VII. Graduate Program Outcomes Assessment
The following students took comprehensive examinations; the examining committees completed outcomes assessment forms for each examination. The forms are on file in the graduate office.

- MA in Lit Examination: Myrriah Gómez, Lisa Myers, Kate Alexander
- MFA Examinations: Molly Beer, Chris Boat, Kyle Churney, Lucy Dupertuis
- Valerie Santillanes, Micaela Seidel, Rudolfo Serna, Chris Wrenn
- PhD Examination: Marisa Sikes, Stacey Kikendall, Ying Xu

VIII. Job Placement
The DGS along with committee members Mary Power, Anita Obermeier, and volunteers Aeron Hunt, Marissa Greenberg held a weekly series of workshops for our MLA jobseekers: Cassandra Amundsen, Katyna Johnson, MichaelAnn Nelson, Danizete Martinez, Cindy Murillo, Robin Runia, Candice Wellhausen, and Jana Giles. Of this
The last five are bonafide candidates far enough along in their work to be competitive. So far only Murillo, Runia, Wellhausen, and Giles have MLA interviews and/or phone interviews for tenure-track positions. All of our job seekers have reported that several job openings have closed because of budgetary constraints.

Katyna Johnson Nanjing, China branch of New York Institute of Technology.
Danizete Martinez UNM Valencia
Cynthia Murillo Tennessee State University
Robin Runia San Angelo State University
Candice Wellhausen Postdoctoral Fellowship at the Georgia Institute of Technology in Atlanta

IX. English Graduate Student Association (EGSA)
The Executive Council of the EGSA conducted a survey of all graduate students regarding their perceptions of how well the graduate program is meeting their academic needs. The results of the survey were reported to and discussed by the Graduate Committee. Erin Murrah, graduate representative on the committee, will be bringing recommendations for policy and procedure changes to help address some of the issues of concern, including better advisement, better advance scheduling for courses, increasing communication opportunities between faculty and graduate students, and more robust orientation for new and returning students.

EGSA has proposed to discontinue the annual Southwest Symposium, which has been struggling for the last several years, and to replace it with a series of colloquia addressing academic and pedagogical issues that will invite the participation of both graduate students and English Department faculty.

EGSA also planned and executed the First Annual Awards Ceremony and Graduation Celebration in May 2009 where they instituted their own set of awards for faculty, staff, and students.

X. Graduate Student Professional Activities
Supported by funds the Graduate Office index, the DGS awarded $1947.47 in grants to support graduate student travel to deliver papers at professional conferences. The table “RPT Applications: F 2008” indicates the projects and the amounts funded (see Attachment 8).
Still finding out who got funded in Spring 09.

XI. Recommendations
1. Complete the work started on revising the evaluation criteria for examinations, portfolios and dissertations, converting the objectives into Student Learning Outcomes and writing rubrics to guide faculty when assessing these student works.

2. Revise the English Graduate Student Handbook to reflect the new policies passed this semester, as well as to clarify the policies regarding the ABD Raise and Course Release.

3. Work with Core Writing Director, Creative Writing Director and Graduate Advisor to implement new admissions process for internal MA applicants to the PhD programs and the new selection process (TA/GA Schedule and Course Preference and Academic Progress Report) for TA- and GAships.

4. Work with EGSA to address the concerns raised in their Fall questionnaire.

5. Continue to push hard to get a workable database system whereby we can sort data on graduate students and produce files on such categories as time in program, ethnicity, gender, date of first matriculation, date of advance to candidacy, and etc. Such a database is absolutely essential to the efficient and effective management of the graduate program, and without one we waste hours sorting data by hand or relying upon the Graduate Advisor to sort tables from Excel. This lack of a database management system is one of the critical deficiencies in the program. Set up protocols and standards for consistent and continuous collection of data and establish a template for the Graduate Program Annual Report that DGS and the Graduate Advisor complete so that the form and content of data in these
reports does not vary from year to year, director to director. What data do we really need to evaluate effectively our program? How do we best gather that data, display it in annual reports, and analyze it?

6. Work on developing more effective recruitment strategies. Restore the phone-bank idea where faculty and EGSA representatives systematically contact by phone or e-mail our top candidates and offer information and help about the program.

7. Work on increasing funding for graduate students for purposes of recruitment and retention. We have an alumni database now that could be tapped to contact our graduates; in the past few years Andy and Miriam Mara have contributed $400.00 annually to support graduate student research; others may be willing to do so if invited.

8. Work with Creative Writing Director to inform MFA students about deadlines and the importance of filing forms on time; also to encourage faculty to respect deadlines for forms, to complete them accurately, and to advise their students to do so as well.

9. Resist making further curriculum changes at the MA level, in particular, until the new MA has had a chance to run for a few years. Nonetheless, revising SLOs and rubrics may require some minor tweaking of curriculum.

10. Set program objectives and SLOs for English 500, Introduction to the Professional Study of English, with an aim to make it a course in professionalization (not in literary research) into the broad discipline of English and require all MA and PhD students to take the course. Some employed technical/professional writers who seek an MA with no intention of teaching in college/university could be excepted from this requirement.

11. Update and revise the Graduate Program website to improve graduate program profile. The website is probably our first and foremost advertising tool.

2. Undergraduate Program

Annual Report, Undergraduate Program in English
The following report describes the activities of the undergraduate program in our department for the period July 1, 2008 to June 30, 2009.

General Summary and Achievements.
In her annual report dated October 3, 2008, Professor Woodward enumerated six goals set by the Undergraduate Committee and Director during the 2007-08 academic year: to increase the use of travel funding to research collections by Honors students; to develop the “My UNM” website/chatroom for English majors; to develop a general Undergraduate Program brochure in full color; to implement Literary Studies Outcomes Assessment; to implement English 150 in-class evaluation measures, and to implement English 250 Outcomes Assessment on a trial basis. Of these goals, she noted that three—increased travel funding to research collections, developing a “My UNM” chatroom, and implementing Literary Studies Outcomes Assessment—were met, leaving development of a full color Undergraduate Program brochure and implementation of English 150 in-class evaluation measures and English 250 Outcomes Assessment to her successor, Professor Jussawalla, who due to illness was unable to complete her tenure as Undergraduate Director and left few records of the Undergraduate Program’s achievements during 2008-2009 academic year.

Of the goals achieved under Professor Woodward’s tenure, only the “My UNM” chatroom may be said to have endured. As far as I can tell, no research funding for Honors students was sought, and while Outcomes Assessments were conducted under acting Undergraduate Director Lynn Beene’s supervision, the sampling of essays assessed was so small (10) and the pool from which the sampling was taken so broad (250,351,487) that almost any conclusions drawn from the data are specious and not reflective, in any objective sense, of teaching or learning. This isn’t meant as a criticism of either Professors Jussawalla or Beene’s efforts as Undergraduate Program
Directors; indeed, all evidence suggests that both were strong leaders who sacrificed much time and energy in shepherding the undergraduate program through a tumultuous period in the English Department's history. Much reconfiguring of administrative posts within the English Department has occurred during the 2008-2009 academic year, giving one hope that important progress will be made in meeting the diverse educational needs and objectives of our undergraduate population and supplying the training in English Language and Literature they will need to thrive professionally and enjoy meaningful lives in an evolving, ever-more competitive and demanding marketplace.

Identified Needs for Improvement.

1. While to my mind undergraduate advisement hasn't substantively lapsed over the past year, the College of Arts and Sciences is taking steps to address the low review it received in this area in the University's overall evaluation last Spring. Anecdotal evidence suggests that most of our majors receive 100% of their advising in English from Dee Dee Lopez, who serves effectively as the Department's undergraduate academic advisor and confers with hundreds of students every semester. Nevertheless, we as a faculty need to increase our visibility and make ourselves more available to students outside the classroom, advising students not only about the concentration requirements but about the culture and discipline of the various fields and specialties within English Language and Literature that we represent.

2. One conclusion that might be drawn from the Outcomes Assessment performed last May is that students perform better in 300- and 400-level literature courses when they have taken English 250 ("The Analysis of Literature") prior to enrolling in them. While I understand the arguments against making English 250 a pre-requisite for all upper-division literature courses, and while there is no stauncher advocate of students enrolling in English 250 early in their undergraduate careers than Dee Dee Lopez, the indices, such as they are, suggest that one way we can help students succeed in all six of our concentrations is to direct them into English 250 early.

3. Outcomes Assessment, if conscientiously and thoroughly conducted, could provide much useful data on the strengths and weaknesses of our curriculum. In addition to identifying lapses in the education we are providing, Outcomes Assessment can also identify our strengths and enable us as a Department to build upon them. While most of us believe, for instance, that a correlation exists between a student's successful completion of English 250 and her success in upper division literature courses, without Outcomes Assessment that looks at papers from English 250 as well as upper division literature courses, there is no way for us to know this or to construct an argument for making 250 a true pre-requisite. Unfortunately, Outcomes Assessment hasn't yet been utilized by the Undergraduate Program to its full potential.

4. Last May seven students graduated with Honors in English, two more than the year before and exactly the same number as the year before that. Currently, seven students are enrolled in the Honors Program, two who intend to graduate Fall 09 and five who intend to graduate in Spring 10. Advising them are faculty members Jack Trujillo (1), Daniel Mueller (2), Matt Hofer (1), Gail Houston (1), Julie Shigekuni (1), and Chuck Paine (1). For a decade and possibly longer, between three and eight students per year have taken advantage of the Honors Program in English when, in fact, a far greater number per year have GPAs that would entitle them to this opportunity. A larger percentage of students don't learn about the Honors Program until too late if at all.

Goals.

1. Advisement. Ashley Carlson, the Undergraduate Program's graduate assistant, and I have already visited all four sections of English 250, the gateway course required of all English majors, with the aim of welcoming majors to the English Department, educating them about the six major concentrations, Sigma Tau Delta, the Honors Program in English, and the availability of faculty members for advisement as the first step in a year-long effort to promote contact between undergraduates and faculty members.
2. English 250. While it may be premature to make English 250 a pre-requisite for enrolling in upper division literature courses, the Undergraduate Committee has begun discussing solutions to the problem of students being under-prepared for the literary analysis and understanding of literary theory expected of them by their upper division instructors. Outcomes Assessment at the 300- and 400-level of students who have and haven’t taken English 250 might well provide data correlating such a hypothesis.

3. Outcomes Assessment must be implemented on a wider scale within the Undergraduate Program if it is to yield accurate data and provide a foundation for curriculum-building. Though Outcomes Assessment has been presented over the years as a simple, efficient instrument for gauging program efficacy, in fact most faculty have found even the most scaled back process onerous and time-consuming. Nevertheless, I believe that Outcomes Assessment is valuable and necessary, and with the help of the Undergraduate Committee, I intend to implement the process developed by Professors Beene, Woodward, and me two years ago but assess a far larger pool of essays from a wider sampling of upper division literature courses.

4. Building the Honors Program in English. In a recent in-class polling of English 250 students, fewer than 10% had any knowledge of this important opportunity. Ashley Carlson, Dee Dee Lopez, and I have begun considering ways to target students with appropriate GPAs as a means of recruiting more students into this valuable program. We have also set as a goal the elimination of breaches in confidentiality that plagued the 2008-2009 Honors Program.

5. Large section (60+ students) of English 250 and English 293/4. Efforts are underway to offer large sections of English 250 and English 293/4 Fall 10. Professors Aeron Hunt and Gary Harrison have expressed interest in teaching large sections of 250 and 293/4 respectively, Dee Dee Lopez is confident that classroom accommodations can be met, and Professor Wanda Martin and I have scheduled a September 30th meeting to discuss TA availability. Professors Hunt, Harrison, and Martin will be invited to an Undergraduate Committee meeting to voice their perspectives and concerns about this innovation.

Enrollments
The English Department database shows 605 students enrolled as English majors as of September 2009. This figure is approximately on par with the numbers reported in previous years: 815 during Summer 2008, 658 at the start of Fall 2007, 533 at the end of Spring 2006, and 506 at the end of Spring 2005. A significant portion of these students have yet to declare a concentration (266). Of the 339 students who have declared a transcripted concentration, the figures are as follows:

- 126 (37%) in Creative Writing
- 70 (21%) in Liberal Arts
- 65 (19%) in Professional Writing
- 46 (14%) in Pre-Professional (formerly Pre-Law)
- 22 (6%) in Pre-Graduate
- 10 (3%) in English-Philosophy

Graduation.
We graduated a total of 120 students in the 2008-09 academic year: 16 in Summer '08, 40 in Fall '08, and 64 in Spring '09. This number is down from 161 students in 2007-2008, and 138 students in 2006-07, but up from 105 in 2005-06, and 86 in 2004-05.

Departmental Honors.
During 2008-09, seven students graduated with Honors in English (Fall: 1; Spring: 6), up from five the year before. Four were awarded cum laude (Fall: 1; Spring: 3), one magna cum laude (Fall: 0; Spring: 1), and two summa cum laude (Fall: 0; Spring: 2).
Graeme Prentice-Mott  
Fall 2008  
Title of Thesis: Little Streets  
Level of Honors: cum laude  
Faculty Advisor: Prof. Jack Trujillo

Sarah Kramer  
Spring 2009  
Title of Thesis: Milton’s Rivers to Salvation: Liquidity and Ritual in Paradise Lost  
Level of Honors: magna cum laude  
Faculty Advisor: Prof. Marissa Greenberg

Elizabeth Cheatham  
Spring 2009  
Title of Thesis: The ‘Other’ Reconsidered: Theorizing Race and Gender in Three of Shakespeare’s Plays  
Level of Honors: summa cum laude  
Faculty Advisor: Prof. Marissa Greenberg

Rick Raab-Faber  
Spring 2009  
Title of Thesis: Not What I Wanted to Be When I Grew Up  
Level of Honors: summa cum laude  
Faculty Advisor: Prof. Jack Trujillo

Ann Marie Clinkscales  
Spring 2009  
Title of Thesis: The Tempest: My Battle with Breast Cancer  
Level of Honors: cum laude  
Faculty Advisor: Prof. Marisa Clark

Kayla Hollius  
Spring 2009  
Title of Thesis: From Petticoats to Pantaloons: Identity and Performativity in Transvestite Civil War Literature  
Level of Honors: cum laude  
Faculty Advisor: Prof. Jesse Alemán

Terry Kwcselait  
Spring 2009  
Title of Thesis: Kiss and Tell  
Level of Honors: cum laude  
Faculty Advisor: Prof. Daniel Mueller

Sigma Tau Delta.  
Under the Faculty Advisement of Assistant Professor Marissa Greenberg, Sigma Tau Delta graduated 16 members as UNM English majors, three more than in 2008 and four less than in 2007. While none of its undergraduate members attended the annual national conference, its officers organized several outstanding programs, notably a series of Brown Bag Lunches featuring faculty and graduate students on such subjects as pursuing graduate study; “Revenge of the Banned,” an evening of lectures in commemoration of Banned Book Week, about which Professor Greenberg published a piece in the Sigma Tau Delta National Newsletter and through which officers raised money to assist members wishing to travel to future national conferences. Sigma Tau Delta nominated Rick Raab-Faber as the second Ximenes scholarship recipient.

Scholarships and Awards
In 2008-2009 we awarded 15 awards to 13 undergraduates.

Megan Abrahamson  
Award: Joseph B. Zavadil Memorial Scholarship

Cora Brittain  
Award: Bank of America Professional Writing Achievement

Elizabeth Cheatham  
Awards: Irene B. Kimball Endowed Scholarship  
And Katherine G Simons Award

Alexis Dudelewicz  
Award: Bank of America Professional Writing Achievement

Stephany Farley  
Award: Mary M. McDonald

Laura Fish  
Awards: Mary M. McDonald  
And Dale and Ivan Melada Scholarship in Professional Writing

Anna Keener  
Award: Reba Rutz Beidleman Memorial Endowed Scholarship

Dorian McKenzie  
Award: Bank of America Professional Writing Achievement

Reyna Montoya  
Award: Bank of America Professional Writing Achievement Scholar

Michael O'Leary  
Award: Dale and Ivan Melada Scholarship in Professional Writing

Steve Pelletier  
Award: Howard Dean Everett Scholarship

Richard Raab-Faber  
Award: Vicente Ximenes Scholarship in Language and Literacy

Sarah Schara  
Award: Bank of America Professional Returning Student Scholar

3. Medieval Studies Programs in English (MSPE)  

The internal infrastructure for MSPE in 2008-2009 remains as an informal advisory committee comprised of Professors of the Department of English Anita Obermeier and Helen Damico, the latter functioning as Director. When matters concerning graduate students' comprehensives arise that may be relevant to the Department of History or curricular issues concerning university-wide medieval offerings, then Professor Tim Graham (Director of the Institute for Medieval Studies) joins Professors Damico and Obermeier in whatever deliberations are necessary. The informal nature of the committee was instituted after the major deliberations regarding renumbering of the medieval offerings were completed and only the final details of placing the renumbering into the catalog remained. Spring 2006 also saw the final cancellation of the undergraduate Medieval Studies Minor and hence of a minor in Medieval Studies offered by English and its installation under the IMS rubric. It was not until September 2007 that IMS began to operate the minor.


1. Curricular and Programmatic Development:

** Our efforts to renumber our curricular offerings begun in 2003 were finally listed in ascending order in the 2008-2009 catalog, showing a topics number on both the undergraduate and graduate levels for innovative course offerings.
**In 2008-2009, Helen Damico experimented with presenting a more focused type of seminar for graduate students, one that centered on a single task—in this case being the retranslation of the OE Genesis, the 3000 or so lines being divided among the class. The Fall semester was given over to a comparison of Genesis A and Beowulf, one a Biblical/Christian epic, the other a Germanic secular heroic narrative, for indebtedness on Genesis by the Beowulf-poet. The second semester was given over to those students who wished to continue in the translation project with publication of the text (either digital or in paper) as the goal. The restricted class of five students produced a collaborative draft of the Biblical epic, which will continue to a revision of that draft in 2009-2010.**

**Curricular interrelations with other departments continues, exclusive of the interrelations with IMS: All English undergraduate medieval courses are used by European Studies as part of their major. There is a continuation of the cross-listing of Old and Middle English language courses with the Dept. of Linguistics, and of the literature courses with Comparative Literature. The English faculty continues to be on the steering committee of IMS.**

**The Committee prepared and set two comprehensives: the Ph.D. comprehensive in the Concentration in Medieval Studies for Marisa Sikes and the MA comprehensive in the Concentration in Medieval Studies for Lisa Myers. Both successfully passed their comprehensives.**

**The 2008-2009 academic year saw the further development of the MEGSE Website as a research and professional development site. In addition to the Library Portal, Doug VanBenthuysen is in the process of completing a revision of Frequency Word-List in Anglo-Saxon (published in the late 40s or early 50s; eleventh printing in 1979) to include the frequency of related words to the existing head word. When finished, this will go out internationally on the Anglo-Saxon List Serve.**

II. Conferences:

**In March 2009, Anita Obermeier chaired an international conference—MAP (Medieval Academy of the Pacific) to great success, with scholars attending from Canada and the Near East and Asia. In addition, Professor Obermeier is the Director of Feminist Research Institute.**

**Marisa Sikes, an ABD, was elected Chair of the National Medieval Graduate Student Association for 2009-2010, and will be the coordinator of the National Conference in March 2010 to be held at the University of New Mexico.**

III. Students and Student Development: There are six students following the Medieval Studies Concentration Programs, 1 in the MA track and the remaining 5 in the Ph.D. track.

**Marisa Sikes and Christine Kozikowski were granted the Arms-Buchanan and Mary McDonald Awards respectively; Marisa Sikes, Christine Kozikowski, Lisa Meyers, Douglas VanBenthuysen, received annual travel awards to international and national conferences for presentation of papers; Douglas VanBenthuysen and Lisa Myers received the Medieval Studies Travel Award for Research to Collections; Douglas VanBenthuysen received the A&S Dean’s Award for Travel, Registration, and Accommodations to an International Conference; and Douglas VanBenthuysen has published “Seamus Heaney’s Audio Beowulf” in Studies in Medievalism XVII (2009).**

**He was a participant in the Graduate Student Digital Workshops Team at the 2009 International Society of Anglo-Saxonists Conference at St. John’s Newfoundland, July-August 2009; and he was participant in the University of Iceland and the University of Minnesota’s co-sponsored study and research Language Course in Iceland in May-June 2009 in Reykjavík, Iceland.**
Graduate Student/Mentor Internship for Viking Mythology: This student/mentor internship continued in Spring 2009 with MA candidate Lisa Myers receiving the award.

Graduate Fellow in Medieval Studies for the Outreach Program to the Secondary Schools was Ph.D. candidate Christine Kozikowski.

Fellow in Digital/Website Initiative was Doug VanBenthuyens.

IV. Recruitment and Promotion:

- in February 2009, six applied to the Medieval Studies Concentrations, from Cal State, Western Michigan, Columbia Teachers College, Mercy College, Duqensce, and UNM. Of the six, offers were made to three, 2 Ph.D. candidates and 1 MA. The two Ph.D.s accepted our offer.

- Continuing our visibility initiative, we mailed out 100 posters to national and international universities.

V. Staffing:

We are able to fulfill our obligations to the program and to our students only because we have had the ability and the good fortune to hire PTTs to handle most of the undergraduates offerings. These faculty have Ph.D. in medieval studies and one is a published scholar. Our main concern lies in this area of the program, the need to have a third permanent faculty member.

- Professors Obermeier and Damico (whose cv's you have) have continued to publish significantly during 2008-2009, as well as to maintain a high level of service to the department.

VI. Objectives for 2009-2010

- to continue creative implementation of our digital initiatives in scholarly research with an eye toward creating a publication site in the future.

- to investigate the possibility of reviving an undergraduate medieval literature program

- to investigate means by which to streamline the graduate program in medieval literature within British/Irish Literary Studies.

- to continue our visibility efforts with the mailing of postcards to national and international institutions.

- to find new and to continue to create funding opportunities for our students.

- to investigate means by which to recycle students who drop out of the Concentration programs more efficiently.

4. Creative Writing Program
Julie Shigekuni was appointed Director of Creative Writing, replacing Sharon Warner who in Spring 2008 resigned from the post she had held for ten years.

The major changes in Creative Writing during 2008-09 took place in programming, with the implementation of an MFA Tutorial program (English 498), which provides intensive one-on-one study for upper division majors who partner with graduate students enrolled in the MFA program, and a Community Studies component to the MFA program, which provides MFA graduate students with the opportunity to teach creative writing at local high schools and other venues. The program’s popular Works-in-Progress series continued. Newly implemented extra-curricular activities included the 11th Week Colloquium, an event designed to introduce undergraduates to faculty teaching creative writing via a discussion of current literary work, an open-mic Lunchtime Reading Series for undergraduates enrolled in CW writing workshops, and an MFA Retreat for MFA students who have completed their coursework and are embarking on the challenging task of developing their dissertations. Additionally, listservs at both the graduate and undergraduate levels were developed to facilitate communication at all levels of the CW program.

The program’s external attractiveness continued to increase, as shown by rising numbers of applicants; however, the CW program faculty elected to decrease the number of students admitted to the MFA program in creative nonfiction and poetry due to a shortage of faculty in both those genre groups. A record number of seven students graduated from the MFA program. Undergraduate English majors with a concentration in creative writing held steady at 140.

Blue Mesa Review completed its second year as a student-run magazine and published Issue 23. After a tough transition phase, the student run leadership has taken hold with a large number of students, both at the undergraduate and graduate levels, volunteering for editorial positions and enrolled in the Blue Mesa Review Editorial & Production English 420/520 course.

The Taos Summer Writers Conference, now in its twelfth year, included in its faculty 2008 Pulitzer Prize winner Elizabeth Strout, along with Robert Boswell, Antonya Nelson, Jonis Agee, and Jesse Lee Kercheval. Much of the conference’s infrastructure was provided by a group of graduate and undergraduate interns.

The CW program hosted two visiting writers: Michelle Otero, a Harvard educated native New Mexican, taught the graduate workshop in creative nonfiction; Julie Mars, author of two acclaimed novels and an award winning memoir, taught the graduate workshop in fiction. The CW program’s expanded reading series included readings and workshops with authors Robert Hass, Arthur Sze, Stefi Weisburd, Blas Falconer, and Robin Romm.

Perhaps the most important achievement of this program resides in the publication of creative and critical work by its faculty and students and their appearances at readings, workshops, and other public venues. Julie Shigekuni published her third novel, Unending Nora. Diane Thiel published American Fugue, which won the NEA International Literature Award, and Winding Roads, exercises in writing creative nonfiction. Daniel Mueller continued to publish short stories in several literary journals. The program hired Dana Levin, author of In the Surgical Theatre and Wedding Day, winner of NEA, PEN, Guggenheim, and Whiting Foundations awards and fellowships, as its new Joseph M. Russo Endowed Chair.

5. American Literature Studies
American Literary Studies has long been a centerpiece in the UNM English department curriculum. This year the first George and Elizabeth Arms Fellowships were awarded to three American Literary Studies ABDs—$2700 to each of them to support their initial dissertation research. In future years the Arms endowment, totaling a third of a million dollars, should generate much more money, which ALS plans to use to recruit graduate students in our field. The department also continues to support the journal American Literary Realism, with an international circulation of about 600, which has in turn funded projects in the department, including stipends to visiting lecturers and an endowment to support the Taos writers’ conference.
This year, the faculty in ALS have stipulated three goals to pursue over the next year or two:

1. to formulate a concentration in Southwest Studies at the undergraduate level comparable to other undergrad concentrations (e.g., literature and philosophy);

2. to develop a plan to rotate the teaching of 200-level courses (250, 264, 265, 281, 293, 295, 296, 297);

3. and to develop a form of mentorship of ABDs assigned to teach 296 and/or 297.

Several of the faculty teach courses cross-listed in other departments or programs: Jesse Aleman’s courses are often cross-listed in Chicano Studies and American Studies; Kadeshia Matthews’s in Africana Studies; and Kathleen Washburn’s in Native American Studies.

We also continue to place students completing Ph.D.s in American literature in tenure-track university teaching positions, as in the case of Rebecca Hooker, who completed her Ph.D. last fall after she was hired by Virginia Wesleyan College, and Cindy Murillo, recently hired by Tennessee State University. I don’t know how better to assess “outcomes” in the graduate program than by pointing to successful Ph.D. placements during a recession. In addition, Kelvin Beliele, who completed the Ph.D. in July 2009, was selected an alternate for a Fulbright Junior Lectureship in Germany.

The faculty in American Literary Studies also continues to outpublish any other group of faculty in the UNM English department, despite our modest number. With four assistant professors in our group (Matthews, Washburn, Hofer, and Higgins) we are also, I believe, the youngest group of faculty in the department.

Still, we are desperate to add faculty in our field. Without additional faculty, in my opinion, the short- and long-term future of our department in general and of ALS in particular is bleak. We are well past the point that we can collectively do our jobs by “working harder” or “working smarter.”

**British/Irish Literary Studies**

BILS spent the year in intensive self-evaluation of each of its sub-groups and as a result has a better sense of its goals, vision, needs. This group will be continuing this effort this year in order to evaluate any curriculum changes that need to be addressed.

The 19th Century British/Irish Literary Studies Group successfully continued in its third year with talks from faculty and graduate students on the market for jobs. This has turned out to be a thriving group, which also draws a strong contingent of graduate students, preparing them for the job market and helping them in the conversations taking place in our discipline. This group is also a cross-disciplinary group, with American and British Literature featured together.

Three of BILS faculty had sabbaticals in spring 2009, Harrison, Woodward, Gaines. Further, young, up-and-coming scholar Carmen Nocentelli received a Newberry Fellowship for the year, while also having one of her articles accepted by the premier journal in the field.

BILS put on another successful London Study Abroad Program, with David Jones leading the group this year.

BILS is proud that Gary Harrison, one of its members, has been named Associate Dean of OGS, but this appointment made it starkly clear that the popular core courses 292 and 293 cannot be covered by him; he is the only tenure-line faculty member regularly teaching these courses. The possibility of having Manuel Montoya become part of the Department as a .5 line helps very much, particularly since Feroza Jussawalla may not return from her two year LWOP.
**Graduate programs:** The curricular offerings listed in the catalog accurately represent a vital disciplinary program in the medieval period for perspective students searching for a professionally oriented graduate program.

**Undergraduate program:** Although we no longer have the administrative or developmental responsibilities for the undergraduate minor in Medieval Studies, we are nonetheless responsible for offering a full undergraduate course of study for students who choose the English option for the Minor in Medieval Studies, and for the undergraduates in English.

Our combined Graduate and Undergraduate offering range from four to six courses, five being the desired number in the Fall (usually one or two in OE, the rest in ME), generally following a set template. We usually offer six in the Spring inclusive of the Viking Mythology class which continues to draw its 60+ students. Enrollments remain stable, taking the 21-day count of Fall 2008 semester: 248 Tolkien (18); From Beowulf to Arthur (22); undergraduate Chaucer (30); Middle English Language class (17); 650 Beowulf and the Old Testament (7). Enrollments for Spring 2009: 305 Viking Myth (61); 350 Medieval Tales (27); 351 Chaucer (32); 547/447 OE Prose (13); 551/451 Uppity Medieval Women (46); 445/545 (of interest to Medievalists, five enrolled) (18); 551 (Restricted class) Genasis A 5.

*Helen Damico handles scheduling of the English medieval courses.*
DEPARTMENT OF FOREIGN LANGUAGES AND LITERATURES
ANNUAL REPORT
JULY 1, 2008-JUNE 30, 2009

Submitted by Professor Natasha Kolchevska, Chair, October 1, 2009

MILESTONES:
Carmen Nocentelli (Comparative Literature/Cultural Studies; ½ time appt. with English) received a Fellowship from the National Endowment for the Humanities to conduct research on her book project at the Newberry Library in Chicago, IL during AY 2008/9.

Natasha Kolchevska (Russian and Department Chair) received, for the second year in a row, a teaching grant of $98k for the STARTALK program in Arabic and Chinese for high school students.

Walter Putnam (French) was on sabbatical during AY 2008/2009.

Warren Smith (Classics) retired after 35+ years at UNM.

The 34th German Summer School in Taos, under the direction of Prof. Katja Schroeter, enrolled its highest number of students (56) since 1999.

Jean-Marie LeClezio, who was a Visiting Professor of French twice in the 1980’s and early 1990’s, was awarded the 2008 Nobel Prize in Literature.

The FLL website was revamped and updated. What began as a redesign of the graduate portion of the website turned into a substantial revamping of the entire site.

FACULTY PRODUCTIVITY
FLL’s 11.5 full-time tenure track faculty (down from 13.5) had a reasonably productive year in terms of books, articles and conference presentations, although it was down from previous years. Faculty members published three books, 5 articles and 2 book reviews. In addition, faculty presented 12 professional papers or invited talks at regional and national conferences and other venues. Three faculty members received outside grants for teaching and research. Faculty attributed the smaller numbers of publications both to the normal ebb and flow of their research programs and to the growing numbers of reports and assessment documents that were required of them during AY 2008/9.

SCHOLARLY WORK
Books:
Baackmann, Susanne

Cyrino, Monica

Vallury, Raji
**Articles, Book Chapters, Encyclopedia Entries:**

_Baackmann, Susanne_


_Stephen Bishop_


_Cheek, Pamela_


_Putnam, Walter_


**Book Reviews:**

_Monica Cyrino_


**Conference papers and invited talks:**

_Susanne Baackmann_


_Lorie Brau_


_Monica Cyrino_

Invited talk: Keynote Speech, Phi Eta Sigma National Honor Society, UNM Chapter, Spring Induction Ceremony, Albuquerque, NM. April 2009.


_Lorenzo F. García_

Regional conference: "Reading a Text Like a Film: Tracing Cinematic Conventions within Ancient Literature." Classical Association of the Middle West and South, Minneapolis, MN. April 2009.


Tanya Ivanova-Sullivan


Invited talk: “Don’t Leave Lexical Semantics to Intuition, or How to Approach Lexical Variation in Medieval Translations.” Dept. of Linguistics, UNM. October, 2008.

Carmen Nocentelli


Awards and grants:

Susanne Baackmann received a RAC grant of $2552 to conduct research in Germany for her book project, tentatively titled “Memories of War, Wars of Memory: The Performance of Memory in Post-War German Culture Across Gender and Generations.”

Tania Ivanova-Sullivan participated in the Third Summer Research Institute for Heritage Speakers, University of Illinois; the application process was competitive, based on the submission of a research project that will be run at the home institution of the participants in the Fall of 2009.

Natasha Kolchevska received an award of $99,493 from the STARTALK program, funded by the National Security Agency, to conduct Summer Institutes for High School students in Arabic and Chinese. These were held during the month of June, 2008. Institute faculty taught total of 35 students in dual and concurrent enrollment programs, and received glowing reviews from the grant’s site visit team.

Off-campus service to the profession:

For a second year in a row, Classics professor Lorenzo Garcia, who is in his second year at UNM, taught a class at the Wyoming Humanities Council Summer Classics Institute, was an invited participant in the roundtable discussion of UNM’s production of Greek Row Tragedy, and is the state Vice President (highest state office) for the national Classics association, CAMWS.

Another recent faculty addition, Tania Ivanova-Sullivan, served as a referee for the “Foreign Dictionaries” section of the Oxford University Press and submitted her final review of the English-Bulgarian Mini Dictionary, to be published by the end of 2009.
Lorie Brau, Associate Professor of Japanese, gave a lecture-demonstration (including a full performance in English) on "Rakugo: Japan's Sit-down Comic Storytelling" for an Oasis adult-education class in June 2009.

TEACHING:

The Department of FLL taught a full range of undergraduate and graduate courses, graduating 42 undergraduates in seven different language and area studies programs (Asian Studies, Classical Studies, French, German, Languages, Russian, Russian Studies). In addition, 10 MA degrees were awarded in French, German Studies and Comparative Literature/Cultural Studies.

The Department expanded its core offerings in Beginning Arabic and Russian by cooperating with the Dean of Students office to procure a $100k grant for ROTC cadets to take courses in these languages.

Another core course, Modern Languages 101, is now offered on a regular basis, with Prof. Ivanova-Sullivan teaching the course, which enrolled over 70 students.

FLL continued to refine its assessment instruments, and faculty members Ali, Kolchevska and Peters-Newell attended national conferences and workshops for training in assessment and language teaching methodology.

FLL faculty (Bishops, Brau and Kolchevska) were critical to the creation and approval of the new International Studies major.

2009 also saw the successful completion of two study abroad programs sponsored by FLL. In December 2008/January 2009, Dr. Muhamed Ali took a group of 12 students on the first ever winter intersession Study Abroad program in Egypt, co-sponsored by Africana Studies. In May 2009, Dr. Stephen Bishop had 22 students participate in FLL's 5th study program in France, Paris to Provence.

German Summer School:

The 34th session of the German Summer School took place at Taos Ski Valley from June 23 to July 24, 2009. A record number of 56 students (the highest since 1999) attended this year's program. This constitutes a 57% increase in student numbers from 2006-2007, and growth in the last two years has been at 20%+. (2007: 47 students, 2008: 49 students). Among these were 18 undergraduate and graduate students from UNM. This is the third year in a row that such a high number of students from UNM attended, and all undergraduate students from UNM declared German as their major. Given the small size of the program, this impressive number testifies to the appeal and strengths of the German program within FLL. Out-of-state participants included 13 students from our consortium partner, California State University at Long Beach, 7 students from Texas, and 6 students from Arizona, as well as smaller numbers from other universities across the country, including Haverford College in Pennsylvania. With its geographical reach and outreach programs, the GSS showcases UNM on a national level.

Since 2009 marked the anniversary of several republics in German speaking countries, this year’s program focused on the topic, “The Republic as Ideal and Reality in German speaking Cultures.” Courses ranged from “The Concept of the Republic in 18th century German literature” and “The Swiss Republic as a Model for Europe,” to “The
Berlin Republic: Germany after the Fall of the Wall,” thus ensuring coherence of the curriculum. Three full-time faculty, four half-time faculty, and four Teaching Assistants contributed to the success of the program. The German Summer School received financial support from UNM ($26,000) and grant money from the Max Kade Foundation ($30,000), the Goethe Institute ($3,300), the Austrian Cultural Forum ($3,500), Switzerland ($4,100), and the Taos Ski Valley ($3,380). The generous contributions of these supporters, UNM’s ongoing support of the GSS, and the high number of students attending ensured a balanced budget for the GSS once again.

Graduate student news:
Fourteen graduate students presented the results of their research at the 1st annual Cultural Studies Graduate Symposium in April 2009. The 2-day conference, titled “Fantastic Projections: Crisis, History, and the Aesthetic Imagination,” was attended by over 50 people from UNM and across the country. Presenters included graduate students from UCLA, University of Iowa, Temple University, SUNY/Buffalo, and the University of Virginia.

While many of our graduate students are New Mexico natives and/or UNM graduates, the Department continues to attract graduate students both nationally and internationally, with students coming from Florida, California, and Washington State, as well as international students from Madagascar, Germany, Egypt, Cameroon, England, France.

Outreach and public lectures (all free and open to the public):
- On September 19, 2008, FLL sponsored the Mid-Autumn Chinese Festival
- On September 23, 2008, the FLL co-sponsored a talk with the International Studies Institute on “How to Deter Russia and protect the Near-Abroad.”
- October saw three presentations by FLL faculty and guest speakers:
  - Oct. 1—Raji Vallury, Professor of French, UNM, “Madness and The Night if the Poetic Community,” co-sponsored by the Feminist Research Institute.
  - Oct. 1—Charlotte Klonk, Professor of German & CL, University of Minnesota, “Between Heaven and Earth—Early Aeroplanes and Old Landscapes”.
  - Oct. 30—Cultural Studies Panel on What is Terror?
- On November 12, 2008, FLL co-sponsored a series of lectures commemorating 90 years of the republic of Austria, organized by Prof. Peter Pabisch, Emeritus.
- On February 18, 2009, Tania Ivanova-Sullivan presented a talk on “Crime, Politics and the Free Market” for the Cultural Studies program
- On March 25th, FLL co-sponsored an FRI panel discussion, “Interdisciplinary Perspectives on Muslim Women”
- April was a busy month for FLL:
  - April 6th—the CL and French programs co-sponsored a talk by Prof. Yves Citton, University Stendhal Grenoble 3, on “Teaching Literature as Collective Improvisation in the Age of Cognitive Capitalism.”
  - April 18th—UNM’s 10th Annual World Language Expo, “Open Your Mind to the World of Possibilities,” attended by over 500 high school students from New Mexico and Texas
April 23—Professor Nicholas Roe, Univ. of St. Andrews in Scotland, presented a talk, co-sponsored by the English Dept., on “Rhinoceros Among Giraffes: Keats and the Elgin Marbles.”

Prof. Cyrino’s Classics 107 course (a core course) was pleasantly surprised in April 2009 by the visit of actor Ray Stevenson, lead in the HBO series “Rome.” This came on the heels of a guest lecture for the 800 students in the class by Prof. Jonathan Stamp, from Oxford University, who was the lead historian for the HBO series “Rome.”

Perhaps the most exciting event in April 2009 was the inaugural Cultural Studies Graduate Student Conference on the theme of “Fantastic Projections: Crisis, History and the Aesthetic Imagination,” attended by 40 students, faculty and community members.

In spite of budget cuts and rescissions, FLL continues to actively co-sponsor lectures and conferences with a number of UNM units, including the International Studies Institute, the Dept. of English, and the Law School. These events are important in that they scholars, students and community in a broad range of topical and historical cultural issues. Attendance has ranged from 10 to 40 participants.

Staff:
No major staff changes.

New or ongoing initiatives:

- Receive permission to recruit for a German tenure track position, which has been vacant for 3+ years.
- Reduce language class sizes to improve student retention and success, and to conform to guidelines set by the Assn. of Departments of Foreign Languages. Some of our beginning language classes have enrolled 30+ students per section, which is twice what the guidelines that our national language teaching association (ACTFL) recommend.
- Increase number of contact hours to 5 per week for students in beginning and intermediate levels of those languages designated as critical by the Department of Defense, Arabic, Chinese and Russian, as well as Japanese.
- Strengthen recruitment efforts for FLL graduate programs.
- Expand study abroad programs sponsored by FLL and its faculty.
- Continue to requalify for STARTALK grant, which offers summer institutes in the critical areas of Chinese and Arabic languages to high school students.
Developments During the Academic Year

Overview: The Department started the Academic year with six tenure track positions and is now at 6.5 FTE. The major agenda for the Department was to implement the curriculum revision that resulted from the programmatic review the previous year. A second major task was to hire a new department chair. The Department was successful in the curriculum revision but not in hiring a chair.

Planning and Curriculum Revision: A review and planning process took place in the Department over a two year period. During the 2005-06 academic year the Department went through a process of strategic planning. Three outside consultants were brought in to advise us. This process identified a new emphasis for the Department. The Geography Department’s new direction brings the Department into the center of the discipline at the intersection between human geography, physical geography, and geographic information science. During the 2006-07 academic year the Department developed an implementation plan. The plan included revisions to the strategic plan, a complete revision of graduate and undergraduate programs, planning for a minor and graduate certificate in GI Science, an assessment plan, a facilities plan and resource needs assessment, faculty and course staffing plans, a governance document, and plans to improve campus and community visibility. The implementation plan was the focus of the academic program review that took place that year. During the past year the curriculum revisions were put through the University’s approval process and are now part of the catalog.

New Mexico Geographic Alliance: The New Mexico Geographic Alliance continues its outreach to K-12 teachers in New Mexico. The Alliance continues its operations through a National Geographic emergency maintenance grant.

Speaker series: This year’s public lectures were presented on the following topics:


Dr. Leslie Duram – Geography, Pragmatism and Environmental Decision Making.

Dr. Karen Humes – Integrating Ground Data and Remote Sensing to Quantify Controls on Land/Atmosphere Interactions—Some Examples from the North Rockies

Dr. Lucas Joppa – Re-assessing the Effect of Protected Areas in Conservation: Park Geography Leads to Success or Failure.

Dr. Melinda Laituri – Multiple High Magnitude Disasters, Geospatial Technologies and the Internet.
Dr. Andrew Sluyter – Transnational Communities and Communal Lands: The Case of Barbuda.

Dr. Elizabeth Wentz – Computation Spatial Analysis Techniques for Better Understanding Urban Water Demand.

**Progress on Plans and Recommendations from Academic Program Review**

*Implementation of Program Review Recommendations:* The Academic Program Review Team had recommendations which the Department has been implementing. The recommendations are included below in italics:

1) *Continue the strong departmental leadership by recruiting from outside UNM a department chair with expertise in environmental management/GIScience.* The Department attempted to hire a chair this past year but the search failed.

2) *Reduce the scope of courses of the departmental curriculum and increase the depth of course offerings with a structured, sequenced curriculum in environmental management and GIScience at the undergraduate and graduate levels.* Accomplished this past year.

3) *Increase the technical and administrative support for the department with a second (preferably full time) office staff person, a computer lab technical person, and a person to handle undergraduate and graduate advising.* No progress made.

4) *Provide additional funding of laboratories for physical geography and GIScience in terms of equipment, software licensing and support, and additional teaching assistant positions.* Some progress has been made.

5) *Identify tenured/tenure track geography faculty to be responsible for course lecture/lab coordination, teaching assistant orientation, training and oversight.* Completed this past year.

6) *Create a hiring plan for 2-3 additional faculty members in the department’s new focus areas. At least eight or nine faculty are the minimum to provide a competitive master’s degree program, especially one with scientific and geospatial technical emphases.* Hiring plan is completed.

*New Faculty:* The Department will be recruiting a new Department Chair this year. This was the number 1 priority of the Review Team.

**Appointments of Faculty/Staff**

The Department added one new Assistant Professor last year. John Carr has a specialty in urban geography, legal geography and theories of globalization. In addition he is a licensed New Mexico attorney.
Separations of Faculty/Staff

Olen Paul Matthews is 0.5 FTE in the Department starting August 2009.

Publications of the Department and Faculty

Benson, M. H.


Carr, J.N.


Cullen, B.T.

**Duvall, C.S.**


**Lane, K.M.D.**


**Zandbergen, P.**


Outside Professional Activities

Benson, M. H.

Presentations:


Carr, J.N.

Academic presentations:


Guest lectures:

University of New Mexico
Communication & Journalism 365: “History of Media”
November 13, 2008

National service:


Reviewer. New Media & Society. 2006 - present.

Cullen, B.T.

Presentations:


Cullen, B. 2008. Uranium mining in New Mexico: Perhaps they can get it right this time! Southwest Division, AAG, San Marcos, October.

National and International Service:

Member, AAG Committee on Membership (2007 - 2009).


Associate Editor, Southwestern Geographer, 1997 - 2009.

*University Service:*

Faculty Senate Curriculum Committee

Faculty Senate Library Committee

*Departmental Service:*

Graduate Advisor

**Duvall, C. S.**

*Presentations:*


*National service:*

Association of American Geographers, Biogeography Specialty Group, Judge, Graduate Student Paper Competition, March 2008, April 2009.

*International service:*


IUCN Species Survival Commission Primate Specialty Group, Member, Great Ape Subsection, 8/2003 - present.
Lane, K.M.D.

Presentations:


National Service:

Editorial Board, Historical Geography

Matthews, O. P.

Presentations:


National Service:

Chair – Nominating Committee, SWAAG, 2009.

Zandbergen, P.

Presentations:

Zandbergen, P.A. 2009. Everybody is watching everybody: Privacy implications of geospatial technologies. Invited lecture, University Libraries Faculty Acknowledgement Award, University of New Mexico, April 29, 2009.


National Service


Editorial Board Member, Environmental Health Insights, 2008 – present.

Awards:

University Libraries Faculty Acknowledgement Award, University of New Mexico, 2009.
Outside Sponsored Research

**Benson, M.H.**


**Lane, K.M.D.**


**Matthews, O.P.**

Matthews, Olen Paul, PI. with Kim Seidler, New Mexico Geographic Alliance Maintenance Grant, National Geographic Society, $50,000 (2005 - 09).

**Zandbergen, P.**


American Civil Liberties Union – Greater Miami Chapter. Availability and Spatial Distribution of Affordable Housing in Miami-Dade County and Implications of Residency Restriction Zones for Registered Sex Offenders. Principal Investigator. Co-PI is Timothy Hart, University of Nevada Las Vegas. 2008-2009. $29,500.
Department of History

Annual Report, 1 July 2008—30 June 2009

By: Patricia Risso, Chair through 30 June 2009

1. Significant developments during the academic year

Faculty

Jake Spidle retired at the end of Fall semester after nearly four decades of service to the department and university. He continues an active research agenda. In August, 2008, two new faculty members joined the department. Sarah Cornell teaches 19th century US History, including slavery, Civil War, and abolition while Erika Monahan specializes in Russia and Central Asia, covering environmental history and specializing in early modern commercial frontiers.

Ference Szasz won the honor of delivering this year’s UNM Annual Research Lecture in April, titled, “Abraham Lincoln and Robert Burns: Connected Lives and Legends.” Virginia Scharff served as president of the large and influential Western Historical Association (WHA) and delivered the presidential address in October 2008, “What’s Love Got to Do with It? A New Turner Thesis.” Linda Hall, who delivered the Annual Research Lecture in 2000, was named Regents’ Professor in May, 2009. Also this Spring, Margaret Connell-Szasz won a Teaching Excellence Award from the College of Arts & Sciences.

Sam Truett is part of a small team of scholars that won major funding from the National Endowment for the Humanities in 2008 to plan a summer research institute on the environment of the borderlands to be conducted Summer 2009. Andrew Sandoval-Strausz’s book, Hotel: An American History, won the 2008 American Historical Association-Pacific Coast Branch Book Award and Eliza Ferguson’s lead article on
domestic violence in late 19th c. Paris in the *Journal of Women's History* won the Stanley Hoffman Best Article Award of the French Politics Group of the American Political Science Association. Two of our assistant professors, Cathleen Cahill and Sarah Cornell, won prestigious Clements Research Fellowships for the Study of Southwestern America, which they will hold at the Clements Center at Southern Methodist University, 2009-2010. Melissa Bokovoy received funds from the department’s Shoemaker Endowment to teach a course on the fall of communism in Eastern Europe for the College’s International Studies Institute’s ‘Summer in Germany’ program (2009). Eliza Ferguson also received Shoemaker funds to run the UNM History Workshop next year, after Andrew Sandoval-Strausz established the successful workshop this past academic year. Barbara Reyes won Shoemaker research funds for a project on Latinas in American public service. Erika Monahan received Shoemaker funds to deliver a paper at a conference in Britain of a prestigious Russian history study group.

**Graduate Students**

A recent doctoral graduate, Chad Black, who is now in a tenure track position at the University of Tennessee, gave a genuinely *interesting* speech at the departmental graduation ceremony (May 09) and he also is making a generous donation to the department. At that ceremony, current graduate students received the department’s major awards. Shawn Wiemann won the Phillips Fellowship for an advanced dissertation student. Kent Blansett won the Woodward Fellowship that supports dissertation research on a Southwest topic. The Bohme Prize went to Rebecca Vanucci for a paper that will be submitted for review to the *New Mexico Historical Review*. 
2. Significant plans and recommendations for the near future

No one is listening, but we need to grow our faculty. Several positions are left unfilled.

**Faculty losses since Spring 2005, when we had 31 faculty members:**

death:
   Tim Moy, History of Science and Technology (not replaced)
retirement:
   Richard Robbins, Russian History (replaced by Erika Monahan)
   Noel Pugach, US Diplomatic History (not replaced)
   Jake Spidle, German History; History of Medicine, European biography (not replaced)
took other positions:
   Jay Rubenstein, Medieval History (not replaced)
   Nancy McLoughlin, Medieval History, Gender History (not replaced)
   Tom Sizgorich, endowed position in Ancient History) (not replaced)
   Jennifer Denetdale, Native American History (not replaced)
   Cynthia Radding, Latin America, Environmental History (not replaced)

**Hires since Spring 2005:**
   Jason Scott Smith, 20th c. US (replaced Farber, who left in 2004)
   Eliza Ferguson, Modern Europe (replaced Schibeci, who left Dec., 2003)
   Erika Monahan, Russian History (replaced Robbins, who retired May 2005)
   Sarah Cornell, 19th c. US (replaced Feller, who left May 2003)

Net loss: five positions, or about 16% (Of the 26 faculty members we now have, one is .25 in the department and two are .50.)

3. Appointments to faculty (none to staff)

   Sarah Cornell, PhD from NYU, 19th c. US History
   Erika Monahan, PhD from Stanford, Russian History

4. Separations of faculty (none of staff)

   Associate Professor Jake Spidle retired in December, 2008 with emeritus status.

5. Faculty Publications (the dept records this information by calendar year, CY 08)

   **Judy Bieber**
   Book review

   **Melissa Bokovoy**
   Jane Slaughter, Melissa K. Bokovoy, Patricia Risso, Patricia Romero, and Ping Yao,
Cathleen Cahill
Edited journal issue

Article

Book review

Linda Hall

Book reviews.


Patricia Risso
Books

Book reviews

Enrique A. Sanabria,

Book reviews

Andrew Sandoval Strausz
Short pieces and encyclopedia entries
1,500-word entry on “Civil Rights Acts” in Encyclopedia of the Supreme Court of the United States, David S. Tanenhaus, ed. (Macmillan Reference USA, 2008)
1,000-word entry on “Civil Rights Act of 1866” in Encyclopedia of the Supreme Court of the United States, David S. Tanenhaus, ed. (Macmillan Reference USA, 2008)

Jane Slaughter
Books.

Encyclopedia article

Jason Smith
Article
“The New Deal Order”; Enterprise & Society 9; 521-534; 2008. (peer-reviewed article; part of a roundtable on historical political economy, American Historical Association.

Book review
Ferenc Szasz

Book


Short pieces

“America’s Athenian Age,” El Palacio 113 (Fall, 2008): 38-43


Book reviews


6. Outside professional activities of staff members.
   Not applicable

7. Outside sponsored research and outside sponsored public history projects

1. Paul Hutton, TV program on the Black Hills for the Travel Channel; TV program on Kit Carson for PBS’s American Experience.


ORGANIZATIONAL:

Virginia Scharff, Director of the Center for the Southwest and Professor of History, was awarded a Beinecke Senior Research Fellowship in the Lamar Center for Frontiers and Borders at Yale University. During this time, Scharff also served as President of the Western History Association. Associate Professor of History Barbara Reyes ably served as Acting Director of the CSW for the year.

EVENTS:

During the 2008-2009 academic year, the CSW hosted the following events:

2008-2009 C. Ruth and Calvin P. Horn Lecture: Dan Flores, A. B. Hammond Chair in Western History at the University of Montana, delivered the 2008-2009 C. Ruth and Calvin P. Horn Lecture, “Art and Regional Identity in the Northern Rocky Mountain West.” The lecture took place Thursday, November 20, 2008, at 5:30 pm to 7:00 pm in Lobo Rooms the UNM Student Union Building. The lecture, discussion, and reception following was attended by between 140 and 150 guests.

2008-2009 Richard W. Etulain Lecture: Sylvia Rodríguez, Professor of Anthropology and Director of the Ortiz Center for Intercultural Studies at UNM, presented the 2009 lecture, “Acequia Communities and the Struggle for Water.” The lecture took place Thursday, February 19, 2009, in the Santa Ana Rooms of the UNM Student Union Building, from 5:30 pm to 7:00 pm. The event was so successful that the crowd of over 90 guests resulted in standing room only. A lively discussion and reception followed the lecture.

Borderlands Lecture Series: The CSW hosted a series of lectures during the spring of 2009. The series of four lectures presented scholarship on the U.S.-Mexico Borderlands region by scholars working in both Mexico and the United States.

Lecture 1: The first lecture combined the work of two Mexican historians. Lucila del Carmen León Velazco of the Instituto de Investigaciones Históricas, Universidad Autónoma de Baja California, presented, “Los Indígenas de Baja California a finales de la etapa misional: Una revisión de las Fuentes.” Martha Ortega Soto of the Departamento de Filosofía Universidad Autónoma Metropolitana, Unidad Izapalapa delivered her lecture, “Estrategias españolas para la colonización de Alta California y la respuesta de sus nativos.” Both
scholars presented their work in Spanish. The event was held Thursday, February 5, 2009, in the Santa Ana Rooms of the UNM Student Union Building, at 3:00 p.m.

**Lecture 2:** Mexican scholar Dana Alexandra Levin Rojo, of the Universidad Autónoma Metropolitana, delivered the second lecture, “Land Struggle and Community Organization in Northern New Mexico After Reies Lopez Tijerina.” The event was held Thursday, March 5, 2009, in the Santa Ana Rooms of the UNM Student Union Building, at 3:00 p.m.

**Lecture 3:** The third lecture, delivered by Dr. Cristina Durán, Professor of Social Work New Mexico Highlands University, was entitled, “Re-Mexicanizing the Streetscapes of New Mexico.” The event was held Thursday, April 2, 2009, in the Santa Ana Rooms of the UNM Student Union Building, at 3:00 p.m.

**Lecture 4:** The fourth and final lecture was given by Sarah Cornell, Assistant Professor of History University of New Mexico. Her lecture was titled, “From Borderlands to Transnational History: Race, Slavery, and Freedom in the U.S. South and Mexico, 1810-1910.” The event was held Thursday, April 30, 2009, in the Santa Ana Rooms of the UNM Student Union Building, at 3:00 p.m. and was the best-attended of the four lectures with a full room of over 50 people.

**Co-sponsorship:**

The CSW was a proud co-sponsor of the Transnational Americans Lecture Series, organized by the UNM History and American Studies Departments, and the Latin American Iberian Institute.

The CSW also co-sponsored with UNM’s Historic Preservation and Regionalism Program a lunch-hour conversation entitled, “The Future of the Past: Historic Preservation and the Next Urbanism.” The panel members included Thomas Carter, Graduate School of Design University of Utah; Virginia Scharff, Professor of History and Director of the Center for Southwest Research at UNM; and Chris Wilson, School of Architecture and Planning, UNM.

The CSW has played an ongoing role as cosponsor and Department of History liaison for two million-dollar Teaching American History grants, funded by the U.S. Department of Education, in partnership with Albuquerque area public schools. We continue to work to create more opportunities for advanced study in history here at UNM for public school teachers.

**FUTURE EVENTS:**

The CSW continues to pursue partnerships with other programs within the University of New Mexico, as well as to seek collaborations with other research centers and cultural institutions. We are pleased to announce that we will co-sponsor and host

Plans for the 2009-2010 academic year include the Clements Center Workshop October 22-25, 2009; the C. Ruth and Calvin P. Horn Lecture (to be held Thursday April 22, 2010, and delivered by Steve Aron, professor of history at UCLA and executive director of the Institute for the Study of the American West at the Autry National Center; and the Richard W. Etulain lecture, to be presented by Jesse Aleman, Associate Professor of English here at UNM. We also hope to sponsor other events as our budget allows.
Name of Division: Latin American Studies

Period Covered: July 1, 2008-June 30, 2009

Submitted by: Kathryn McKnight, Associate Director for Academic Programs, LAII

Significant Developments of the division

- Developed strong and constructive working relationships between new Associate Director and other senior LAII staff as part of LAII restructuring.
- Drafted response to external review and action plan as part of APR process.
- Drafted outcome assessment plan to be implemented in AY 09-10.
- Three MA students completed newly-created graduate research assistantships, working closely with LAS faculty, making significant contributions to the compiling and editing of two forthcoming books, and presenting a conference paper.
- Secured significant funding for 22 of 47 incoming and continuing graduate students, ranging from a $2,000 scholarship to 18 hours tuition credit to full tuition plus stipend. Funding sources include NM Legislative Special Appropriation, HED, Anderson Schools of Management, New Mexico Scholars, and the Department of Spanish and Portuguese.

Significant plans and recommendations for the future

- Add dual degree in MALAS/MPH.
- Add MALAS concentration in Communication.
- Strengthen MA concentration in Human Rights, given recent faculty losses.
- Decide to reopen admissions to the PhD in LAS or discontinue the degree.
- Approve and implement 3-year SLO assessment plan.
- Develop team-taught interdisciplinary gateway course for the MA in LAS.
- Develop 200-level introduction LAS feeder course for the major.
- Assure regular offering of LTAM 400, the upper-level multidisciplinary humanities and social sciences courses in LAS.
- Increase number of graduate assistantships granted by the LAII from 14 to 17.
- Continue to work with the College of Arts and Sciences on replacing LAS faculty lost over past three years in Anthropology, Art History, Political Science, Sociology, and Spanish and Portuguese.
Appointments to faculty/staff

- Kathryn McKnight, appointed Associate Director for Academic Programs, LAII

Separations of faculty/staff

- Sherman Wilcox, Acting Director of Latin American Studies, under the rubric of his position as Interim Associate Dean, College of Arts and Sciences.

Publications of the division; publications of individual faculty/staff

Publications of the faculty, including the Associate Director, are reported by individual academic departments to which they belong.

Outside professional activities of staff members

The outside professional activities of the Associate Director related directly to her faculty position in the Department of Spanish and Portuguese, this year, and thus were reported in that department’s annual report, leaving only the activities of the Academic Program Manager, Amanda Wolfe, to report here.

Amanda Wolfe, Academic Program Manager:


- 2009 – present, Vice President/President-Elect, Consortium of Latin American Studies Programs. "The consortium is comprised of Latin American centers/institutes from 57 universities, which coordinate their efforts to support teaching and research on Latin America by sponsoring workshops at national conventions, developing curricular materials, and promoting public and private funding for Latin American studies.

- 2009, Chair and Organizer, “Perspectives on Required Gateway and Methods Courses in Interdisciplinary Graduate Programs," Latin American Studies Association meeting, Rio de Janeiro, Brazil.


Outside sponsored research (include name of sponsor, amount, purpose, of grant, duration)

None
1. Significant developments during Academic Year 2008-2009

Through a generous gift from the late Selma Greenberg, the department established the Joseph Greenberg Fellowship Endowment, currently estimated at $2,100,000. The department made its first scholarship award to doctoral student Ahrim Kim.

The State Legislature continued funding of the Navajo Language Program that was initiated through Legislative Priority funding in its 2007 session. The Legislative funding authorized in the 2009 session totaled $100,000.

Dr. Sherman Wilcox served as Associate Dean for Curriculum and Instruction, College of Arts & Sciences, during AY 2008-2009.

Dr. William Croft was an invited plenary speaker at the Second International Conference on Cognitive Semantics, Suzhou University, Suzhou, China.

Dr. Caroline Smith was an invited professor at the ICAR (Interactions, Corpus, Learning and Representations) Laboratory at the École Normale Supérieure - Lettres et Sciences Humaines in Lyon, France.

Dr. Phyllis Perrin Wilcox Endowed Scholarship topped $15,000. First award granted.

Drs. Sherman Wilcox and Phyllis Perrin Wilcox were invited speakers at the German Linguistics Society conference in Bamburg, Germany.

Dr. William Croft was an invited speaker at the Workshop on Building Integrative Models of Linguistic Change, Santa Fe Institute.

Dr. Melissa Axelrod, with graduate students and community collaborators, presented their critical language revitalization work on Nanbê at the Stabilizing Indigenous Languages Symposium, Flagstaff, AZ.

Dr. Catherine Travis was Visiting scholar, University of Melbourne, Department of Linguistics, January-June 2009.

Dr. Phyllis Perrin Wilcox and Dr. Sherman Wilcox were invited speakers at the Third International Conference on Disability and Rehabilitation, Riyadh, Saudi Arabia.

Erin Wilkinson was the first deaf student to graduate from the doctoral program in linguistics. Dr. Wilkinson is now Assistant Professor of Linguistics, University of Manitoba.

2. Significant plans and recommendations for the near future
The department plans to continue to build the Navajo Language Program with the goal of offering a B.A. in Navajo Language and Linguistics.

The department recommends that the College of Arts & Sciences respect the recommendations made by the Academic Program Review and acknowledge the critical need for faculty hires in core areas of linguistics and in the Signed Language Interpreting Program.

3. Appointments to faculty and staff

Lorraine Manavi was hired to replace Roseann Willink in the Navajo Language Program. Manavi taught previously at San Juan College.

Dawn Myers was hired to replace Karen Naughton in the Signed Language Interpreting Program. Myers previously worked as a professional interpreter and speech/language therapist with the Albuquerque Public Schools.

Yvonne Martinez-Ingram was appointed as Department Administrator effective April 1, 2009.

4. Separations of faculty and staff

Nancy Montoya resigned as Department Administrator, effective January, 2009.
Roseanne Willink retired as a Lecturer II, effective June 30, 2009.
Karen Naughton retired as Lecturer III, effective June 30, 2009.

5. Publications of faculty in Linguistics

Croft, William

"Inferring universals from grammatical variation: multidimensional scaling for typological analysis." Theoretical Linguistics 34, 1-37.

"Multidimensional scaling and other techniques for uncovering universals [reply to commentaries]." Theoretical Linguistics 34, 75-84.


Morford, Jill P.

Shaffer, Barbara


**Travis, Catherine**

“Locational adverbs in non-spatial settings: The case of *ahi* in Colombian Spanish conversations.” In Curnow (ed.), *Selected papers from the 2007 conference of the Australian Linguistic Society*.

**Wilcox, Phyllis**


**Wilcox, Sherman**


6. **Outside professional activities of staff members**

**Melissa Axelrod**

Actively engaged in native language revitalization projects in local New Mexico communities.

**William Croft**


**Jill Morford**


Bonnie Rudy
Actively involved in local, state, and national deaf community organizations (American Sign Language Teachers Association, National Association for the Deaf, Conference of Interpreter Trainers, Community Outreach Program for the Deaf).

Josephine Santiago
Invited to Siena, Italy to film and produce a DVD for the Siena School for the Liberal Arts of Deaf poets from around Italy presenting their Italian Sign Language poetry.

Barbara Shaffer

Caroline Smith
For the month of May 2009, Dr. Smith was an invited professor at the ICAR (Interactions, Corpus, Learning and Representations) Laboratory at the École Normale Supérieure - Lettres et Sciences Humaines in Lyon, France. She gave an invited lecture and participated in a workshop on language and interaction.

Catherine Travis

Yo and I in New Mexico: Accounting for variation in evaluating convergence via code-switching. Linguistics Program Seminar Series, Monash University, Melbourne, Australia (co-authored with Rena Torres Cacoullos)

Anaphora and deixis in discourse: A case study of Spanish locational adverbs. Linguistics Program Seminar Series, Monash University, Melbourne Australia. (co-authored with Timothy Jowan Curnow)

Clause-combining in Spanish cleft constructions. Research Centre for Languages and Cultures, University of South Australia. (co-authored with Timothy Jowan Curnow)

Phyllis Wilcox


Commission on Collegiate Interpreter Education (CCIE). Commissioner and Rater. National accreditation body for signed language interpreting programs
in the United States.

Sherman Wilcox

Grant reviewer for National Science Foundation, National Institutes for Health, and European Science Foundation.


7. Outside sponsored research

Melissa Axelrod
Nanbé Tewa Language Revitalization, $203,840, National Science Foundation, continuing.

Collaborative Research: Ixil Mayan, National Science Foundation, continuing.

Jill Morford
Center for Visual Language and Visual Learning, $581,945, National Science Foundation (5-year grant)

Caroline Smith
Dissertation grant for Ana Medina-Murillo, $10,957, National Science Foundation

Catherine Travis
Research Allocation Committee, University of New Mexico. “Code-switching and variable subject expression in New Mexico,” $6,860 (Co-PI: Rena Torres Cacoullos)

8. Students’ professional activities

Emily Haynes was chosen from a pool of two hundred applicants to be one of thirty members of the support staff for Registry of Interpreters for the Deaf national conference. She also received an award of $250 from the New Mexico Registry of Interpreters for the Deaf to defray costs for the conference.

The graduate student organization “High Desert Linguistic Society” sponsored the 8th HDLS conference, November 6-8, 2008.

Fellowships and Awards

Robert Young Scholarship Undergrad recipient: Wyndsor Yazzie  Graduate recipient: Michele Kiser

Phyllis Perrin Wilcox Endowed Scholarship The first annual award of $750 was presented to
Emily Haynes.


Emily Haynes received the Research and Publication Award from the Signed Language Interpreting Program.

**Masters Theses**


**Doctoral Dissertations**

Angus Grieve-Smith, *Modeling the Spread of ne ... pas in French*

Erin Wilkinson, *Typology of Signed Languages: Differentiation Through Kinship Terminology*


9. **Undergraduate and Graduate study in the Department of Linguistics**

**Undergraduate Students 2008-2009**

124 students are registered as Majors in Linguistics. 72 students are enrolled in the BS degree in Signed Language Interpreting. 10 Students are enrolled as Navajo minors

**Graduate Students 2008-2009**

The Department of Linguistics has 13 students in the MA program and 31 students in the PhD program. In addition, we have 13 Educational Linguistics Doctoral Program jointly administered with the College of Education

*Admissions 2008-2009: 14 PhD and 15 MA students were offered admissions*

10. **Graduates from the Department of Linguistics**

*Bachelor of Arts in Linguistics*  
6 graduates

*Bachelor of Science in Sign Language Interpretation*  
12 graduates

*Master of Arts in Linguistics*  
8 graduates

*Doctor of Philosophy in Linguistics*
3 graduates

11. **Events sponsored by the Department of Linguistics**

   **Colloquium Series**

   Leland McCleary (University of São Paulo), “Social and Interactional Aspects of Brazilian Sign Language”

   Jennifer Cole (University of Illinois), “Signal-based and Expectation-based Factors in Prosody Perception”

   Gregory Anderson (Living Tongues Institute for Endangered Languages), Film: “The Linguists”

   Gregory Anderson (Living Tongues Institute for Endangered Languages), “Towards a Typology of Cognate Object Constructions”

   Teenie Matlock (University of California), “The Dynamics of Fictive Motion”

   Terence Wilson (Rutgers New Brunswick) and Oscar Krisen Buros (Rutgers New Brunswick), “Evidence-based treatment: Progress and Problems”

   Christian Meissner (University of Texas El Paso), Memory for Own and Other Race Faces: Using a Theoretical approach to inform practice in eyewitness Identification”
The Department of Mathematics and Statistics continued to meet the demands of its broadly defined missions in education, research, and service during the 2008-2009 academic year.

1. Significant Developments during the Academic Year, 2008-2009

- Including multiple year funding, our research funding was approximately $10,728,926 for 2008-2009; this is an increase from $6,035,126 last year. We have been very successful with our NSF funding in ($750,000.00) to support our Mentoring through Critical Transition Points (MCTP) program. This program, designed to attract students to our graduate program since the Summer of 2008.

- Total 21-day enrollment for the AY was 14,508 students, a small increase over the previous AY total of 14,407 students. There were 7,247 students enrolled fall semester, 6,271 students enrolled spring semester, and 990 students enrolled in summer session.

- The Department of Mathematics and Statistics awarded a total of 36 BS degrees, 22 MS degrees, and 15 Ph.D. degrees for AY 2007-2008.

- Dr. Janet Vassilev and Dr. Dimiter Vassilev continue to administer the PNM-UNM Mathematics Contest which has been funded by PNM continuously since 1996. The math contest is open to all New Mexico students in grades 8 through 12. PNM has agreed to continue its financial support, now at $17,000 each year, through 2011. The funding has enabled us to offer cash prizes, books, and a scholarship to the winning contestants. Professor Alexander Solynin from Texas Tech was the guest lecturer at the final round of competition. We took advantage of the statewide high school PNM-UNM Math Contest mailings and sent flyers about our web site to high school teachers. We anticipate that this will help teachers state-wide prepare their students for UNM. Our finals from past years are on our web site so that teachers and students will know UNM’s expectations.

2. Plans and Recommendations

- An academic program review of the department was conducted April 21-23, 2008. After consultation with the executive committee of the department regarding the program review last AY, it was determined that the faculty generally agreed with the assessment and recommendations expressed in the report. A response to the report was sent to the A&S Dean’s office for review.

3. Appointments to Faculty/Staff

- The following post doctoral associates were hired in May 2009 to teach and conduct research in AY09-10:

  1. Pavlo Cherepanov
  2. Oksana Guba
  3. Luis Mata-Lorenzo
  4. Natalia Vladimirova
  5. Philip Wallstedt
• Alexander Korotkevich, Assistant Professor, was hired in May 2009 and he will start teaching in Spring 2010.

• Guoyi Zhang, Assistant Professor was hired in May 2009 to start teaching August 2009.

• Nina Greenberg was hired in June 2009 as a Visiting Lecturer to teach and coordinate Statistics classes with an effective start date of August 2009 for one year.

• Susan Niemczyk was hired in June 2009 as a Visiting Lecturer to teach and coordinate Mathematics 120 courses with an effective start date of August 2009 for one year.

• Shirley Rey Lovato was hired for the position of Department Administrator III, in October 2008.

4. Separations

• Dr. Kucharz, Professor, retired in May 2009 and became a Professor Emeritus with our department.

• John Hamm, Lecturer III, retired in May 2009.

• Winston Crandall, Professor/Part-time Instructor, retired May 2009.

5. Faculty Publications and Creative Works

Blair, Matthew

Two papers published in 2008, both co-authored with Hart Smith (University of Washington) and Christopher Sogge (Johns Hopkins University):


Boyer, Charles


Canonical Sasakian Metrics, with K. Galicki and S. Simanca, Communications in Mathematical Physics 279 (2008), 705-733.

Buium, Alexandru


Coutsias, Evangelos


Hersh, Reuben


Huerta, Gabriel


Kitchen, Richard


Book Chapters/Conference Proceedings/Reports:


Lorenz, Jens


Loring, Terry


Lu, Yan


Lushnikov, Pavel


Pereyra, Cristina

M. C. Pereyra, "Haar multipliers meet Bellman functions". To appear in *Rev. Mat. Iberoamericana*.


Simanca, Santiago

Canonical Sasakian Metrics, with K. Galicki and S. Simanca, *Communications in Mathematical Physics* 279 (2008), 705-733.


Steinberg, Stanly


Sulsky, Deborah


Wearing, Helen


6. Outside Professional Activities of Staff Members

**Dann Brewer**, Systems Analyst III, was a member of ITS UNM group and the Root Managers cooperative. He also transferred all information from our departmental server to a new departmental Apple system server. This is an ongoing process.

**Sterling Coke**, Unit IT Support Manager, was a member of the implementation team for Banner Report Rapid Redesign, the IT agent representing A&S, and a member of the Information Architecture group, and the IT UNM group

**Claudia Gans**, Administrative Assistant III, proctored the National Engineering Exams for the NCEES

**Roxanne Littlefield**, Coordinator of Program Advisement, was part of the A&S and University College advisement team for NSO, developed and went live with the on-line mathematics placement program, the electronic transfer evaluation requests, and the departmental student database.

**Shirley Rey Lovato**, Department Administrator III, was on the UNMJobs implementation team for faculty hiring procedures.

**Gail Mercer**, Senior Fiscal Services Technician, was a member of the UNM A&S Staff Development Committee.

**Seth Pershan**, Systems Analyst II, assisted in the transfer of information from our departmental server to a new Apple system server.
Developments in 2008–2009

The year saw several significant developments for the Institute. It was the second year of the revised Minor in Medieval Studies, which continued the successful trajectory begun in 2007–08. The Institute hosted a major regional conference, the annual meeting of the Medieval Association of the Pacific. It received a grant from the New Mexico Humanities Council to host its annual Spring Lecture Series on the theme “Vision and Visionaries in the Middle Ages.” During the year there were three meetings of the Medieval Work in Progress Seminar. The Outreach Program to New Mexico Secondary Schools continued to flourish and the Institute published volume 18 of the AVISTA Forum Journal, an academic periodical covering the fields of medieval art, science, and technology that has an international circulation. The Friends of Medieval Studies initiative, launched in 2007, continued to grow and to produce donations used to help fund the Institute’s programs.

The revised Minor in Medieval Studies offers students the opportunity to study the Middle Ages from a multi-disciplinary perspective. The Institute took over the administration of the Minor from the English Department in Fall 2007, at the same time that the curriculum was overhauled. A major feature of the revised Minor is the new interdisciplinary gateway course, “The Medieval World,” taught by Institute Director Timothy Graham. When first offered in Fall 2007, the course reached its enrollment cap of sixty-five several weeks before the beginning of the semester. For Fall 2008 Dr. Graham therefore increased the cap to eighty-five. The class again filled to capacity; he will increase the cap again for 2009. During the year Dr. Graham attempted to establish how many students are currently pursuing the Minor but was informed by the College of Arts and Sciences Advising Office that it is virtually impossible to track Minors accurately as students are not obliged to declare their Minors. Dr. Graham is seeking to keep his own record of students known to be pursuing the Minor.

On March 6–7, the Institute hosted the annual meeting of the Medieval Association of the Pacific, a highly respected conference that draws scholars from the United States, Canada, and Japan. Anita Obermeier was the Program Chair and principal organizer of the event, which included thirty-three sessions and a total of 102 papers. The plenary lecturers were Bonnie Wheeler of Southern Methodist University, who spoke on “Humiliation: Managing Reputation in Medieval Literature,” and Jay Rubenstein of the University of Tennessee (formerly of UNM), whose presentation was titled “Apocalyptic Narrative and the History of the First Crusade.” The program included an opening reception at St. Clair Winery and Bistro, with musical entertainment by flamenco guitarist Robert Sequoia; a banquet at Seasons Rotisserie and Grill, with a concert by Cantores Festivi; and an excursion to Acoma Pueblo. Four members of the Institute’s Steering Committee spoke at the conference: Justine Andrews on “Byzantine Painting in Frankish Famagusta: Cypriot Views on linguae francae”; Tony Cárdenas on “Salvation

The New Mexico Humanities Council awarded the Institute a grant of $5,509 to host its twenty-fourth Spring Lecture Series, held from Monday, April 27 through Thursday, April 30. The theme this time was “Vision and Visionaries in the Middle Ages.” The aim was to explore the science and literature of vision, the experience of visionaries, and major aspects of medieval visual culture with a series of presentations on topics ranging from optics as studied in the early University of Paris, Dante’s vision of the afterlife, and the writings of the first known female author in the English language. Jeffrey Hamburger, Kuno Franck Professor of German Art and Culture at Harvard University, set the series in motion with a lecture titled “Openings” in which he discussed the visual aesthetics of the book opening—the two pages that face one another when a book in codex format is opened up—as those aesthetics developed over the thousand years of the Middle Ages. Professor Hamburger also delivered the second lecture of the series, “‘As It Were’: Mysticism and Visuality,” in which he focused on a major area of his personal research, the textual and pictorial representation of visions—particularly those experienced by nuns in late medieval Germany. Katherine Tachau, Professor of History at the University of Iowa, spoke next on “Illuminating the Science of the Stars in the Thirteenth-Century Bibles Moralisées,” a presentation in which she explored visual aspects of a group of richly illuminated manuscripts produced in Paris for members of the French royal family. Professor Tachau’s early research centered on the medieval science of optics, and in a second presentation, “Light and Color, Optics and Alchemy in Thirteenth-Century Paris,” she discussed the contributions to optics by the Franciscan scholar Francis Bacon and the influence of Bacon’s work on major figures of the scientific revolution of the sixteenth century.
The fifth lecture in the series, “Dante’s Vision of the Afterlife,” delivered by Christopher Kleinhenz, Professor of Italian Emeritus at the University of Wisconsin, offered a detailed and superbly illustrated analysis of Dante’s *Divine Comedy*, the great literary masterpiece of the Middle Ages. In addition to discussing the unique way in which Dante structured his vision of Hell, Purgatory, and Paradise, Professor Kleinhenz also offered a masterly account of the historical, intellectual, and political context within which Dante lived and worked. The Thursday afternoon slot of the series was given over to a concert by UNM’s Early Music Ensemble, directed by Colleen Sheinberg of the Department of Music. Titled “Musical Visions in the Medieval World,” the concert included songs and tunes on the themes of “Visions of the Hereafter,” “Visions of the Divine,” “Pilgrims’ Visions,” “Visions and Miracles,” “Visionary Composers,” “Visions of Sin and Corruption,” “Visions of Beauty,” and “Music as Visionary Art.” The final presentation of the series offered an innovative departure from the normal format. Rather than deliver a formal lecture, Barbara Newman, who is Professor of Classics, English, and Religious Studies at Northwestern University, and a leading expert on female mystics of the Middle Ages, offered a dramatic recreation of the life and influence of Julian of Norwich, fourteenth-century hermit and mystic and the first known female author in the English language. Professor Newman’s script required the services of two actors in addition to Professor Newman herself, as well as a small choir (five members of the well-known local early music group, Música Antigua de Albuquerque). The various scenes of the performance took place against a backdrop of slides of images relevant to Julian’s life and historical context; the photography was the work of Professor Newman’s husband, Richard Kieckhefer, who is Professor of History at Northwestern. The unusual nature of this presentation brought the 2009 lecture series to a rousing conclusion.

The Spring Lecture Series has always been a popular event with the public, but the attendance on this occasion was the highest for many years. More than 1,800 people attended the event as a whole, while Christopher Kleinhenz’s lecture on Dante drew an audience of over four hundred.

The Institute’s Outreach Fellow for the year was Christine Kozikowski, a doctoral student who is pursuing the English Department’s Concentration in Medieval Studies. During the Fall semester Ms. Kozikowski presented a module on “Manuscript Production and Illumination” at Menaul School. She created a new module on “The Crusades” for presentation at Albuquerque High School. She also spoke on “Courtly Love and The Wife of Bath’s Tale” at Eldorado High School, and arranged for fellow doctoral student Douglas VanBenthuyksen to deliver a module on “Beowulf and Old English” at Manzano High School. Graduate students and faculty offered a total of seven presentations at Albuquerque Academy’s Medieval Day, held in late November. During the year Ms. Kozikowski was invited by Albuquerque Academy to develop a syllabus for a medieval summer course. She spent much of the Spring semester working up material for this course and taught it over a three-week period in June and July. We hope that we will have the opportunity to continue to participate in the Academy’s summer program in the future.

During the year the Institute held three meetings of its successful Work in Progress Seminar, a program initiated in 2007. The aim of the seminar is to offer faculty, graduate students, and visiting scholars the opportunity to speak about their current research and receive feedback from the audience. In November we welcomed Maria Panayotidi, Professor of Byzantine Art and Archaeology at the University of Athens, who was in North America as the Alexander S. Onassis
Foundation Visiting Scholar for 2008; UNM was selected as just one of three campuses for her visit. Professor Panayotidi spoke on “Thirteenth-Century Painting at St. Catherine’s Monastery, Sinai.” Her research on the icon painting of St. Catherine’s is the fruit of her long-term service as co-director of the Hellenic Archaeological Mission’s excavations on the south Sinai peninsula in Egypt. The seminar met twice during the Spring semester. In February Justine Andrews, Assistant Professor of Art History, delivered a presentation on “Gothic Cyprus: Sources and Functions of Fourteenth-Century Latin Architecture.” Her paper was based on research she had conducted between January and June of 2008, when she was the recipient of a Fulbright Fellowship to study in Cyprus. The second meeting of the semester, held in March, featured Paul Acker, the Institute’s Visiting Scholar in Medieval Scandinavian Studies, delivering a presentation on “Vikings and Pre-Raphaelites” in which he examined the influence of Scandinavian mythology on some of the major artists of the nineteenth-century Pre-Raphaelite movement. All three meetings held during the year were very well attended, with an audience of more than sixty at each session, including several members of the Friends of Medieval Studies. On each occasion a simple lunch was provided free of charge.

In November, the Institute published volume 18 of the AVISTA Forum Journal, the interdisciplinary journal of medieval science and technology that is edited by Anne Van Arsdall, Research Associate of the Institute. The issue included four articles: “Craftsmanship or the Lack of It: A Compendium of Late-Medieval Northern European Goldsmiths’ Work” by David Humphrey, Royal College of Art, London; “Villard de Honnecourt: Gothic Carpenter” by George Brooks, Valencia Community College, Orlando; “Villard’s Perpetuum Mobile” by Steven A. Walton, Pennsylvania State University; and “Materials, Preparation, and Recipes of the Medieval Illuminator” by Donald Royce-Roll, New York State School of Art and Design. The issue also provided a review of Frédéric Épaud’s De la charpente romane à la charpente gothique en Normandie, abstracts of papers on science and technology delivered at the Forty-Third International Congress on Medieval Studies held at Western Michigan University in May 2008 and at conferences held at the University of Leeds and Oxford University, and abstracts of twenty-six dissertations completed in 2006 and 2007. For the first time the cover of the journal was printed in color.

Friends of Medieval Studies, launched in the Spring of 2007, continued to expand in 2008–09, producing donations totaling between $3,500 and $4,000 that are used to help fund the Institute’s public programs. There are now over ninety individual or family members of the Friends. To show appreciation of their support, in December the Institute hosted a reception for the Friends in the Student Union Building, with a buffet supper and wine. Between sixty and seventy Friends attended the event, at which Timothy Graham delivered an illustrated presentation on “The Luttrell Psalter and Medieval Life.” Members of the Friends also regularly attend the Work in Progress Seminars.

Plans for 2009–2010
On March 11–13, 2010, UNM will host the ninth annual Vagantes conference. This is the national conference for graduate students in Medieval Studies; it will draw about one hundred participants from across North America, and perhaps also from Europe. The conference is being organized by medieval graduate students in the English and History Departments, led by Marisa
Sikes, the President of UNM’s Medieval Studies Student Association. It will feature twenty-four student papers, and plenary lectures by Institute Director Timothy Graham and by Hannah Johnson of the University of Pittsburgh. The Institute for Medieval Studies is proud to have the Vagantes conference come to UNM; previous hosts have included Harvard University, the University of Toronto, Cornell University, the University of California, Los Angeles, the University of Notre Dame, and Ohio State University.

In April the Institute will celebrate the twenty-fifth anniversary of its acclaimed Spring Lecture Series. The theme for 2010 is “Love in the Middle Ages.” The program will include lectures on troubadour love, troubadour music, courtly love and the origins of the Arthurian romances, the love affair between Heloise and Abelard, prostitution in medieval Spain, and the representation of intimacy in late medieval art; there will also be a concert by UNM’s Early Music Ensemble. The speakers will be Elizabeth Aubrey of the University of Iowa, George Greenia of the College of William and Mary, William Levitan of Grand Valley State University, William Paden of Northwestern University, Bonnie Wheeler of Southern Methodist University, and Diane Wolfthal of Rice University. The Institute has applied to the New Mexico Humanities Council for a grant to support the event. The Institute will mark the anniversary by a special exhibition on the pilgrimage to Santiago de Compostela, to coincide with the lecture series. Funded by the Xunta de Galicia (the government of Galicia, the province within which Santiago de Compostela is located), the exhibition will take place in the Herzstein Reading Room of Zimmerman Library.

The Institute will again sponsor sessions at the International Congress on Medieval Studies. Anita Obermeier will organize two sessions on “Unfinished Texts,” with papers from Sarah Baechle (University of Notre Dame, and formerly a UNM student), Joshua Eyler (Columbus State University), Tara Foster (Northern Michigan University), Jonathan Herold (University of Toronto), Tristan Major (University of Toronto), and Timothy Shonk (Eastern Illinois University). Dr. Obermeier will herself offer a paper in one of the sessions, as will Institute Director Timothy Graham. Tony Cárdenas will organize sessions on “The Apocalypse in the Middle Ages” and “Mosén Diego de Valera’s Cronica abreviada.” His speakers will be David Abeita (University of New Mexico), Nathaniel Campbell (University of Notre Dame), Micah Erwin (University of Texas), Susan Rauch (Texas State University, San Marcos), Wendell Smith (Dickinson College), and Aaron Taylor (University of New Mexico); Dr. Cárdenas will also offer a paper himself. Lisa Myers, a doctoral student in English, will be the Institute’s Graduate Student Prize Winner and will speak on the Robin Hood legends.

The Institute’s Visiting Scholar in Medieval Scandinavian Studies for Spring 2010 will be Geoffrey R. Russom, Professor Emeritus of English at Brown University, an expert in Old English versification and Old Norse literature. Dr. Russom recently retired from Brown, where he taught from 1972 until December 2008.

Personnel

The Institute continues to function without the support of a dedicated staff person, as has been the case since October 2006. The College of Arts and Sciences provides administrative support to process financial transactions, but the Institute must call upon the resources of its Director, its
ten-hour-a-week graduate assistant, and the five members of its Steering Committee to fulfill every aspect of its demanding mission of curriculum delivery and public programs. Thanks to the determination of all involved, the Institute has continued to flourish and be extremely active, contributing significantly to campus life and to UNM's national and international reputation. Adequate staff support is, nevertheless, a strong and continuing need.

Paul L. Acker was the 2009 Visiting Scholar in Medieval Scandinavian Studies, jointly sponsored by the Institute and by UNM's Department of English Language and Literature. Dr. Acker is Professor of English at Saint Louis University and is an expert on Old English and Old Norse literature as well as being a published poet. While at UNM for the Spring semester, Dr. Acker taught the popular course “Viking Mythology” (English 305), which on this occasion produced an enrollment of sixty-one students. To welcome him to the UNM community of medievalists, a reception in his honor was held at the home of Timothy and Marian Graham in Corrales. During his stay, Dr. Acker spoke to the Work in Progress Seminar and also traveled to Tempe, AZ, to deliver a research presentation at the Arizona Center for Medieval and Renaissance Studies.

The departure of Assistant Professors of History Thomas Sizgorich and Nancy McLoughlin in Summer 2008 to the University of California, Irvine, has had a severe impact on the History Department's ability to offer an adequate number of medieval courses and, in particular, has threatened the Department's graduate programs in ancient and medieval history. Another medievalist, Jay Rubenstein (now a MacArthur Foundation Fellow and Associate Professor at the University of Tennessee), left UNM in Summer 2006. Timothy Graham is now the only medievalist in the History Department and, because of his administrative responsibilities, teaches just one course each semester. As a result of significant budgetary constraints throughout the University, there was no opportunity to launch faculty searches during the year, nor does it seem likely that searches in the ancient and medieval fields will be authorized in 2009-10. As a result, it has been necessary to discourage potential graduate students from applying to the History Department's programs at the very time when the reputation built up in previous years has led to increasing numbers of inquiries. The hiring of new faculty continues to be an urgent priority.

Publications, Conference Presentations, and Other Professional Activities

For the sixth consecutive year, the Institute sponsored sessions at the International Congress on Medieval Studies held on the campus of Western Michigan University. The Forty-Fourth Congress took place from May 7 through May 10. Justine Andrews organized a session on “Medieval Famagusta” that featured papers by herself on “The Role of Armenia in the Visual Culture of Medieval Famagusta,” by Maria Paschali (Courtauld Institute of Art, University of London) on “Innovations in the Medieval Painting of the Greek Cathedral in Famagusta,” and by George Kellaris (McGill University) on “The Cathedral of Saint Nicholas, Famagusta, and the Question of the German Monuments.” Tony Cárdenas’s session on “Medieval ‘Best Sellers’: Spain” included papers by Isidro J. Rivera (University of Kansas) titled “Teodor in Print: Assessing the Concept of Best Seller from Manuscript to Print,” by Aaron Taylor (University of New Mexico) titled “A Tale of Two Tales: The Fate of Arnalte y Lucenda and Grisel y Mirabella,” and by Cristina González (University of California, Davis) titled “And with how
much exactness they describe everything": *Enrique Fi de Oliva, Tablante de Ricamonte, Don Quixote de la Mancha.*

Anita Obermeier was the organizer of three Congress sessions sponsored by the Consortium for the Teaching of the Middle Ages; she herself presided at two of those sessions, on “Teaching Dante.” Tony Cárdenas gave a paper on “Alfonso VI’s Legacy in History, Literature, and Legend: From Lap to Lap” in a session on the eleven-hundredth anniversary of the death of Alfonso VI of León-Castile. Timothy Graham’s paper, “Parker, the Web, and Anglo-Saxon Studies,” was included in a session dedicated to the Parker-on-the-Web manuscript digitization project, which is dedicated to providing scholars with access to complete digital facsimiles of the great collection of medieval manuscripts at Corpus Christi College, Cambridge. Leslie Donovan participated in a roundtable panel on “Teaching Tolkien.” The Institute’s Graduate Student Prize Winner for the year was Douglas VanBenthuysen, a doctoral student in English, who delivered his winning paper, “John Mitchell Kemble: From Broadswords to *Beowulf*,” in a session on “*Beowulf* after the Middle Ages.” The Institute covered his travel expenses and the Congress Committee at Western Michigan waived his registration and accommodation charges. Marisa Sikes, also a doctoral student in English, delivered her paper on “Grendel’s Mother: An Examination of Martial Mourning” in a session on “Mourning Mothers.” Christine Kozikowski of the English Department offered a presentation titled “Actions Speak Louder Than Words: Silence and Unspoken Communication in Gower’s *Confessio Amantis.*” David Lawrence of the English Department offered his paper on “Gerald of Wales and the Monstrous” in a session on “Cross-Cultural Contacts: Ireland and the Anglo-Normans.”

Two doctoral students in the History Department gave papers at the Fifteenth Annual Conference of the Arizona Center for Medieval and Renaissance Studies held in Tempe, AZ, in February. Yulia Mikhailova spoke on “Erotic Images, Female Visionaries, and the Devil in Hell.” Donna Ray’s paper was titled “Christine de Pizan’s Vision of the Female Trinity.” Both presentations were included in a session on “Vision, Visions, and Gendered Identities” in which the third speaker was Nancy McLoughlin, formerly Assistant Professor of History at UNM.

During the year, Institute Director Timothy Graham published his article “Glosses and Notes in Anglo-Saxon Manuscripts” in *Working with Anglo-Saxon Manuscripts*, edited by Gale R. Owen-Crocker (Exeter: University of Exeter Press), pp. 159–203. In August he offered the Albuquerque OASIS Group a lecture on Dante’s *Inferno* titled “To Hell and Back with Dante.” He delivered a second OASIS presentation, “Medieval Manuscripts: An Inside View,” in November. During that same month he traveled to the University of Minnesota to deliver a lecture and present a workshop to the university’s Center for Medieval Studies. The lecture, “Paleography, Codicology, and Pedagogy: The Genesis of *Introduction to Manuscript Studies,*” addressed the production of his and Raymond Clemens’ book on manuscript studies, published at the end of 2007. The workshop, “A Rediscovered Manuscript of Anglo-Saxonists William and Elizabeth Elstob,” centered on a research project on which Graham has been working since 2005. At Albuquerque Academy’s Medieval Day, held the Monday before Thanksgiving, he spoke on “The Vikings.” In mid-February Graham traveled to Tempe, AZ, to lead a half-day pre-conference workshop on medieval manuscript studies at the annual meeting of the Arizona Center for Medieval and Renaissance Studies. At the end of March he was a respondent in a session devoted to his and Raymond Clemens’ book at the annual meeting of the Medieval
Academy of America, held in Chicago.

In September, Justine Andrews, Assistant Professor of Art History, spoke to UNM’s Osher Lifelong Learning Institute on “Sculpting Cathedrals: The Rebirth of the Figure in the High Middle Ages.” She was an invited participant at the conference on “Medieval Famagusta” held in Nicosia, Cyprus, in late October; she delivered a paper on “The Role of Genoa in the Visual Culture of Famagusta.” She received a College of Fine Arts Professional Development Grant to participate at the International Congress on Medieval Studies in Kalamazoo, MI, in May.

Tony Cárdenas, Professor in the Department of Spanish and Portuguese, received a grant of $2,500 from the UNM Research Allocations Committee to support his work on an edition of the Crónica abreviada of fifteenth-century Spanish historian Mosén Diego de Valero. In addition to his presentations to the Medieval Association of the Pacific and the International Congress on Medieval Studies he delivered three conference papers during the year: “¡Dios, ¿qué buen vassallo, si oviesse buen señor!’ Alfonso VI en el siglo XVI,” at the Congreso Internacional XII Jornadas Medievales held at the Universidad Nacional Autónoma, Mexico City, in late September; “Codfish in Don Quijote or What’s a Nice Basque Like You Doing in a Novel Like This,” at the annual meeting of the Modern Language Association held in San Francisco in late December; and “The Challenge of ‘A Wretched Manuscript’: The Madrid Copy of the Libro del caballero de dios,” at the Thirteenth Bristol Colloquium on Hispanic Manuscripts, Books, and Texts held at the University of Bristol, England, in June. He also delivered two invited lectures: “La Reconquista/The Reconquest: A Cultural and Historical Meander,” at the First Annual Renaissance Fair, El Rancho de las Golondrinas, NM, in September; and “Alfonso X and the Way of St. James,” at the meeting of the National Organization for American Pilgrims on the Camino, held in Albuquerque in March.

Helen Damico, Professor of English, published “Beowulf’s Foreign Queen and the Politics of Eleventh-Century England” in Intertexts: Studies in Anglo-Saxon Culture Presented to Paul E. Szarmach, edited by Virginia Blanton and Helene Scheck (Tempe, AZ: Medieval and Renaissance Texts and Studies), pp. 209-40. She delivered two presentations during a visit to Washington, D.C., in November: a paper on “Grendel’s Reign of Terror: From History to Vernacular Epic” at the annual meeting of the Haskins Society; and an invited lecture at Georgetown University on “Ælgifu of Northampton: Stereotypical and Quasi-Historical Treatments of Cnut’s Concubine.” She delivered a plenary address at Vagantes, the annual conference of the Graduate Student Committee of the Medieval Academy of America, held on the campus of Florida State University; her topic was “Beowulf and the Danes: From History to Vernacular Epic.”

Leslie Donovan, Associate Professor in the University Honors Program, received the 2009 Outstanding Faculty Advisor of the Year Award from UNM Student Activities. At the Mythopoeic Society Conference held in New Britain, Connecticut, in August, she delivered a paper titled “Brightly Shining and Armed for Battle: The Valkyrie Legacy in Tolkien’s Middle-Earth Fiction” and participated in a roundtable discussion on “The Valkyrie and the Goddess: Women in Mythopoeic Fiction.”

Anita Obermeier, Associate Professor of English, published a review of Gretchen Mieszkowski’s
Medieval Go-Betweens and Chaucer's Pindarus in *Journal of English and Germanic Philology* 108, pp. 117–20. She offered a presentation on “Feasting with King Richard II” at Albuquerque Academy's Medieval Day and brought to the presentation several food items prepared using recipes in a cookbook written during the reign of Richard II. Her organization of the Medieval Association of the Pacific meeting was generally praised as being flawless.

1. Significant developments during the academic year 2008-2009

Interest in Philosophy as a major among undergraduates continues to be strong. According to Office of the Registrar statistics in Spring 2009 the Philosophy Department had 167 registered philosophy majors across all programs and colleges.

A&S First Major: 83 Philosophy, 22 English-Philosophy, and 3 Economics-Philosophy.

University College First Major: 17 Philosophy, 3 Economics-Philosophy, 7 English-Philosophy.

A&S Second Major: 22 Philosophy, 1 English-Philosophy, and 1 Economics-Philosophy.

University College First Major: 6 Philosophy.

Eighteen students graduated with B.A.’s in Philosophy in Fall, 2007, and sixteen in Spring, 2008.

Two new students were admitted to the Ph.D. program (with full financial aid) and six to the M.A. (3 deferred to spring and all three failed to show).

The Department completed its Academic Program Review.

The Department’s Catalog listings were completely revised and updated.

No appointments to or separations from staff.

Faculty

Prof. Domski won a 2009 Teaching Excellence Award in the College of Arts and Sciences.

Prof. Becker took a sabbatical leave in Fall 2008.
Prof. Hannan was promoted to full professor. Prof. Kalar was promoted to associate professor with tenure.

Prof. Katsafanas, who specializes in ethics, initiated the department's participation in the BA/MD program, teaching their capstone seminar in bio-medical ethics.

Prof. Johnston successfully passed his mid-probationary review.

There were no retirements or resignations.

Conferences & Speakers

The Department co-sponsored the Summer Seminar on Buddhism at Jemez Springs in June, together with the UNM Religious Studies Program and the Rinzai-ji Zen Center.

Featured Speakers:
Shoryo Katsura, Ryukoku University, Japan
Jay Garfield, Smith College
Peter Gregory, Smith College
Wendi Adamek, Barnard College/Columbia University

The Department sponsored its sixth annual Philosophy Student Conference on the theme "Philosophy and Its History" in November. The keynote speaker was Donald Rutherford, of the University of California, San Diego.

The complete list of speakers for the year:

Friday, September 5 Jesús Adrián, Universidad Autónoma de Barcelona, *Heidegger and the Genealogy of the Question of Being*

Friday, September 12 Charles Fleddermann, UNM & Kirsty Mills, Consultant in Engineering Ethics Education, *Caught in the Storm: Engineers, Ethics and Hurricane Katrina*

Monday, September 29 Matthias Schirn, University of Munich, *The True and what might be the truth about 'is true' in Frege*

Thursday, October 23 O'NEIL MEMORIAL LECTURES IN THE HISTORY OF PHILOSOPHY
Hilary Putnam, Harvard University
*What James and Dewey Hoped to Do*
Friday, October 24  O’NEIL MEMORIAL LECTURES IN THE HISTORY OF PHILOSOPHY
Hilary Putnam, Harvard University
Reflections on Pragmatism

Wednesday, Nov. 5  Evan Tiffany, Simon Fraser University, I Resent That!
An Intersubjectivist Account of Moral Responsibility –

Friday, Nov. 7  Keith Lehrer, University of Arizona,
Art, Consciousness and the Self

Friday, February 6  John Heil, Washington University, St. Louis, Relations

Friday, March 27  John Richardson, New York University,
Nietzsche on Life’s Ends

Friday, April 3  Richard Boothby, Loyola College in Maryland,
Lacanian Anxiety, or the pain of losing what you never had

Friday, May 1  Lorilani Biernacki, University of Colorado at Boulder,
A Taste of Ethics: Abinavagupta’s Rasa Theory

Plans and recommendations

The O’Neil Lecturer this year is the distinguished Paul Guyer, Professor of Philosophy, University of Pennsylvania.

The Department plans a complete upgrade to its website.

The Department plans to propose to the College that Philosophy 156, Reasoning and Critical Thinking, be developed as a course that will partially satisfy the university undergraduate writing requirement, possibly substituting for English 102. We would like to modify the course to meet that need, increase the number of sections offered and, correspondingly, the number of Philosophy TA’s required to teach them.

Publications of faculty

Kelly Becker


Andrew Burgess


John Bussanich


Mary Domski


Russell Goodman


Barbara Hannan


Richard P. Hayes


Adrian Johnston


**Brent Kalar**


**Paul Livingston**


**John Taber**

Iain Thomson


5. Outside professional activities of staff members

Kelly Becker


Andrew Burgess

“Kierkegaard and the Rhetoric of Silence.” Paper (on Kierkegaard and Taoist tradition) delivered at a session, entitled “Kierkegaard as a Resource for Comparative Philosophy” at the World Congress of Philosophy, Seoul, Korea, July 28-August 5, 2008. The paper was published in the proceedings by the Korea Kierkegaard Academy and Institute [=Department] of Philosophy, Seoul National University (see above in publication list).

“The Apostle Paul in the Strategic Humor of Kierkegaard’s 1843-44 Discourses.” (Paper delivered at the one day conference, on the theme “Kierkegaard and Christianity,” which included participants from India, China, Korea, Japan, Australia, Canada, and the US. A participant from Spain had to cancel at the last moment. The conference was sponsored by the Korea Kierkegaard Academy and the Institute of Philosophy, Seoul National University, (see above in publication list). My paper was one of the two keynote papers for the conference, and it was published in the proceedings by the Korea Kierkegaard Academy and Institute [=Department] of Philosophy, Seoul National University (see above in publication list).
“Kierkegaard’s Taler, Moravian Reden.” (4151 words) Paper delivered at the international, biennial conference of the Moravian Historical Society, Bethlehem PA, October 9-11, 2008

On June 1, 2009, I delivered an invited lecture at the Philosophy Department at "University of Constantine the Philosophy in Nitra, Slovakia, on the topic "The Concept of Discipleship in Bonhoeffer’s Marginalia to Kierkegaard’s Late Papers." Later that day I shared a panel with Professor Roman Kralik of the University of Nitra at the city of Zilina, in northern Slovakia. The panel (translated on the spot into Slovakian and English) was on "Kierkegaard as a Prophet for Today." I understand that Nitra plans to publish the Slovakian version of the paper, and there is a new English-language journal based in Slovakia that wants to publish it in English.

Co-Chair, Steering Committee, Kierkegaard, Religion, and Culture Group, American Academy of Religion

John Bussanich

Co-Editor, Ancient Philosophy
Board of Directors, International Society for Neoplatonic Studies
Referee, Cambridge University Press

Mary Domski

“Locke’s Qualified Embrace of Newton’s Principia” SPAWN 2009: Nature and Purpose in Early Modern Philosophy, 9-12 August 2009, Syracuse, NY

“The Dynamical Interplay of Mathematics and Metaphysics in Descartes’ Corpus” Duke University, Department of Philosophy, 4 April 2009

“Kant on Imagination and Geometrical Certainty” Workshop on Geometrical Thinking, Sponsored by the Ideals of Proof Project directed by Michael Detlefsen, 15-16 December 2008, Nancy, France

Co-organizer, Southwest Seminar for Early Modern Philosophy

Russell Goodman

Regents Professor of Philosophy Russell Goodman was been named a Fellow of the Institute for Advanced Study in the Humanities at the University of Edinburgh. He will spend the summer of 2009 working on philosophers of the "Scottish Enlightenment" of
the mid-18th century, including David Hume, Adam Smith, Thomas Reid and Francis Hutcheson.


Richard P. Hayes

Respondent to three papers at Pacific division meeting of American Philosophical Association Society for Asian and Comparative Philosophy, on topic of ethics and epistemology in Indian Buddhism. Vancouver, British Columbia. April, 2009.

Associate Editor, Journal of Indian Philosophy.


Adrian Johnston


“Courage before the Event: Alain Badiou and the Force of Affects,” Departments of English, French and Italian, Philosophy, and the Comparative Literature Program, University of Texas at Austin, Austin, Texas.
“Life Terminable and Interminable: The Undead and the Afterlife of the Afterlife—A Friendly Disagreement with Martin Hägglund,” Round-Table Discussion with Martin Hägglund, Cornell University, Ithaca, New York.

Executive committee, Affiliated Psychoanalytic Workgroups

Editorial board, *International Journal of Žižek Studies*
Referee for *Continental Philosophy Review, Journal for Lacanian Studies*, and several other journals.

Manuscript referee, Columbia University Press.

**Brent Kalar**


**Paul Katsafanas**


“The Problem of Normative Authority in Kant, Hegel, and Nietzsche,” Workshop on Nietzsche and Kantian Ethics, University of Southampton, April 2009.


**Paul Livingston**

Awarded a faculty research fellowship (renewal) by the Alexander von Humboldt Foundation to conduct research at Freiburg University in Germany (June 1 - Aug. 25, 2009). His ongoing research project concerns the concepts of logos and language in the phenomenological writings of Edmund Husserl and Martin Heidegger.

John Taber


Associate Editor, Journal of Indian Philosophy.

Iain Thomson


“Heidegger: Against Aesthetics, for Art,” Gale Memorial Lecture, Department of Art and Art History, University of New Mexico, Albuquerque, New Mexico, 17 November 2008.

“Nietzsche on the Death of God and the Challenge of Affirming Life” (lecture to the Albuquerque Academy Senior Class, 16 October 2008).

Member of the Program Committee for the American Philosophical Association, Pacific Division (2007—present).

Member of editorial board, Journal of Philosophy and Popular Culture (2009—)

Referee of philosophy faculty quality for “The Philosophical Gourmet Report” (2008—).

Referee for The European Legacy, 2009.


Referee for Routledge, 2008.

6. Outside Sponsored Research

Grant from the National Science Foundation to Mary Domski (PI) to conduct a pilot study for a program to train Philosophy graduate students and engineering students to team-teach courses on engineering ethics in area colleges ($100,000).
Significant Developments

The most significant developments during the 08/09 academic year were probably the hiring of one new Lecturer, Dr. Jeff Saul, who started in January 2009, and the hiring of our new Department Administrator, Lina Sandve. No regular, tenure-track faculty members were hired, nor were there any retirements or resignations. We had 27 tenure-stream faculty members during 08/09, plus two Lecturers (still down from three in previous years). Assistant Professor Steve Koch underwent successful mid-probationary review this year. For other personnel changes see the separate sections below.

Reorganization and better functioning of the departmental office staff had been a high priority in previous years. Significant progress on this front has been achieved and the process is being completed under the leadership of our new Department Administrator. Unfortunately the recent trend of constantly increasing demands on our departmental admin staff as well as on Chair and Associate Chairs, imposed by our upper administration, has continued unabated. Needless to say, recent budget woes have not helped either, although this department appears to have managed better than some others.

Continued lack of recurring salary support by A&S for our extremely valuable grant support staff member (Monica Fishel) and for a fraction of our Department Administrator's salary remain a serious concern. Both have had to be supported by the departmental overhead account, and securing full A&S salary support for both positions remains a top priority.

Research in the department and therefore overhead return to the department has remained relatively healthy. For CY01/02/03/04/05/06/07 earnings the departmental overhead allocations were $159k/190k/192.5k/165.5k/180k/171k/163.6k. (For CY02 and 03 the numbers represent averages, correcting a mistake in the allocation made in summer 2003). Starting in summer 2008, i.e. with FY09, OVPR has of course shifted to a different model of more "live" F&A distribution and "budget-only" initial allocations. Even more important is the reduction in overhead return to the units: the department now receives only 10.5% of total F&A, as opposed to the previous 13.2%. With this reduction our initial FY10 budget-only allocation is $138.3k, still based on CY08 research expenditures. This amount is clearly very much in line with other recent years. In the pre-stimulus era, with its rather difficult funding climate (for most subfields of the physical sciences) these numbers signify a respectable ongoing research vitality of our department. The remaining problem of the debt of our Institute for Astrophysics (IfA), accumulated while reporting to Deans prior to Dean Dasenbrock, has not yet been
addressed any further.

During calendar year 2008 serious planning had started for a new building for our department, including an initial needs assessment. Meanwhile UNMH has decided that the next phase of the hospital expansion will proceed west of University Boulevard, and not in our current location. This decision unfortunately appears to have brought our new building planning process to a stop, or at least to a crawl. The spring 2009 NM legislative session did not approve the $500K planning money, which was on UNM's priority list. We plan to continue the fight for a badly needed new building. One new ingredient that surfaced during 08/09 is a plan for a potential parking structure on the lot that currently houses our Campus Observatory. Needless to say, a new observatory would have to be built somewhere else before the current one could be demolished.

Future Plans

During 08/09 we started to update our 2004 departmental Long Range Plan, a plan which had served us rather well, for instance in faculty hiring decisions. This update is being undertaken in conjunction with preparations for our Academic Program Review in February 2010. In the present (and foreseeable) financial climate it is of course exceedingly difficult to obtain new faculty position. Therefore we continue to aggressively pursue any possible target of opportunity such as joint hires with a National Lab. One such opportunity was lined up with Sandia National Lab during 08/09, but unfortunately the candidate decided in the end not to move to Albuquerque for personal reasons.

Replacement of our third Lecturer remains a high priority, as does the ongoing push for a new building. Clearly dealing with the state budget shortfall and its implications for UNM and for our department will remain a crucial issue, after this beast raised its ugly head during 08/09.

New Appointments

Our one new Lecturer hire for 08/09 has already been mentioned. Lina Sandve, our new Department Administrator, started on November 1, 2008. The half-time Student Program Coordinator for our graduate program in Optical Science & Engineering, Alisa Gibson, moved over into our full-time departmental Student Program Coordinator position effective August 13, 2008.

Separations/Retirements/Deaths

As already mentioned last year, in August 2008 our Lecturer Kathy Dimiduk left for Cornell University to assume a Senior Lecturer position and the Directorship of a new Teaching Excellence Institute in their Engineering College. This was a very serious loss for us. Our previous Department Administrator Deborah Russell resigned effective October 15, 2008. Patrick Newman, Accountant I, was terminated effective March 11, 2009. An immensely sad event happened in June 2009. Our Japanese graduate
student Megumi Yamamoto got lost while hiking in the mountains above Santa Fe. She was rescued by a State Police helicopter, only to subsequently die when the helicopter crashed in bad weather. A memorial fund in her name has been established. In addition, we had to mourn the death (Nov. 14, 2008) of Prof. Krzysztof Wodkiewicz. He was a research faculty member in our department with a joint appointment at the University of Warsaw/Poland. For many years he had spent every other academic year at UNM, performing research and teaching.

Graduation Statistics

Between the summer semester 08 and the spring semester 09, the department graduated 5 BS in Physics (all male), 2 BS in Astrophysics (both male), 3 BA in Physics & Astrophysics (all male), 7 MS in Physics (2 of them women), 3 MS in Optical Sciences & Engineering (all male), 8 PhD in Physics (3 women), and 6 PhD in Optical Sciences & Engineering (1 woman). All of these are official UNM numbers. The undergraduate degree numbers are a bit below our typical ones, whereas the number of PhDs was very healthy.

Outside Sponsored Research and Publications

Research efforts in the department remain strong. For FY09, funding for new and existing/continuation/renewal grants in the department (including Institutes and Centers housed in the department, such as the Center for Advanced Studies, the Institute for Astrophysics, the NM Center for Particle Physics, and the Consortium of the Americas for Interdisciplinary Science) amounted to $7.8M. For comparison, the corresponding amounts for FY02/03/04/05/06/07/08 were $6.4M/$5.3M/$6.0M/$8.8M/$7.7M/$5.8M/$6.6M, respectively. The total number of awards received in FY03/04/05/06/07/08/09 was 54/51/54/56/41/47/64, respectively - a very strong result for FY09. Some of the fluctuations in the total award $s is simply a consequence of large grants not happening every year. Overall grant activity has certainly remained healthy, especially considering the significant ongoing federal funding hurdles for the physical sciences (before the stimulus era).

The overhead return to the department is perhaps more meaningful than the numbers just cited, because it is based on actual expenditures during a given year. Those returns were already listed in the first section of this report. Another meaningful number is the total grant spending, (i.e. total direct costs plus overhead). For FY05/06/07/08/09 those numbers were $6.6M/$6.7M/$6.1M/$7.0M/$6.6M, respectively.

Publications in refereed journals, as well as conference contributions and proceedings, invited talks, etc. by faculty members of this department are much too numerous to list here - suffice it to say that well over one hundred papers were published in refereed journals alone.

Awards, Recognitions, Special Grants or Contracts, and Special Events
In July the College of A&S named Prof. John McGraw one of the recipients of their 2008 Teaching Excellence Awards. During the same month the Keck Foundation awarded a $1.1M grant for a research project titled "A Facility to Perform Biomolecular Imaging, Real Time Phase Mapping of Biological Dynamics". PI is Prof. Jean-Claude Diels, also participating are Profs. Keith Lidke and Sudhakar Prasad from our department.

In August our graduate student Wendy Patterson (PhD advisor: Prof. Mansoor Sheik-Bahae) was selected to receive the Los Alamos National Laboratory 2008 Student Distinguished Performance Award.

On September 20 KNME Science Cafe presented "Dark Matter," a short segment from the national PBS series Nova ScienceNow, followed by a discussion with our Prof. Dinesh Loomba, at the National Atomic Museum in Old Town Albuquerque.

Also in September, the 4th consecutive allocation for the LWA (Long Wavelength Array) project was received, $2.8 million. The LWA will be a very large (400 km) synthetic aperture radio astronomy telescope designed as a new instrument in the poorly explored region of the electromagnetic spectrum. It will research astrophysics, space physics, space weather, and ionospheric physics. Prof. Greg Taylor is Scientific Director.

In fall 2008 the Statistical Research Center of the American Institute of Physics (AIP) posted four lists of universities that are the largest producers of physics degrees earned by Hispanic Americans and African Americans over the last decade. We made one of those lists, the one for most physics bachelors to Hispanic Americans. Physics departments in the 13 universities listed awarded about 1/3 of all physics BS degrees earned by Hispanic Americans since 1998. Universities on this list conferred 15 or more BS phyx to Hispanic Americans between 1998 and 2007.

In December Prof. Carl Caves was elected a Fellow of AAAS (American Association for the Advancement of Science), and staff member Sandra Ortiz was awarded one of two 2008 Gerald W. May Awards for distinguished service and dedication to UNM.

In February Profs. Jim Thomas and Wolfgang Rudolph were issued a US patent on "Addressable Field Enhancement Microscopy",

In March Prof. Sally Seidel's graduate student Jessica Metcalfe received a National Science Foundation Doctoral Dissertation Enhancement Award and Prof. John McGraw's graduate student Jon Turner received a Regents' scholarship. Our prototype machinist John DeMoss was awarded an Outstanding Staff Award from the Provost's Committee for Staff.

In April Prof. Sudhakar Prasad was the recipient of one of only two 2008-2009 *Outstanding Teacher of the Year* awards from UNM's Office of Support for Effective Teaching (OSET). As part of his upcoming sabbatical Prof. Ivan Deutsch was selected as a Fulbright scholar grantee, and will spend some time doing research in Spain.
Monica Fishel, our grant support staff member won the Noteworthy Technical Support Person Award from the Sigma Xi Society.

June 15-29 the US Particle Accelerator School was held in Albuquerque, sponsored by UNM and our department. Profs. Sally Seidel and Doug Fields were instrumental in preparations for this successful event.

Special Departmental Service & Outreach Contributions

As in previous years, we again participated in various UNM recruitment activities such as Senior Day, Hispanic Student Day, School-to-World Day, Star Scholar's Reception, etc. Our Campus Observatory was staffed (including one faculty member) for public night viewing every Friday evening during the academic year, weather permitting of course - a very long established tradition of our department, in collaboration with the Albuquerque Astronomical Society. In addition, we continued our tradition of Open Houses for prospective graduate students (every spring we invite the best domestic applicants, expenses paid), as well as for high school students and first or second year undergraduates already at UNM. These Open Houses include research laboratory tours and interactions with various faculty members.

After the earlier chairing of the important Research Study Group by Prof. Carl Caves, since FY08 Professor John McGraw has co-chaired ERAC (Executive Research Advisory Committee) within OVPR. Prof. Doug Fields was President Elect of our Faculty Senate during 08/09.
I. SIGNIFICANT DEVELOPMENTS
A. UNDERGRADUATE PROGRAM
The department graduated 142 majors, including six students who received departmental honors: David Odegard, Misha Ross, and Lisa Sanchez were awarded *Summa Cum Laude*, Taylor Watrous and Mackenzie Woods were awarded *Magna Cum Laude*, and Joseph Dworak was awarded *Cum Laude*. The annual commencement ceremony was held in Ballrooms B & C of the Student Union Building and attended by over 450 students and guests. UNM Political Science alumnus and UNM Board of Regents President, Raymond Sanchez, was the commencement speaker.

Senior honors student, Joseph Dworak, received the Clauve Outstanding Senior award. Senior honors student, Lisa Sanchez, was named an American Political Science Association Minority Fellow.

B. GRADUATE PROGRAM
The department awarded the Doctor of Philosophy degree to Nancy Carrillo. The Master of Arts degree was awarded to John Dyrcz, Tali Gluch, Eric Wallace, and Mike Wolff.

Matthew Ingram accepted a post-doctoral fellowship at the Center for US-Mexican Studies at the University of California, San Diego (Ph.D. awarded August 1, 2009).

Michele Leiby had the opportunity to work as an international elections observer during El Salvador’s historic presidential election.

Kimberly Nolan-Garcia accepted a faculty position at Centro de Investigación Y Docencia Económicas (CIDE) in Mexico City (Ph.D. expected December 19, 2009).

John Todsen was nominated for the Susan-Deese Roberts Teaching Assistant of the Year award.

Awards:
Prakash Adhikari won the Dean’s Dissertation Year Fellowship.

Lisa Bryant received a Graduate Research and Development Grant from the Graduate and Professional Student Association for a field experiment on voter confidence.

Meg Edwards received a Fulbright scholarship to study in Argentina.

Yann Kerevel won an International Foundation for Electoral Systems (IFES) Fellowship for researching the relationship between membership characteristics of election management boards and their affects on public trust and election success.

Albert Palma received a Fulbright scholarship to study in Brazil.

Yann Kerevel, Jason Morin, Ron Nikora, and Albert Palma each received a Graduate Fellowship from the Office of Graduate Studies.

Diana Walters received Robert Wood Johnson Foundation Ph.D. Fellowships.

Benjamin Bonin, Tali Gluch, John Todsen, and Eric Wallace received New Mexico Scholars Award.

Matthew Ingram and Kimberly Nolan-Garcia received Ph.D. Fellowships from the UNM Latin American and Iberian Institute.
Four new students were admitted to our graduate program for the 2008-2009 academic year. The department currently has 4 M.A. students and 32 Ph.D. students enrolled.

C. SPEAKERS AT PROFESSIONAL CONFERENCES

Lonna Atkeson
“Do Vice Presidents influence Vote choice?” presented at the Midwest Political Science Association, Chicago Illinois, April 1-4, 2009 with Yann Kerevel and Lisa Bryant.

“Are They the Same or Different? An Examination of Trust in Government, External Efficacy and Voter Confidence” Midwest Political Science Association, Chicago Illinois, April 1-4, 2009 with R. Michael Alvarez and Thad E. Hall.


Ellen Grigsby


Timothy Krebs


Chair, “Intersections of Race and Class in Urban Areas” (Panel 30-7), annual meeting of the American Political Science Association, Chicago, Illinois, August 30-September 2, 2008.

Chair and Discussant, “Local Elections and Turnout” (Panel 36-10), annual meeting of the American Political Science Association, Chicago, Illinois, August 30-September 2, 2008.

Deborah McFarlane


“Reproductive Health and the 2008 Election.” Presented at the annual meeting of the American Political Science Association, Boston, with Sunny Bergh.

Michael Rocca

Chair, “Legislative Deliberation and Debate” panel at the American Political Science Association annual meeting, Boston, MA September 27-31, 2008.


Andrew Ross


Gabriel Sanchez
Chair and Discussant for “The Systematic Study of Race and Public Policy from the UNM RWJF Center For Health Policy” panel at Western Social Science Association Conference, April 2009.

Chair and Discussant for “An Interdisciplinary Examination of Health Policy from the UNM RWJF Center for Health Policy,” panel at Western Social Science Association Conference, April 2009.

“Public Support for Expanding Health Care Coverage in New Mexico.” Co-authored with German Izon and Richard Santos, Annual Meeting of the Western Social Science Association, Albuquerque, NM, April 2009.


Section Chair “Voting and Elections” for Western Political Science Association Conference, March 2009.

Discussant for “Ethnicity and Elections: American and Comparative Perspectives” panel at Western Political Science Association Conference, March 2009.


Christine Sierra
“Expanding Categorization at the Intersection of Race and Gender: “Women of Color as a Political Category for African American, Latina, Asian American, and American Indian Women,” co-authored with Pei-te Lien,


E. INTERNSHIPS
Ten outstanding undergraduates were selected as Fred Harris Congressional Interns, and sent to Washington, DC, during the academic year. Mercy Berman, Layne Bettini, John Cane, Lucia Cook, Levi Monagle, Vanessa Ringwald, Derek Skinner, Diego Urbina, Taylor Watrous, and Hannah Wood lived in Washington, DC, working as Congressional Interns while enrolled as full-time UNM students.

Six junior and senior students were selected to serve one-week internships during the 2009 New Mexico Legislative session, working as junior professional staff assigned to individual legislators. Under the direction of Dr. Lonna Atkeson, the Legislative Internship Program provides a unique opportunity for our students to observe the policy-making process and for UNM to showcase our students to the Legislature.

Thirty-five undergraduates were placed as interns in public agencies, political campaigns, office of elected officials, and voluntary organizations. Under the direction of Dr. Ellen Grigsby, the program gives students practical experience in the application of political science theories while receiving course credit.

F. SCHOLARSHIPS AND FELLOWSHIP AWARDS
The department awarded ten undergraduate scholarships and three graduate research fellowships this year.

G. RESEARCH CONTRACTS AND GRANTS
The department’s total in active and pending contracts and grants is $418,128 including on-going studies funded by the National Science Foundation, PEW Charitable Trusts, and the Robert Wood Johnson Foundation on determining voter intent & election integrity and conflict-induced displacement and understanding the causes of flight.

H. FACULTY HONORS AND APPOINTMENTS
Lonna Atkeson was honored with a plaque from New Mexico Verified Voting and United Voters of New Mexico for "outstanding initiative in promoting election integrity." Kathy Hochstetler was appointed Gallegos Lecturer in Political Science. She also received the Distinguished Graduate Award from her PhD program at The Department of Political Science of the University of Minnesota. Michael Rocca received the Western Political Science Association’s Best Paper Award on Latina/Latino Politics. He was also nominated for a UNM Outstanding Teacher of the Year Award. Gabriel Sanchez received a UNM Faculty of Color Faculty Excellence Award. Kathy Powers was nominated for the College of Arts and Sciences Award for Teaching Excellence, University of New Mexico. Professor Emeritus F. Chris Garcia was selected for the Albuquerque Senior Hall of Fame by Silver Horizons. His photograph now appears along with other inductees on the hallway walls of the Albuquerque Convention Center.

II. SIGNIFICANT PLANS
A. CURRICULUM DEVELOPMENT
The department took initial steps toward forming a Center for the Study of Voting, Elections, and Democracy, under the leadership of Professor Lonna Atkeson. The Center will foster interdisciplinary research, applied analysis, and curriculum on the administration of elections.

The Robert Wood Johnson Center for Health Policy at UNM, started with an initial commitment of $18.5 million, was established to train the next generation of Latino and Native American Political Scientists, Economists, and Sociologists to become leaders in national debates about health policy. The Department of Political Science continued its work with colleagues in the Social Sciences and in the Public Health program to develop curriculum in the field of health policy and politics to prepare our RWJF graduate fellows for successful careers in the discipline.
B. RECRUITMENT
Political Science successfully increased the strength of its faculty minority representation with the hiring of Juan Pablo Micozzi (Assistant Professor), and Jillian Medeiros. Medeiros was hired as a Robert Wood Johnson Post-Doctoral Fellow for academic year 2009-2010. She will join the Department’s faculty as an Assistant Professor beginning academic year 2010-2011. Additionally, we are in the early stages of planning to raise money for an endowed professorship in the study of Hispanic Politics in honor of F. Chris Garcia, a national leader in the study of Latino politics and former President of the University of New Mexico.

III. APPOINTMENTS TO FACULTY/STAFF
Jillian Medeiros, Robert Wood Johnson Post-Doctoral Fellow
Juan Pablo Micozzi, Assistant Professor

IV. SEPARATIONS OF FACULTY/STAFF
Gregory Gleason was on leave without pay while teaching at the George C. Marshall European Center for Security Studies, near Munich, Germany.

V. PUBLICATIONS
Atkeson, Lonna R.


Grigsby, Ellen

Hansen, Wendy
Hochstetler, Kathy

Representação, Partidos e Sociedade Civil na Argentina e no Brasil [Representation, Parties and Civil Society in Argentina and Brazil]. Caderno CRH (Brazil) 21: 52: 47-66. With Elisabeth Jay Friedman [editor-reviewed]


Krebs, Timothy B.


McFarlane, Deborah

Rocca, Michael S.


Ross, Andrew L.


Sanchez, Gabriel R.


Sierra, Christine
www.knme.org/newmexicoinfocus <http://www.knme.org/newmexicoinfocus/>


Stanley, William

VI. NOTEWORTHY OUTSIDE PROFESSIONAL ACTIVITIES OF FACULTY
Department editorial board memberships
American Association for the Advancement of Science
American Journal of Political Science
American Political Science Association
American Political Science Review
American Politics Quarterly
American Politics Research
American Public Health Association
American Review of Politics
Coalition for a Realistic Foreign Policy
Comparative Politics
Conflict Management and Peace Science
European Union Politics
Foreign Policy Association
Served as officers or members of key committees in national or regional professional organizations

Ellen Grigsby
Board of Directors, Western Association of Pre-Law Advisors. 2001- Present

Kathy Hochstetler
Brazilian Studies Association Executive Committee (and subcommittees), 2006-2010

Timothy Krebs
Book Review Editor, Urban Affairs Review, June 2007-present

Deborah McFarlane
American Public Health Association, Publications Board
Journal of Health Administration Education, Editorial Board

Christine Sierra
American Political Science Association Trust & Development Board of Trustees
American Political Science Association Teaching & Learning Conference Program Committee.
Southwestern Political Science Association, External Evaluator, Department of Political Science, University of Colorado, Denver

Selected invited presentations by faculty

Lonna Atkeson

"Auditing the Election Ecosystem," Conference on US Election Reform, University of Iowa, Iowa City, Iowa, May 9-10, 2009, with Thad E. Hall and R. Michael Alvarez.


Kathy Hochstetler
University of Minnesota
Bellagio Study and Conference Center, Bellagio, Italy
University of Bergen, Norway
German Institute of Global and Area Studies (GIGA), Hamburg, Germany

Andrew Ross


Kathy Powers
“Scraps of Paper or Signs of IO Autonomy? IO Treaties and International Legal Personality. (Invited for presentation at the annual meeting of the European Consortium for Political Research, Potsdam, Germany 2009)


Other professional activities off-campus or community and public service
Lonna Atkeson
PBS Interview, In Focus, New Mexico Politics, November 6, 2008
PBS Interview, The Line, CD3 Debate Coverage, October, 2008
PBS Interview, The Line, CD1 Debate Coverage, October, 2008
PBS Interviewer, Expert Guest, Lehrer News, New Mexico Coverage, October 2008
KNBC Guest, Eye on New Mexico, September, 2008

Wendy Hansen
Grant Referee-
National Science Foundation
Social Sciences and Humanities Research Council of Canada
Qatar National Research Fund

Andrew Ross


Gabriel Sanchez
Contributed to “Hispanic Facts and Figures for the Nation” report as part of Hispanic Heritage Month Committee, television interview with Channel 13 News (Super Tuesday Segment)
Christine Sierra


"New Mexico and the Hispanic Vote: Election 2008." Invited guest speaker, U.S. Department of State, Washington Foreign Press Center, before a delegation of 25 international journalists, Doubletree Hotel, Albuquerque, New Mexico, October 30, 2008.


Media Interviews:

"Swinging for Latinos: Strategically Situated Swing Vote Poised to Play Leading Role in the Battle Between Two Major Parties and Both Would-be Presidents." The New Mexico Independent, July 1, 2008.

http://newmexicoindependent.com/view/swinging-for-latino


The Democratic Party's National Convention, Guest on Public Affairs Call-In Show hosted by Arcie Chapa, KUNM-FM radio, Thursday, August 28, 2008.


Blogs posted by KNME TV-5 and The New Mexico Independent, Albuquerque, New Mexico.

(www.knme.org/newmexicoinfocus)
(www.newmexico-independent.com)


"From Hillary to Barack." Thursday, August 28, 2008.

"¡Obámanos!" Sunday, August 31, 2008.

"Awaiting Obama: New Mexicans Ready for Nominee's Stadium Address; Richardson Will Also Speak Today in Denver." The Santa Fe New Mexican, August 28, 2008.  


http://library.cqpress.com/cqweekly/weeklyreport111-000003098362


Interview from the Democratic Party's National Convention, Hispanic International Telecommunications Network (HITN), Denver, Colorado, August 27, 2008.


Interviews for the 2008 Election also included the following media outlets:

Served on departmental, college, or university committees or held administrative positions outside the department

Christopher Butler
Outcomes Assessment Coordinator, 2008-present
Chair of the National Phi Kappa Phi Study Abroad Grants Selection Committee, 2007-10.

Wendy Hansen
Graduate Committee

Kathy Hochstetler
Executive Committee, Latin American and Iberian Institute
College of Arts and Sciences Tenure and Promotion Committee
Grants and Awards Committee, Latin American Studies

Timothy Krebs
Graduate Advisor

Mark Peceny
Chair, Department of Political Science
International Studies Institute Board
Steering Committee, Robert Wood Johnson Foundation Center for the Study of Health Policy at UNM

Kathy Powers
Member, Executive Committee
Member, Latin American Politics Search Committee
Member, Assessment Committee, Program of African Studies
Member, RWJ Recruitment Committee (UNM Robert Wood Johnson Health Policy Center)
Member, RWJ Fellowship Committee (UNM Robert Wood Johnson Health Policy Center)

Michael Rocca
Executive Committee
Undergraduate Committee
Fred Harris Congressional Internship Program Organizational and Selection Committee
Library Liaison
Colloquium Chair
Faculty Advisor for UNM student group, The National Society of Collegiate Scholars, Spring 2007-present
Faculty Advisor for UNM student group, Lobo Conservatives, Fall 2007-present
Faculty Advisor for UNM student group, Planning for College Success, Fall 2007-present

Andrew Ross
Executive Committee, Special Science and Engineering Research Initiatives, Office of the Vice President for Research
DTRA Program Review Committee, Office of the Vice President for Research

Gabriel Sanchez
Title-V at UNM Faculty Steering Committee
El Centro de La Raza
Law School Minority Pipeline Committee
Hispanic Heritage Month Committee
Faculty Steering Committee for Peer Mentoring of Graduate Students of Color
Co-Chair, RWJF and McNair Undergraduate Research Conference
Faculty Advisor for UNM student group, UNM Bigs (Affiliate of Big Brothers and Sisters of New Mexico)
Presentation “Social Inequalities in US” given to the pre-Medical Student Organization
Served on Panel entitled “Academic Job Search,” sponsored by Career Services

Christine Sierra
Graduate Advisor, Department of Political Science
Political Archives Ad-Hoc Task Force, University Libraries
Robert Wood Johnson Center for Health Policy, Awards Committee, Chair
Office of the Dean, College of Arts & Sciences, Senior Promotion Committee
Department of Africana Studies, Faculty Search Committee

William Stanley
Graduate Committee, Political Science
Undergraduate Committee, Political Science
Comparative Politics Search Committee, Political Science
Interdisciplinary Committee on Latin American Studies (College of Arts and Sciences)

VII. SPONSORED RESEARCH

Wendy Hansen

VIII. OUTSIDE-SPONSORED RESEARCH

Lonna Atkeson
ANNUAL REPORT – Academic Year 2008-2009

DEPARTMENT OF PSYCHOLOGY

Jane Ellen Smith, Chair

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A. Departmental Administration and Structure

The Department continued with the administrative structure adopted in 1995. Jane Ellen Smith completed her first year as chair on July 31, 2009. The Department's major administrative advisement committee, the Policy and Planning Committee, consisted of the Department Chair, the Associate Chair for Graduate Education (Tim Goldsmith), the Associate Chair for Undergraduate Education (Gordon Hodge), and the heads of the Department's four areas of study. The returning Area Heads were: Cognition, Brain, Behavior (Vince Clark), and Evolutionary/Developmental (Steven Gangestad). The new Area Heads this year were in Clinical (Sarah Erickson) and Health Psychology (Angela Bryan). Although the Quantitative area is no longer taking new students, Harold Delaney remained a representative for the current program. As the Director of CASAA, Barbara McCrady was added to the P & P Committee to provide needed representation.

UNM-Mind Research Network Relationship

Throughout much of the year there were efforts spearheaded by Kent Hutchison and Mike Dougher to develop a Memorandum of Understanding (MOU) between UNM and the Mind Research Network (MRN) to facilitate their collaborative work. As part of this agreement the Psychology Department would receive $20,000/joint hire each year, and the department could take credit for the grants and publications of the joint hires. The plan was to have the President and CEO of MRN (John Rasure) and UNM’s President Schmidly sign the agreement on July 1, 2009.

Foundation Support

The Department benefited again this year from the Quad-L Trust, which was endowed through the UNM Foundation by the late Professor Emeritus Frank Logan. The Quad-L Library supported by this Trust not only facilitates the study of the psychology of learning, but also provides a meeting place for students’ defenses of their graduate degrees. Derek Hamilton serves as faculty advisor for the Quad-L Library. The Quad-L speaker for the year was Dr. Richard Thompson from the University of Southern California (see Appendix E).

The Psychology Department also continued to reap the benefits of a new trust established by the late Emeritus Professor Robert G. Grice. These funds are divided into 5 categories: (1) a library fund (to support the growth and development of our students as researchers), (2) a colloquium series (to bring in external speakers who are likely to collaborate on research projects), (3) psychology graduate student support (primarily to help cover the tuition of students who are not otherwise covered as part of their support), (4) graduate fellowships in psychology (to recruit outstanding students for the graduate program in psychology), and (5) research enhancement for faculty projects (to allow for the generation of pilot data for grant applications and to provide matching funds for grants). During this second year we accessed money in the first three categories. The computer library that was supported by money in category #1 became functional in Spring 2009. The library houses 16 state-of-the-art computers for use by graduate students and honors students.
Minor "Make-Overs"

Logan Hall received a minor make-over in late summer of 2008. The halls were painted in two tones, and the three classrooms were painted in colors as well. The other notable make-over this past year was the Psychology Website. The chair made it a priority to work with the computer committee (headed by Eric Ruthruff) to update our website to make it more useful, appealing, and easy to navigate. Take a look!

Departmental Committees

Two new departmental committees were started this past year. First, a Graduate Student Teaching Mentoring Committee was established in order to propose solutions to concerns about our mentorship of graduate student teaching raised by: (1) the Academic Program Review from 2007, (2) our own faculty, and (3) the graduate students themselves. A comprehensive proposal was presented to the faculty in May 2009 by the chair of the committee, David Witherington. Given time constraints, just one aspect of the proposal was discussed in length; adding a required 1 credit Teaching course. A motion to add this requirement was passed, and plans were made for the committee to meet over the summer to re-work other components of the proposal.

The second new departmental committee was a Grant Writing Support Committee that was started by Kent Hutchison. The purpose of the committee is to offer concrete guidance to junior grant writers in the department.

The remaining departmental committees and the assignments are listed in Appendix K.

B. Faculty

Hires

There were no faculty hires in Psychology this past year. We remain at 21.27 FTEs. The hiring plan that was submitted in May 2009 for next year requested two junior faculty lines. The first request was for an individual in Developmental Psychology, with preference given to candidates who were able to interface with existing strengths in evolutionary, health, and/or quantitative psychology. A request for a developmental psychologist has been at the top of our list for four years now, and was the area identified in our Academic Program Review (2007) as the one in most critical need of faculty. Our department's hiring request actually named an individual; an extremely strong minority candidate, and requested that this individual be considered for a special hire as well. The second request was for an open search in experimental (non-clinical) psychology, with preference given to researchers in health, quantitative, or cognitive psychology.

Promotions

Mike Dougher left his Associate Dean position last year to be named the Associate Vice President for Research. His job is to facilitate research and scholarly activities on main campus, especially the integration of research and education. Mike also serves as the liaison between the
research office and the various main campus academic units, including research centers and institutes. We were sad to see him teach his last class in the Psychology Department, but we trust that he still has psychology’s best interests in mind. We thoroughly enjoy his occasional (highly entertaining) visits to Logan Hall.

Barbara McCrady was awarded the title of Distinguished Professor this past year; the highest faculty rank at the university. In addition to being a professor in the Psychology Department, Dr. McCrady serves as the Director of the Center on Alcoholism, Substance Abuse, and Addictions (CASAA). She came to UNM in 2007 from Rutgers University. Dr. McCrady’s research examines the relationship between alcohol abuse/dependence and family function. The foundation of her work is the belief that families play critical roles both in the development and maintenance of problematic drinking, and in the change process as well. She also has been awarded the distinguished NIH Merit Award for “enduring contribution to scientific knowledge.” In addition to her research contributions, Dr. McCrady has offered some new clinical graduate courses in both addiction treatment and couple therapy. Recently she took over the required Clinical Science course. We are very fortunate that Barbara decided to join us!

Angela Bryan (Health Psychology) was promoted to full professor this year. Angela is a social psychologist whose research focuses on developing theory-based biopsychosocial models of health behavior, and using these models of behavior to design, implement, and evaluate theory-based behavior change interventions to improve preventative health behavior. She studies two major areas of behavior change: (1) the prevention of HIV/AIDS and other sexually transmitted diseases among high risk adolescents, with a focus on the role of alcohol use and marijuana use in facilitating sexual risk behavior, and (2) the reduction of diseases associated with sedentary lifestyle (heart disease, Type II diabetes, various cancers) through exercise promotion.

Kent Kiehl (Cognition, Brain, & Behavior), who was hired as an associate professor, was awarded tenure this year. His research focuses on the clinical cognitive neuroscience of major psychopathological conditions, including psychopathy, substance abuse, and schizophrenia. Kent examines cognitive control, error-monitoring, emotion, morality, and attention processes in these conditions.

Eric Ruthuff (Cognition, Brain, & Behavior) is a cognitive psychologist who was awarded tenure and promoted to associate professor. Eric’s research focuses on various aspects of human attention: dual-task performance, task switching, selective visual attention, and attentional capture. Related interests include cognitive aging, human factors and electrophysiology.

Steven Verney (Clinical) also received tenure and a promotion to associate professor this year. His research is centered on information processing efficiency as indexed through psychophysiological (i.e., pupillary dilation response and eye-tracking) methods and its application to clinical psychology. From his primary interest areas of culture, information processing efficiency, and general cognitive capacities, he has branched out to other health disparity-focused applications, such as neurocognitive functioning related to alcohol use disorders and fetal alcohol syndrome disorder in ethnic minority populations.
Karin Butler (Cognition, Brain, & Behavior) is a cognitive psychologist who received a positive mid-probationary review. Karin's research is centered on individual differences that affect the allocation of cognitive resources to various activities. Some of the individual difference factors she examines are healthy aging and bilingualism. She also explores the manner in which one's ability to flexibly switch between different modes of thinking influences the experience of memories (accurate or false) for events.

Congratulations everyone!

Research Activities

The research activities of the faculty are summarized in Appendix A. It is particularly noteworthy that this year our extramural funding was approximately 7.5 million dollars (see Appendix B). This is certainly an extraordinary accomplishment, both in terms of the absolute level of funding achieved for a department of our size and in terms of the breadth of topics under study. We are hopeful that we can continue this high level of funding in the future. Appendix D provides a list of faculty and a list of their publications for the year. Last year the faculty had an outstanding average of 6.58 publications per FTE. Clearly our faculty continues to excel in their research activities and to be productive in terms of publishing and presenting their work at professional meetings.

By whatever metric one might wish to apply, the faculty of the Department of Psychology is very good. However, a persistent threat to the quality of our faculty is salary inequity, and the real threat of losing faculty to other universities as a result. The salaries of some of our faculty are as much as 20% below national and regional norms. The fact that there were no raises last year did not help to remedy the situation with respect to peer institutions. It will take several successive years of salary increases before our faculty is compensated at a level comparable to their peers. While this problem is fully acknowledged by the central administration, more needs to be done. There should be no doubt that the highest priority for the Department is to see faculty salaries increased to the level of regional norms immediately and to the level of national norms in the near future. This is the only way to preserve the excellence of our Department.

Awards

Elizabeth Yeater received one of the university's two Teacher of the Year awards for 2009. The Faculty Senate Teaching Enhancement Committee and the Office of Support for Effective Teaching host this campus-wide teaching award competition. Assistant Professor Elizabeth Yeater teaches large undergraduate courses in Abnormal Behavior, as well as small seminars in her research area; victimization. Her graduate courses include the required Psychopathology Seminar for clinical students, and a graduate trauma course. Dr. Yeater trains students to conduct research or develop clinical skills in the areas of the sexual victimization of women, Posttraumatic Stress Disorder and Borderline Personality Disorder. Great job Elizabeth!

Steve Alley was the recipient of the annual Louie Award this year; an award given to employees who exemplify the very best in providing great service to UNM students. Psychology lecturer
Alley was recognized for “being a great supporter of the students in the Psychology Department in which he currently teaches four large psychology classes, a Freshman Interest Group class, and an ITV course, yet still finds time to do some advising…” His assistance with student advisement was a critical contribution, given the lack of a student advisor in our department for most of last year. Well done Steve!

Sabbaticals

Fall 2008 & Spring 2009: Ron Yeo & Geoffrey Miller
Spring 2009 (& Fall 2009): Kristina Ciesielski

Research Faculty Positions

Each year there are a number of other individuals within UNM and the professional community of Albuquerque who make major contributions to our teaching, training and research missions. Research faculty status is granted to individuals who have excellent research records, provide research opportunities for our students, and receive extramural funding. Five years ago the Department decided to expand our list of affiliated research faculty for several reasons. These arrangements extend the range of research opportunities for our students, increase opportunities for collaborative and interdisciplinary research, and increase the amount of extramural funding generated by the Department. The corresponding increase in the indirect costs returned to the Department provides additional research support to our faculty and students and, in a self-perpetuating manner, facilitates the generation of additional extramural funding. The Department is indeed pleased with its affiliation with our research faculty, and we intend to add to that list in the future.

The department’s research faculty for 2008-2009 were: Janis Anderson, Catherine Baca, Peder Johnson, and Scott Tonigan.

Letters of Academic Title

Individuals with Letters of Academic Title typically are professionals from the community (or neighboring institutions) who make valuable contributions to the department, such as through research collaborations, teaching, or clinical supervision (see Appendix C). The individuals who received a Letter of Academic Title from our department in the last year were: Rob Annett, Brandi Fink, Jessica Goodkind, Christian Hendershot, and Alecia Reid-McCarthy.

On a sad note, Research Assistant Professor Rob Anderson passed away in May 2009. He will be missed.

Department Colloquia

A number of psychologists and researchers from other universities, other departments within the university, and from the community further enriched our educational programs by presenting research colloquia to our faculty and students. These individuals and the titles of their presentations are listed in Appendix E.
C. Graduate Education

Current Graduate Students

A total of 84 graduate students (all areas) are currently enrolled in the Department. This year, the Department awarded 6 Ph.D. degrees. The names of the degree recipients along with the titles of their dissertations and the names of their faculty advisors can be found in Appendix F. This brings the total of Ph.D. degrees awarded by the Department to 355. In addition, the Department awarded 11 Master of Science degrees this year (see Appendix G).

Admissions

The Department received 214 highly qualified applicants to the graduate program for AY 2008-2009. The Graduate Admissions Committee, under the expert leadership of Steve Gangestad, continued its efforts to attract and select the very best applicants to our graduate program. As part of this effort, Sarah Erickson (Director of Clinical Training) coordinated the annual Open House for visiting applicants (March 6th). After a full day of interviewing, visitors and their graduate student hosts were treated by the department to a New Mexican dinner at Los Equipales Restaurant. Everyone’s efforts paid off, as we were able to admit 11 highly qualified students to our program this year. These students, their areas of study, and their advisors are listed in Appendix I. The Admissions Committee is to be commended for its hard work in recruiting an impressive class of new students.

The task of setting up a data base for all of the applicants to our graduate program typically falls to the student advisor. Our student advisor left in August 2008, and given that there was a hiring “pause” in effect this past year, the position could not be replaced without a special exemption from the provost. Initial requests to hire a student advisor were denied, and thus the Psychology Department operated without a student advisor essentially the entire academic year. So we had to instead have our part-time temporary receptionist, Shirley Heying, take charge of managing the admissions applications. Fortunately Shirley handled the job beautifully, with the able assistance of the work-study staff.

Although recruiting excellent minority applicants is always a priority, some additional steps were taken this year. The Office of Graduate Studies announced that it was accepting proposals for graduate student recruitment. Steve Verney and Steve Gangestad submitted a proposal that was funded for $3000. The proposal specifically requested money to enhance the recruitment of minority students. One of the requests involved money to participate in the Council of University Directors of Clinical Psychology (CUDCP) conference that was being held in Albuquerque (January 2009). The objectives were (1) to make UNM a more visible presence so that the Directors of Clinical Training from across the country could become more familiar with UNM, and (2) to gain direct access to the 40 undergraduate minority students from across the country who were participating in the research segment of the conference. The first objective was addressed by providing local entertainment (both Native American and Hispanic dance numbers; a powerpoint presentation of New Mexico scenes) at the Opening Reception for the conference, and by having our clinical faculty attend the reception. The second objective was met by
providing each visiting undergraduate a “Welcome Bag” filled with UNM and New Mexico souvenirs. This program primarily was arranged by Jane Ellen Smith, with assistance from Sarah Erickson and other clinical faculty, as well as from the department staff.

**Student Funding**

Fortunately, the Department was able to provide some financial support to all graduate students who requested aid and were in good standing. In part, this was due to the availability of research assistantships made possible by extramural funding obtained by the faculty, as well the availability of research and clinical positions outside the Department. However, most of the students who received aid in our Department worked as graduate assistants (GAs). This presented a problem because the ratio of the number of courses needing GAs to the number of GAs funded creates an excessive workload for our GAs. The Department simply has not received sufficient GA funding to cover its needs. Moreover, GA stipends are too low relative to our peer institutions. This places us at a real disadvantage in trying to compete with other institutions for recruiting the best graduate students. We did, however, receive a $5000 award from the college to successfully recruit one excellent student this year.

Another emerging problem is difficulty in covering tuition for our graduate students who are supported through mechanisms other than our GA budget. For example, some students are funded outside of the department on grants as research assistants, but the grants do not have tuition built into the proposals. We are trying to remedy this for the future by making sure that all grantees know to include tuition (and health insurance) as an expense in proposals that potentially involve graduate students. In the meantime we have made every attempt to cover the outstanding tuition from our overhead account and the Grice Foundation money.

**New Graduate Assistantships and Practicum Placements**

As noted in last year’s report, Dr. William Miller and his wife, Kathy Jackson, established a new GA position for a clinical student working with “the poorest of the poor”. Initially the position funded a student for 10 hours per week, but eventually it will be increased to 20 hours/week. From among the agencies who applied for the GA (and who could cover the remaining 10 hours/week of the student’s GA position), Samaritan Counseling was selected. Graduate student Kathryn Lenberg was the first recipient of the GA line, and she gained excellent clinical experience by working at Samaritan for the year.

Health Care for the Homeless funded two small GA positions for the first time. Our students were placed in a program for males with trauma experiences and substance use problems. Elizabeth Yeater supervised.

Sarah Erickson and Dan Matthews assisted the psychologists at the VA Medical Center in formalizing their practica offerings for our graduate students. An Open House was held at the VA in April 2009 so that representatives from various available rotations could make brief presentations to interested students. The rotations include:
Women’s Stress Disorder Treatment Team (Diane Castillo, Ph.D.)
Neuropsychology (Rex Swanda, Ph.D.)
Family Psychology (Lorraine Torres-Sena, Ph.D.)
ZIA Spinal Cord Injury (Kathleen Padilla, Ph.D.)
Substance Use Disorder Treatment Program (Lisa Arciniega, Ph.D.)
Domiciliary Residential Rehabilitation Treatment Program (June Malone, Ph.D.)
Behavioral Medicine (Eric Levensky, Ph.D.)
Substance Abuse, Trauma, and Rehabilitation Residence (Evelyn Sandeen, Ph.D.)
Men’s Outpatient PTSD (Jennifer Rielage, Ph.D.)
Psychiatric Residential Rehabilitation Treatment Program (Deborah Simon, Ph.D.)
Suicide Prevention Team (Brenda Mayne, Ph.D.)
Ward 7 Inpatient Psychiatry (Jordon Bell, Ph.D.)
Without Compensation Appointment Procedures (Cathy C’de Baca)

Mike Dougher received RAC funding to help support four graduate students who were working at the FAIR program (domestic violence) downtown. These students were testing a new treatment program while also receiving valuable clinical experience.

Awards

Each year a small committee selects winners of two awards for clinical graduate students: the Garland Award (for work with adolescents or families), and the Rosenblum Award (for work with children or families). This year’s winners were:

Garland Awards for $1000 each (awarded Aug. 2008):
Lauren Parks (mentor: Ron Yeo) and Peggy MacLean (mentor: Sarah Erickson)
Rosenblum Award for $500 (awarded Aug. 2008):
Jennifer Knapp Manuel (mentors: Barbara McCrady/Theresa Moyers)

The Haught lecture award recipient was Josh Tybur. His mentor is Geoffrey Miller.

Robert Wood Johnson Awards: Two of our graduate students received RWJ Dissertation Fellowships again this year: Julia Austin (mentor: Jane Ellen Smith) and Jen Bennett (mentor: Steve Verney). Three students were awarded RWJ Doctoral Fellowships: Alexis Ortiz (mentor: Bruce Smith), Marita Campos-Melady (mentor: Jane Ellen Smith), and Yajaira Peña-Esparza (mentor: Steve Verney).

Clinical Internships

The clinical students who applied for internships this past year did well. The students and their internship sites scheduled for 2009-2010 are:

<table>
<thead>
<tr>
<th>Julia Austin</th>
<th>Palo Alto VA Medical Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jennifer Knapp Manuel</td>
<td>Palo Alto VA Medical Center</td>
</tr>
<tr>
<td>Peggy MacLean</td>
<td>UNMH School of Medicine: Early Childhood Track</td>
</tr>
</tbody>
</table>
Clinical students who finished/were finishing their internships this past year were:

- **John Dencoff**  
  Southern AZ VA Health Care System
- **Brandi Fink**  
  Michael E. DeBakey VA Medical Center, Houston, TX
- **Laura Lundy**  
  UNM Health Science Center
- **Lauren Parks**  
  UNM Health Science Center
- **April Brown**  
  Eastern Virginia Medical School, Norfolk, VA.

The Annual Report of the Clinical Program to APA is included (Appendix H).

**Diversity Organization (DO!)**

The Diversity Organization in the department continued to hold regular meetings and sponsored several events this past year. These included hosting "diversity training" for clinical psychology students, mailing flyers about UNM's Psychology Department to undergraduate universities in the Southwest, posting notices of cultural events on and off campus to graduate students, sponsoring a multicultural case conference, organizing social gatherings (2 happy hours, trip to ABQ Pow Wow, etc), discussing multicultural research in the first year Research Seminar, and offering various suggestions to faculty on training issues. The faculty mentor for DO! is Steve Verney, and the graduate student officers for this past year were:

- **Paulette Christopher** - president
- **Lisa Hagen Glynn** - vice president
- **Erica Nason** - secretary
- **Brenna Greenfield** - treasurer
- **Yajaira Peña-Esparza** - social coordinator

**Outcomes Assessment**

The College of Arts and Sciences required each department to submit an Outcomes Assessment plan for each degree program (BA, BS, Ph.D.). The department's Outcomes Assessment Committee (Gordon Hodge, Harold Delaney, Tim Goldsmith) met with the chair to develop these plans. Drafts were presented to the faculty for review. A summary of the adopted plan for graduate education follows:

1. Students will complete an annual evaluation form that lists research activities. Target: 50% of all of our graduate students will have collected data during the year.
2. Students who teach a course will be formally evaluated by a faculty member. A written evaluation using rating scales (1-6) to assess various teaching characteristics (e.g., organization and clarity) will be included. Target: 50% of these students will receive a mean of 4.0 or higher.

10
(3) The written paper segment of comprehensive exams will be graded on a 100 point scale by committee members. Target: 50% of students will achieve a score of 80 or better.

Comprehensive Exams

In discussing the Clinical Committee’s request to reduce the length of the comprehensive exam writing time from 6 months to 5, a discussion ensued about the Clinical Committee’s relatively new option for the comps. Option B, as it is called, is basically a Psychological Bulletin-type review paper. The non-clinical areas decided that they also wanted to offer such an option for the students within their own areas, and so the change was adopted. Students still can choose the four question option instead.

D. Undergraduate Education

Undergraduate Majors

The undergraduate education productivity of the Department’s faculty and staff is enormous and among the highest in the College. As of the Spring 2009 semester, the Psychology Department had a total of over 1400 undergraduate Psychology Majors. This is more than a 40% increase over the prior decade despite having fewer FTEs. A total of 277 bachelor’s degrees in Psychology were awarded this past year. The Department offers a wide variety of courses, ranging from introductory psychology to advanced courses in learning and memory, cognition, abnormal psychology, developmental psychology, social psychology, evolutionary psychology, quantitative methods, and cognitive/behavioral neuroscience. Our students are exposed to some of the best lecturers at the University and have access to advanced laboratory courses in which they design experiments and gain “hands-on” research experience with human and non-human subjects.

Enhancing Enrollment

One of the main goals for the University this past year was to increase and maintain enrollment in courses. Each department was asked to develop a set of steps to make progress toward this goal. The steps agreed upon by the Psychology Faculty were:

- Staff would visit lower division Psychology Classes to encourage students to come in for advisement.
- The Psychology listserv would provide information about upcoming new or available classes.
- The cap on enrollments for classes would be increased whenever feasible.
- Psychology Independent Study (PSY 499) opportunities would be advertised on our website.
- Faculty would remind graduate students to officially enroll in graduate research hours (PSY 551).
- Staff would try to obtain statistics on student retention in psychology classes so the extent of the problem could be realized.
Outcomes Assessment

The department’s Outcomes Assessment plan that was adopted for undergraduate education follows:

1. A comprehensive exam (similar to the ETS Major Field exam) that was developed by Harold Delaney years ago will be administered as a pre-test in PSY 105 classes and as a post-test in the Research Methods (PSY 302) course to all majors who have accumulated 27 hours in psychology (of the 35 hours required for a degree). Target: 75% of students will receive at least a score of 50%.

2. As part of the Research Methods class, students will submit written critiques of empirical papers, and will demonstrate the ability to acquire and interpret data. These will then be scored according to an established rubric. Target: 75% of students will show acceptable performance (as outlined in the rubric).

Undergraduate Research and Creativity Conference

Three Psychology Department honors students received awards at the Undergraduate Research and Creativity Conference this year. They included: Belinda Vicuña (mentor: Harold Delaney), Cassandra Wooton Sprague (mentor: Bob Thoma), and Garret Hosack (mentors: Jose Canive & Stephen Lewis).

Psychology Honors Program

The flagship for quality education in our Department remains our Psychology Honors Program, which has been in existence for over 30 years. This program, which culminates in the student completing a year-long research project, has been especially attractive to Psychology majors who go on to pursue graduate work in psychology. Appendix J lists our 2008-2009 honors students along with the titles of their theses and the names of their faculty supervisors. Harold Delaney continued as the instructor for the Junior Honors Seminar, and Eric Ruthruff was the Senior Honors instructor. The recipient of the Outstanding Honors Thesis award was Belinda Vicuña (mentor: Harold Delaney), and the Outstanding Honors Student was Tiffany Callahan (mentor: Angela Bryan). Financial support for conducting the studies ($2000) was obtained in response to Eric Ruthruff’s proposal to the College of Arts and Sciences.

Basics in Addiction Counseling (BAC) Concentration

Excellent progress was made in further developing the department’s proposed Basics in Addiction Counseling (BAC) Concentration, a concept that started years ago with William Miller, and which received assistance from Theresa Moyers initially. This year Barbara McCrady and Jane Ellen Smith worked together along with Regina Dickens, the Program Specialist (Field Work Coordinator) who was hired with state money for the project. Regina spent time establishing relationships with local addiction treatment agencies that could provide field placements for the students in the program, and she started to develop a policies and procedures manual. Unfortunately we learned recently that the state has decided that UNM
should be paying for this Program Specialist position, given that it is part of a degree-granting program. Consequently we will need to request college funds to continue the position. The necessary paperwork for the concentration, which will be an option for a select group of Psychology Majors, is under review in the Faculty Senate. The program should be approved to start in Fall 2010 with an initial class size of about 15.

Given the nature of the BAC concentration (e.g., field placements at treatment agencies) it is necessary to limit the number of students accepted into the program. Thus, admission requirements were established. All applicants are required to be Psychology Majors and meet the following:

1. Are enrolled in the equivalent of the 4th semester of full-time coursework toward a college degree
2. Have a minimum cumulative GPA of 3.0 or a Psychology GPA of 3.5
3. Are committed to a career in the alcohol/drug counseling field
4. Have interpersonal skills appropriate for a counseling career
5. Have the ability to meet the program standards (with or without reasonable accommodation), and
6. Have read and acknowledged an understanding of the New Mexico Counseling and Therapy Practice Board standards for licensure.

In developing this concentration, 4 new courses were created. Three of them are 1-credit courses (see below) and one is a 3-credit course called “Evidence-Based Treatment of Addictions.” The UNM minimum requirements for a Psychology Major, the manner in which these requirements will be fulfilled for students in the BAC concentration, and additional requirements for the BAC concentration are summarized in the table:

<table>
<thead>
<tr>
<th>PSYCHOLOGY MAJOR REQUIREMENTS</th>
<th>BAC CONCENTRATION REQUIREMENTS</th>
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<tbody>
<tr>
<td>Minor in the College of Arts &amp; Sciences</td>
<td>Required</td>
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<tr>
<td>PSY 105 (3 credits) - General Psychology</td>
<td>Required</td>
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<tr>
<td>PSY 200 (3 credits) - Statistics</td>
<td>Required</td>
</tr>
<tr>
<td>4 OF 6 (12 credits):</td>
<td>PSY 240 - Brain &amp; Behavior</td>
</tr>
<tr>
<td>PSY 220 - Developmental Psychology</td>
<td>3 other 200-level courses - to be selected from 200 level courses listed</td>
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<tr>
<td>PSY 240 - Brain &amp; Behavior</td>
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<tr>
<td>PSY 260 - Learning &amp; Memory</td>
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<td>PSY 265 - Cognitive Psychology</td>
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<td>PSY 271 - Social Psychology</td>
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<td>PSY 280 - Health Psychology</td>
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<tr>
<td>PSY 302 - Research methods</td>
<td>Required</td>
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<tr>
<td>4 Electives (12 credits) at 300 or 400 level</td>
<td>PSY 332 - Abnormal</td>
</tr>
<tr>
<td>PSY 347 - Drugs &amp; Behavior</td>
<td>PSY 430 - Alcoholism</td>
</tr>
<tr>
<td>PSY 4xx - Evidence-Based Treatment of Addictions</td>
<td></td>
</tr>
<tr>
<td>Psychology Lab (2 credits) - 300 or 400</td>
<td>PSY 335L - Clinical Psychology Lab or</td>
</tr>
</tbody>
</table>
**E. Graduation**

For the 19th consecutive year, the Department hosted a spring commencement ceremony for its graduating students. The commencement address, which was delivered by Professor Barbara McCrady, was entitled, “Family: The Essential Presence”. Previous addresses have been delivered by Jane Ellen Smith, David Witherington, Michael Dougher, Frank Logan, William Gordon, Samuel Roll, John Gluck, Henry Ellis, William Miller, Kristina Ciesielski, Mark McDaniel, Dennis Feeney, Richard Harris, Robert Sutherland, Harold Delaney, and Lynette Cofer. Department Administrator Trish Aragon-Mascareñas organized the ceremony, and she and her staff handled all of the arrangements. Counting the faculty, the graduates, their families and friends, almost 1000 people attended the ceremony. Needless to the say this is a huge and costly (over $3,400) undertaking for the Department, but judging by the very positive comments from both the graduates and faculty, it is well worth the expense and effort.
Additional Significant Faculty Contributions for the Year

As part of the Psychology Department Graduation Ceremony this year, each faculty member was recognized for at least one significant contribution to the department. In preparation, faculty were asked to specify what they believed to be their main contributions for the year. These contributions (including the superlatives added by the chair), were recognized at the ceremony:

Steve Alley:
- Outstanding service to students (the Louie Award) not only for always teaching large psychology classes & a Freshman Interest Group class, but especially for volunteering to help with student advising when we were without an advisor this year.

Angela Bryan:
- New federal grant (NIAAA) worth $2.3 million entitled, “Alcohol/marijuana & risky adolescent sexual behavior: Group interventions with detained adolescents.”

Karin Butler:
- An important paper published for a study that looks at the effectiveness of a strategy for decreasing memory errors in older adults.

Harold Delaney:
- His course “Sigmund Freud Debates C. S. Lewis: Sexuality, Suffering, and the Meaning of Life” is the most popular course in the University Honors program.
- His 24th year coordinating the Psychology Honors Program; graduates of the program were admitted this year to graduate programs at the University of Hawaii, University of California at Irvine, and the University of Cincinnati.

Mike Dougher:
- New position –Associate Vice President for Research.
- Special APA award for his work that bridges the gap between laboratory research and real clinical problems (e.g., anxiety and depression).
- Great advocate in higher administration for Psychology.

Steve Gangestad:
- Co-authored a book entitled, “The Evolutionary Biology of Human Female Sexuality.”

Kent Kiehl:
- His work in which he uses brain scans to study the minds of criminals was cited in Science, Nature and then popular magazines like The New Yorker (not People magazine yet though.....)

Theresa Moyers:
- Had a paper published in the top clinical psychology journal that examines the language that substance abusing clients use in therapy, and how that influences the choices they make about abstinence.
Eric Ruthruff:
- Published 5 articles & 2 book chapters
- Biggest accomplishment though? “I put together a desk for my home office, all by myself. I was real proud of that. It came in a box with instructions and all the parts, but it wasn't easy” (sorry Eric! I couldn’t resist mentioning it again – Jane).

Bruce Smith:
- 13 articles, including several in the top journals in clinical psychology, psychiatry, neuroimaging, & pain.
- 4 undergraduates from his lab were accepted into doctoral programs in psychology.

Akaysha Tang:
- National/international attention for a paper concerning the role of maternal care on offspring’s ability to adapt to stressful social situations.
- Great efforts to increase diversity among the graduate student body in our department.
- Regularly involved undergraduates in her research at a high level such that they earned authorship on some of her publications.

Claudia Tesche:
- Received an exciting new federal grant to study language and addiction.

David Witherington:
- Published multiple articles & book chapters on the development of emotion in infants.
- Worked hard to make sure graduate students got additional training to be good teachers.

Elizabeth Yeater:
- Teacher of the Year (the only assistant professor to get a university teaching award this year).
- 6-month old Madeline Rose.

Kamilla Venner:
- Started a fascinating treatment study with the Zuni tribe in which she will work with the tribal members to adapt two alcohol treatments to specifically fit the tribe’s unique culture/needs.

Ron Yeo:
- Published a striking number of articles/chapters - despite being chair the last 4 years; he is a neuropsychologist who studies, for example, neurochemical correlates of brain injury, intelligence, and mood.
- Provided a tremendous amount of help to the new chair despite being on sabbatical himself.
F. Staff

The Department of Psychology continued to benefit from a highly competent support staff last year that skillfully handled the basic functions essential to the day-to-day operations of the department. Trish Aragon-Mascarías served a second year in her position as the Department Administrator. She was given an award by the chair for her "Extraordinary Service to the Chair". Stan Bennett (Department Financial Administrator), an experienced and capable administrator, handled increasingly more grants due to the joint appointments with Mind Research Network (MRN). Carol-Ann Griffin assisted Stan Bennett in accounting, finance, and grants, as well as coordinating with MRN and CASAA. Jeani Sarosy expertly advised students, managed the data base for graduate admissions and active graduate students, and handled all communications with the Office of Graduate Studies (OGS). She left her position in the summer of 2008. Many of her duties were picked up by a superb temporary hire; Shirley Heying. Kim Larrañaga an Administrative Assistant, helped organize the schedule of classes, developed much of the annual report, tracked faculty publications, and assisted with the distribution/tracking of tenure materials to external reviewers. The department’s core staff brought a lot of energy and enjoyment to the main office.

Our research support staff again included Gilbert Borunda (Senior Lab Animal Technician), Ector Estrada (Animal Research Coordinator), and Patrick Sharp (Research Engineer). Our veterinarian was Dr. Kevin O’Hare. The outstanding experience, skills and efforts of these individuals were invaluable and facilitated a wide range of research activities in our department.

The success of the Psychology Clinic this year was due in large measure to the administrative and interpersonal skills of Dan Matthews, who has served as the Clinic Staff Director for more than 20 years. Dan continued to be assisted in his duties by Wanda Sharts, the Administrative Assistant.

G. Space

As has been highlighted in the Department’s Annual Report for the past 18 years, our Department is not well accommodated by its current space allocation. We need a new building or a significant addition to the existing building. Currently, we have insufficient staff space in order to function optimally, and more importantly, insufficient research laboratory space. Unfortunately, during the past few years we have had to continue to convert graduate student offices into faculty research space. Even with this, we do not have sufficient, suitable research space in the building to accommodate the high level of faculty research activity that has been attained in recent years. The size of our current building places severe limitations on our ability to grow and to reach our full potential as a department. The Department’s request for an addition has been acknowledged routinely on the University’s Capital Projects list. As mentioned last year, our American Psychological Association (APA) accreditation review specifically noted the inadequacies of the Psychology Department Clinic, which has been addressed this year (see below).
Psychology Clinic

The poor condition of the department's Psychology Clinic was raised as a problem in both of our 2007 reviews: the Academic Program Review for the entire department and the American Psychological Association's report on the clinical program. In the summer of 2008 the university planners identified a suitable new clinic (and AGORA) building and obtained $250,000 to renovate it. The newly renovated clinic was completed in November of 2008. The clinic has four sizable therapy rooms, with two of them large enough to conduct groups. The capability for observation is available for two of the rooms. In addition, there is a large student work area, room for supervision and storage, and offices for several staff, including the Clinic Director, Dan Matthews.

Building Proposals

In an effort to obtain Federal Stimulus funds ["Recovery Act Limited Competition: Extramural Research Facilities Improvement Program (C06)"] to improve the physical structure for the Psychology Department and CASAA, two different grant proposals were submitted (and one was planned for the Fall 2009 deadline).

Animal Research Facility: This $15 million proposal was for a separate 34,000 gsf building to be shared by animal researchers in Psychology, Biology, and Biomedical Engineering. The facility would be located on main campus between Logan and Castetter (Biology) Halls. The building would house animals used in NIH research and would contain wet lab space. Derek Hamilton was a department representative (along with the chair) at the many proposal-writing meetings.

New CASAA Building: This $15 million proposal was for a new 43,894 square foot CASAA building to be located on main campus on the north/east side of Logan Hall. The 3-story structure would house current CASAA researchers as well as several professors in the Psychology Department who have research that is focused on addictions and health. In addition, the building would house a new state-of-the-art Psychology Clinic, a large testing area, and training/conference rooms. Barbara McCrady took charge of preparing the main narrative for the proposal. She was assisted by the chair.

A proposal for a remodel of the second floor of Logan Hall into a Clinical Neuroscience Core was in preparation for a September 2009 deadline.

Regardless of the result of the grant proposals, an awareness of the dire needs of the Psychology Department in terms of its building was raised on campus with the main planning and development staff.
APPENDIX A

SUMMARY STATISTICS

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<tr>
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<td><strong>Faculty Information</strong></td>
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<td>Voting Faculty (total)</td>
<td>22</td>
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<td>25</td>
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<td>Professors</td>
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<td>5</td>
<td>7</td>
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<tr>
<td>Assistant Professors</td>
<td>7.5</td>
<td>9</td>
<td>10</td>
<td>11</td>
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<tr>
<td>Budgeted FTE Faculty</td>
<td>21.5</td>
<td>19.4</td>
<td>20.06</td>
<td>20.47</td>
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<tr>
<td>Visiting Faculty</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
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</tbody>
</table>

| **Research Activities** |
| Books, Articles, Chapters | 72 | 93 | 109 | 123 | 140 |
| Extramural Support | 7,187,187.91 | 6,627,298.5 | 7,948,804 | 8,986,229 | 7,485,558 |

| **General Information** |
| FTE Staff | 12.25 | 12.63 | 12.82 | 12.21 | 12.60 |
| Department Budget | 2,228,702 | 2,261,188 | 2,279,177 | 2,436,120 | 2,580,451 |
APPENDIX B

OUTSIDE-SPONSORED RESEARCH FOR 2008-2009

Catherine Baca: Principal Investigator

National Institutes of Health (NIH); “Primary Care Intervention Alcoholism”; $146,311.00; 9/1/2003-8/31/2008

Angela Bryan: Principal Investigator

NIAAA/NIH—HIV Prevention with Adolescents: Neurocognitive Deficits and Treatment Response; $625,596.00; 09/30/2007-8/31/2012
NIAAA/NIH—Alcohol, Marijuana, and Risky Sex: Group Interventions with Detained Adolescents; $682,596.00; 07/01/09-06/30/2014
NIAAA/NIH—STIMULUS-HIV Prevention with Adolescents: Neurocognitive Deficits and Treatment Response; $125,637.00; 08/03/2009-06/30/2010
UC Boulder—Multi-level Analysis of Self-Regulation and Substance Abuse; $26,922.00; 05/01/2009-03/31/2010
UC Boulder—Mediators & Moderators of Exercise Behavior Chg; $80,677.00; 7/1/07-6/30/2009

Timothy Goldsmith: Principal Investigator

Federal Aviation Administration; “Structural Knowledge Analysis of Aviation Safety Reports”, $270,000.00; 4/01/07-10/08/2008.

Derek Hamilton: Principal Investigator

NIAAA; Prenatal Ethanol, Social Behavior and Prefrontal Cortex; $358,433.00; 04/17/2006-03/31/2009.

Gordon Hodge: Principal Investigator


Kent Hutchison: Principal Investigator

NIAAA/NIH—Treatment Alcohol Dependence: Integrating Genetic & fMRI Methods; $309,930.00; 10/12/2007-04/30/2010
NIAAA/NIH—A New Pharmacotherapy for Alcohol Dependence; $339,665.00; 12/01/2005-11/30/2010
NIAAA/NIH—Sensitivity to Intravenous Ethanol: Genetic Determinants; $276,011.00; 09/25/2007-08/31/2010

20
Kent Kiehl: Principal Investigator

MIND Research Network – Graduate Research Assistant Support for Prof. Kent Kiehl; $26,908.00; 08/08/2007-08/31/2010
National Institute of Mental Health/NIH—Aberrant Functional Connectivity in Psychosis; $201,488.00; 07/27/2005-06/30/2010
National Institute of Mental Health/NIH—Neurocognitive Assessment of ‘Callous’ Conduct Disordered Youth; $206,338.00; 02/02/2006-12/30/2010
National Institute on Drug Abuse/NIH—Neurocognitive Changes Associated with Behavioral Treatment in Cocaine Abusers; $357,767.00; 09/30/2005-07/31/2010

Barbara McCrady: Principal Investigator

Clarity; Enhance the Safety of Children; $11,334.00; 01/01/2008-09/29/2012.
Rutgers – CBT Models and Change Mechanisms; $15,894.00; 09/30/08-08/9/2013

Theresa Moyers: Principal Investigator

National Institute on Alcohol Abuse and Alcoholism/NIH-Testing Theory-Based Training in Motivational Interviewing; $525,201.00; 07/30/2007-06/30/2010
Loyola University; “Trauma Center Brief Intervention”; $39,260.00; 08/21/2006-07/31/2012
NIDA; Testing Theory-Based Training; $541,203.00; 07/30/2007-06/30/2011.

Bruce Smith: Principal Investigator

Sandia National Labs; The Role of Emotion and Emotion Regulation in Decision Making and Action in Critical Situations; $40,000.00; 10/01/2007-09/30/2008.

Akaysha Tang: Principle Investigator

Sandia National Laboratories; “Construction, Extraction, and Validation of Human Brain prints From High-Density EEG”; $349,999; 2/15/06-9/30/08.

J. Scott Tonigan: Principal Investigator

National Institute on Alcohol Abuse and Alcoholism (NIAAA); “Transtheoretic Model of AA Rel”; $187,072.00; 04/15/2004-03/31/2009.
National Institute on Alcohol Abuse and Alcoholism (NIAAA); “Therapeutic Mechanisms in AA”; $144,932.00; 08/01/2007-04/30/2009.
National Institute of Health (NIH); “AA Social Dynamics”; $136,187.00; 09/30/2006-08/31/2011

Kamilla Venner: Principal Investigator

NIDA; “Zuni MI/CRA Project”; $458,854.00; 09/30/2007-07/31/2011.
Elizabeth Yeater: Principal Investigator
Veterans Administration Medical Center; IPA Funding for Psychology Graduate Student Erica Nason; $13,362.00; 06/01/2008-12/31/2009

Ronald A. Yeo: Principal Investigator
MIND Research Network; Scientific Research Consulting Services-Psychology Department; $614,661.00; 08/16/2007-08/31/2009

MIND Research Network; Attentional Dysfunctional/Recovery in TBI; $36,420.00; 03/01/2009-02/28/2010
## APPENDIX C

### LETTERS OF ACADEMIC TITLES

<table>
<thead>
<tr>
<th>NAME</th>
<th>TITLE</th>
<th>ORGANIZATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyal Aharoni</td>
<td>Research Scholar</td>
<td>The MIND Research Network</td>
</tr>
<tr>
<td>Paul Amrhein</td>
<td>Adjunct Associate Professor</td>
<td>Montclair State, New Jersey</td>
</tr>
<tr>
<td>Robert Annett</td>
<td>Research Professor</td>
<td>University of New Mexico Hospital</td>
</tr>
<tr>
<td>Alfredo Aragon</td>
<td>Research Assistant Professor</td>
<td>University of New Mexico- CASAA</td>
</tr>
<tr>
<td>Lisa Arciniega</td>
<td>Clinical Associate</td>
<td>VA Medical Center</td>
</tr>
<tr>
<td>Michael Bogenschutz</td>
<td>Adjunct Professor of Psychology</td>
<td>University of New Mexico, Psychiatry</td>
</tr>
<tr>
<td>Molly Brack</td>
<td>Adjunct Lecturer I</td>
<td>AGORA</td>
</tr>
<tr>
<td>Judith Brooks</td>
<td>Clinical Associate</td>
<td>VA Medical Center</td>
</tr>
<tr>
<td>Diane Castillo</td>
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<td>VA Medical Center</td>
</tr>
<tr>
<td>Elizabeth Dettmer</td>
<td>Adjunct Assistant Professor</td>
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</tr>
<tr>
<td>Henry Ellis</td>
<td>Research Professor</td>
<td>UNM Psychology Department</td>
</tr>
<tr>
<td>Sarah Feldstein-Ewing</td>
<td>Adjunct Research Assistant Professor</td>
<td>The MIND Research Network</td>
</tr>
<tr>
<td>Francesca Fibley</td>
<td>Research Assistant Professor</td>
<td>University of Colorado at Boulder, Psych</td>
</tr>
<tr>
<td>Brandi Fink</td>
<td>Research Scholar</td>
<td>UNM Psychology Department</td>
</tr>
<tr>
<td>Alyssa Forcehines</td>
<td>Research Assistant Professor</td>
<td>University of New Mexico- CASAA</td>
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<tr>
<td>Charles Gasparovic</td>
<td>Research Assistant Professor</td>
<td>The MIND Research Network</td>
</tr>
<tr>
<td>James Gillies</td>
<td>Research Assistant Professor</td>
<td>VA Medical Center</td>
</tr>
<tr>
<td>Jessica Goodkind</td>
<td>Research Assistant Professor</td>
<td>University of New Mexico Hospital</td>
</tr>
<tr>
<td>Faith Hanlon</td>
<td>Research Assistant Professor of Psych</td>
<td>VA Medical Center</td>
</tr>
<tr>
<td>Christian Hendershot</td>
<td>Research Scholar</td>
<td>University of New Mexico- CASAA</td>
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<tr>
<td>Reid Hester</td>
<td>Research Associate Professor</td>
<td>University of New Mexico- CASAA</td>
</tr>
<tr>
<td>Lorna Joachim</td>
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<tr>
<td>Brian Kersh</td>
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<tr>
<td>James Kroger</td>
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<td>New Mexico State University</td>
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<tr>
<td>Alexandre Laudet</td>
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<td>University of New Mexico - CASAA</td>
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<tr>
<td>Eric Levensky</td>
<td>Clinical Associate</td>
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<tr>
<td>Vanessa Lopez-Viets</td>
<td>Research Assistant Professor</td>
<td>UNM Psychology Department</td>
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<tr>
<td>June Malone</td>
<td>Clinical Associate</td>
<td>VA Medical Center</td>
</tr>
<tr>
<td>Ella Nye</td>
<td>Clinical Associate</td>
<td>VA Medical Center</td>
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<tr>
<td>Kathleen Padilla</td>
<td>Clinical Associate</td>
<td>VA Medical Center</td>
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<td>E. Pare-Blapoever</td>
<td>Adjunct Assistant Professor of Psych</td>
<td>The MIND Research Network</td>
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<td>Brian Pilgram</td>
<td>Clinical Associate</td>
<td>VA Medical Center</td>
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<tr>
<td>Allecia Reid-McCarty</td>
<td>Research Scholar</td>
<td>University of New Mexico- CASAA</td>
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<tr>
<td>Jennifer Relage</td>
<td>Clinical Associate</td>
<td>VA Medical Center</td>
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<tr>
<td>Donald Rossi</td>
<td>Adjunct Professor of Psychology</td>
<td>New Mexico Department of Education</td>
</tr>
<tr>
<td>Mel Rutherford</td>
<td>Academic Colleague</td>
<td>UNM Psychology Department</td>
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<tr>
<td>Joseph Sadek</td>
<td>Clinical Associate</td>
<td>VA Medical Center</td>
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<tr>
<td>Evelyn Sandeen</td>
<td>Clinical Associate</td>
<td>VA Medical Center</td>
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<tr>
<td>Pilar Sanjuan</td>
<td>Adjunct Research Assistant Professor</td>
<td>The MIND Research Network</td>
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<tr>
<td>Brian Shelley</td>
<td>Research Assistant Professor</td>
<td>UNM Center for Life</td>
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<tr>
<td>Timothy Strongin</td>
<td>Clinical Associate</td>
<td>Saint Joseph Medical Center</td>
</tr>
<tr>
<td>Name</td>
<td>Title</td>
<td>Institution</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Rex Swanda</td>
<td>Clinical Associate</td>
<td>VA Medical Center</td>
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<tr>
<td>Ursina Teuscher</td>
<td>Adjunct Assistant Professor of Psych</td>
<td>University of California, San Diego</td>
</tr>
<tr>
<td>Robert Thoma</td>
<td>Research Assistant Professor of Psych</td>
<td>VA Medical Center</td>
</tr>
<tr>
<td>Lorraine Torres-Sena</td>
<td>Clinical Associate</td>
<td>VA Medical Center</td>
</tr>
<tr>
<td>Teddy Warner</td>
<td>Adjunct Associate Professor</td>
<td>UNM Family Community Medicine</td>
</tr>
</tbody>
</table>
APPENDIX D

FACULTY PUBLICATIONS AY 2008-2009

BRYAN, ANGELA


BUTLER, KARIN M.

CIESIELSKI, KRISTINA

CLARK, VINCENT P.


DELANEY, HAROLD D.

DOUGHER, MICHAEL J.


ERICKSON, SARAH


GANGESTAD, STEVEN W.


GOLDSMITH, TIMOTHY E.


HAMILTON, DEREK


HODGE, GORDON

HUTCHISON, KENT


KIEHL, KENT A.


**MCCRADY, BARBARA**


Worden, B., McCrady, B., & Epstein, E. (2008). Assessment reactivity to follow-

**MILLER, GEOFFREY F.**


Section 1.01

MOYERS, THERESA


RUTHRUFF, ERIC


SMITH, BRUCE W.


34


SMITH, JANE ELLEN


TANG, AKAYSHA C.


TESCHE, CLAUDIA D.

VENNER, KAMILLA


VERNEY, STEVEN P.


WITHERINGTON, DAVID C.


YEATER, ELIZABETH A.


YEAO, RONALD A.


## APPENDIX E

### COLLOQUIA AY 2008-2009

<table>
<thead>
<tr>
<th>Colloquium Presented By</th>
<th>Colloquium Title/Date</th>
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<tbody>
<tr>
<td>Richard Thompson, Professor&lt;br&gt;University of Southern California&lt;br&gt;[Quad-L Lecturer]</td>
<td>“In search of memory traces”&lt;br&gt;October 6, 2008</td>
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<tr>
<td>Christian Meissner, Associate Professor&lt;br&gt;Department of Psychology&lt;br&gt;University of Texas-El Paso</td>
<td>“Memory for own-and other-race faces: Using a theoretical approach to inform practice in eyewitness identification”&lt;br&gt;February 15, 2009</td>
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<tr>
<td>Teenie Matlock, Founding Faculty &amp; Assistant Professor of Cognitive Science&lt;br&gt;University of California, Merced&lt;br&gt;(Joint Colloquium with UNM Linguistics Department)</td>
<td>“The dynamics of fictive motion”&lt;br&gt;April 3, 2009</td>
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<tr>
<td>Terence Wilson, Professor II and Oscar Krisen Buros Professor&lt;br&gt;Rutgers New Brunswick</td>
<td>“Evidence-based treatment: Progress and problems”&lt;br&gt;April 24, 2009</td>
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### APPENDIX F

**DOCTORAL DEGREES AWARDED AY 2008-2009**

<table>
<thead>
<tr>
<th>NAME</th>
<th>TITLE OF DISSERTATION</th>
<th>ADVISOR</th>
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</thead>
<tbody>
<tr>
<td>Jennifer A. Harriger</td>
<td>&quot;Risk and Protective Factors in Women's Artistic Gymnastics: The Relationship to Disordered Eating and Negative Body Image&quot;</td>
<td>David Witherington</td>
</tr>
<tr>
<td>Stacey Hendrickson</td>
<td>&quot;The Wrong Wright Stuff: Mapping Error in Aviation&quot;</td>
<td>Tim Goldsmith</td>
</tr>
<tr>
<td>Timothy V. Hoyt</td>
<td>&quot;Person-and Situation-Level Factors Predicting Sexually Aggressive Behavior in College Men's Responses to Analogue Dating and Social Situations&quot;</td>
<td>Elizabeth Yeater</td>
</tr>
<tr>
<td>Sharon Kernen</td>
<td>&quot;Insulin Dependent Diabetes: The Effects of Depression on Executive Functions and Disease Management&quot;</td>
<td>Ron Yeo</td>
</tr>
<tr>
<td>Lauren Parks</td>
<td>&quot;Longitudinal Changes in Ventricle Volume Following Pediatric Traumatic Brain Injury: Predictors of Cognitive Function&quot;</td>
<td>Ron Yeo</td>
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<td>Ilanit R. Tal</td>
<td>&quot;Sibling Kin Recognition: Social and Genetic Predictors of Incest Aversion and Altruism&quot;</td>
<td>Steve Gangestad</td>
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## APPENDIX G

**MASTER'S DEGREES AWARDED AY 2008-2009**

<table>
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<tr>
<th>NAME</th>
<th>TITLE OF THESIS</th>
<th>ADVISOR</th>
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<tbody>
<tr>
<td>Mary E. Bancroft</td>
<td><em>Relationships between Coping Strategies and Cognitive Ability, Temperament and Parent Socialization in an Ethnically Diverse Sample of Preschool Children</em></td>
<td>Sarah Erickson</td>
</tr>
<tr>
<td>Ann E. Caldwell</td>
<td><em>Family: The Essential Presence</em></td>
<td>Angela Bryan</td>
</tr>
<tr>
<td>Marita Campos-Melady</td>
<td>The Lexical Decision Task: A Better Measure for Predicting Alcohol Use in Women?</td>
<td>Jane Ellen Smith</td>
</tr>
<tr>
<td>Felicha T. Candelaria</td>
<td><em>Cannabinoids Impair Acquisition, Consolidation, and Reconsolidation of Rodent Spatial Memory</em></td>
<td>Derek Hamilton</td>
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<tr>
<td>Lora Cope</td>
<td>Paralimbic Structural Abnormalities in Psychopathy: A Voxel-Based Morphometry Study</td>
<td>Kent Kiehl</td>
</tr>
<tr>
<td>Suzanne Duvall</td>
<td>Executive Function within a preschool sample born preterm and very low birth weight</td>
<td>Sarah Erickson</td>
</tr>
<tr>
<td>Lisa Hagen Glynn</td>
<td>Talking About Drinking</td>
<td>Theresa Moyers</td>
</tr>
<tr>
<td>Travis Johnson</td>
<td>Negative contrast and spatial navigation in orbitofrontal and pre-limbic/infra-limbic lesioned rats: A single dissociation</td>
<td>Derek Hamilton</td>
</tr>
<tr>
<td>Tessa E. Margett</td>
<td>The Development of Preschool Age Children's Concept of Living and Man-made Objects</td>
<td>David Witherington</td>
</tr>
</tbody>
</table>
Kathryn Wiggins  How does mindfulness affect relationships? Examining the role of empathy and emotion regulation  Bruce Smith
APPENDIX H

AMERICAN PSYCHOLOGICAL ASSOCIATION COMMISSION ON ACCREDITATION ANNUAL REPORT

Summary Report for the Doctoral Program in Clinical Psychology at University of New Mexico (000938)
For the Reporting Period: 9/1/2007 to 8/31/2008

Total Number Who Applied to the Program: 121
Total Number Who Were Offered Admission to the Program:
Applied for an Internship for 2008 - 2009: 5
Were placed in an Internship for 2008 - 2009: 5
Number of Degrees Awarded in 2007-2008: 4
Average Number of Years to Complete Program: 7
Total Number of Currently Enrolled Students: 53
Number of Archived Students: 31

African American-Black: 1
Caucasian: 40
Hispanic-Latino: 9
Asian: 0
American Indian - Alaska Native: 1
Multi-Ethnic: 2
Not Reported: 0
Canadian: 0
Male: 10
Female: 43

Minority Students: 13

Students under the Americans with Disabilities Act: 1

Foreign National Students: 1

Member of Professional or Research Society: 36

Author or Co-Author of Papers or Workshops at Professional Meetings: 26

Author or Co-Author of Articles in Professional or Scientific Journals: 24

Involved in Grant-Supported Research: 32

Involved in Teaching: 16

Involved Part-Time in Supervised Practicum Training on or off Campus: 25

Average GPA: 3.64

Total Number of Students Reported: 53

Average GRE scores (Verbal + Quantitative): 1289

Total Number of Students Reported: 53

Graduate Semester-hour Equivalent Credits: 3

Average Intervention and Assessment Hours: 623

Average Support Hours: 288

Average Supervision Hours: 255

African American-Black: 0

Caucasian: 10

Hispanic-Latino: 0
Asian: 0
American Indian - Alaska Native: 2
Multi-Ethnic: 0
Not Reported: 0
Canadian: 0
Male: 5
Female: 7
Core Program Faculty: 12
Other Program Faculty: 0
Other Contributors: 0
Member of Professional or Research Society: 12
Author or Co-Author of Papers or Workshops at Professional Meetings: 12
Author or Co-Author of Articles in Professional or Scientific Journals: 12
Recipient of Grants or Contracts: 9
Involved in Undergraduate Teaching: 10
Involved in Masters Teaching: 12
Involved in Doctoral Teaching: 12
Involved in Research Supervision: 12
Involved in Professional Service Supervision: 10
Engaged in Delivery of Professional Services: 3
APPENDIX I

GRADUATE STUDENTS ACCEPTED FOR AY 2009-2010

<table>
<thead>
<tr>
<th>NAME</th>
<th>ADVISOR</th>
<th>AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katherine Belon</td>
<td>Jane Ellen Smith</td>
<td>Clinical</td>
</tr>
<tr>
<td>Sara Blaine</td>
<td>Kent Hutchison</td>
<td>Clinical</td>
</tr>
<tr>
<td>Julie Brovko</td>
<td>Ken Kiehl</td>
<td>Clinical</td>
</tr>
<tr>
<td>Jennifer Crawford</td>
<td>Elizabeth Yeater</td>
<td>Clinical</td>
</tr>
<tr>
<td>Brian Coffman</td>
<td>Vince Clark</td>
<td>Cognition, Brain &amp; Behavior</td>
</tr>
<tr>
<td>Daniel Fischer</td>
<td>Theresa Moyers</td>
<td>Clinical</td>
</tr>
<tr>
<td>Christopher Garcia</td>
<td>Claudia Tesche</td>
<td>Cognition, Brain &amp; Behavior</td>
</tr>
<tr>
<td>Kari Leiting</td>
<td>Elizabeth Yeater</td>
<td>Clinical</td>
</tr>
<tr>
<td>Christopher McClouth</td>
<td>Theresa Moyers</td>
<td>Clinical</td>
</tr>
<tr>
<td>Erika Montanaro</td>
<td>Angela Bryan</td>
<td>Health</td>
</tr>
<tr>
<td>Michael Trumbo</td>
<td>Vince Clark</td>
<td>Cognition, Brain &amp; Behavior</td>
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</table>
## APPENDIX J

### SENIOR HONOR THÈSES AY 2008-2009

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>THESIS TITLE</th>
<th>FACULTY SPONSOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lauren Bullard</td>
<td><em>Drum Therapy: How Does it Affect Mood States and Burnout?</em></td>
<td>Alyssa Forcehimes, Ph.D.</td>
</tr>
<tr>
<td>Shannon Kinkead</td>
<td><em>Neurophysiology and Attention as a Function of Nicotine Withdrawal in Dependent Individuals</em></td>
<td>Kent Hutchison, Ph.D.</td>
</tr>
<tr>
<td>Belinda Vicuña</td>
<td><em>The Forgiving Personality: Exploring the Relationship Between Personality and Forgiveness Across Varying Situations</em></td>
<td>Harold Delaney, Ph.D.</td>
</tr>
<tr>
<td>Garrett Hosack</td>
<td><em>Neutral Affect Processing in Schizophrenia</em></td>
<td>Jose Canive, M.D.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stephen Lewis, M.D.</td>
</tr>
<tr>
<td>Christine Karver</td>
<td><em>Anthropomorphism in Children's Stories: Preference and Retention For Stories With Animal Versus Human Illustrations</em></td>
<td>David Witherington, Ph.D.</td>
</tr>
<tr>
<td>Flannery Merideth</td>
<td><em>Evaluation of the Equivalence of the Standard Versus Computerized Administration of the Wisconsin Card Sorting Test</em></td>
<td>Joseph Sadek, Ph.D.</td>
</tr>
<tr>
<td>Asa Warren</td>
<td><em>A Smoking Cessation Study Involving Values-Based Motivational Interviewing</em></td>
<td>Brian Kersh, Ph.D.</td>
</tr>
<tr>
<td>Katherine Nieman</td>
<td><em>Self-Control as a Limited Resource: The Influence of Success or Failure</em></td>
<td>Harold Delaney, Ph.D.</td>
</tr>
<tr>
<td>Tiffany Callahan</td>
<td><em>Self-Determination Theory in Sport: Differences between Athletes in Individual and Team Sports</em></td>
<td>Angela Bryan, Ph.D.</td>
</tr>
<tr>
<td>Stephen Pina</td>
<td><em>Anxiety and Steroids: The Relationship Between Self-Perceived Anxiety and the Willingness to Try Steroids</em></td>
<td>Theresa Moyers, Ph.D.</td>
</tr>
</tbody>
</table>

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# APPENDIX K

## COMMITTEE ASSIGNMENTS AY 2008-2009

<table>
<thead>
<tr>
<th>AREAS</th>
<th>Area Heads + Assoc. Chairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical</td>
<td>Erickson*, Dougher, Ciesielski, McCrady, Moyers, B. Smith, J. Smith, Venner, Verney, Yeater</td>
</tr>
<tr>
<td>Cognition, Brain, Behavior</td>
<td>Clark, Butler, Ciesielski, Goldsmith, Hamilton, Hodge, Kiehl, Ruthruff, Tang, Tesche</td>
</tr>
<tr>
<td>Developmental/Evolution</td>
<td>Gangestad, Ciesielski, Erickson, Witherington</td>
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<tr>
<td>Health</td>
<td>Bryan, Delaney, Erickson, B. Smith</td>
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<td>Delaney, Bryan, Gangestad, Goldsmith</td>
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<td>Policy &amp; Planning</td>
<td>Bryan, Clark, Delaney, Erickson, Gangestad, Goldsmith, Hodge, McCrady</td>
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<td>Human Subjects (Department)</td>
<td>Goldsmith, Butler, Hamilton, Tang, Witherington</td>
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<tr>
<td>Admissions</td>
<td>Gangestad, Kiehl, Ruthruff, Venner, Verney, Yeater</td>
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<td>Outcomes Assessment</td>
<td>Hodge, Delaney, Goldsmith</td>
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<td>BAC (Basics in Addiction Counseling) Program</td>
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<td>Animal Facilities &amp; Use</td>
<td>O’Hair (vet), Hamilton, Tang</td>
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<td>Colloquia</td>
<td>Tesche, Bryan, B. Smith</td>
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<td>Computer/Web</td>
<td>Ruthruff, Kiehl, Tesche</td>
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<td>Awards</td>
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<td>Delaney, Clark, Hodge, B. Smith</td>
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<td>Grant Writing Mentoring</td>
<td>Hutchison, Bryan, Hamilton, Kiehl</td>
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<td>Teaching/Mentoring</td>
<td>Witherington, Alley, Hodge</td>
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<td>Library Liaison</td>
<td>Tang</td>
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NOTE: These do not include the university committees on which many of our faculty serve, such as the IRB, Institutional Animal Care and Use Committee, Academic Freedom & Tenure Committee, Faculty Senate.

*An underlined committee name designates the chair.
This report focuses on the activities of the UNM Religious Studies program from the period of July 1, 2008 to June 30, 2009.

A. Significant Program Developments

1. Strengthening our Undergraduate Program

   • Religious Studies courses have enjoyed strong enrollments: 1,184 students in the Fall 2008 semester and 1,326 students in the Spring 2009 semester (for a total of 2,510 students enrolled in the 2008-2009 academic year). Additionally, our number of majors is currently 49. Yet one of our primary goals this year has been to build a stronger sense of community for our undergraduate students. Toward this end, we organized an Advising Day Open House in the Religious Studies office where students could stop by to meet our undergraduate adviser, the program director, and our office administrative staff. We hoped that this would increase the amount of contact and ties among students, faculty, and staff.

   • Another goal has been to create a vibrant intellectual climate in Religious Studies. To achieve this, we launched the Religious Studies Research Colloquium in the spring of 2009. We sponsored research presentations by our lecturers, part-time instructors, and advanced graduate students in Religious Studies-related fields. The purpose of this colloquium was three-fold: 1) to show diversity of topics that are part of this discipline; 2) to give students a chance to interact with faculty outside the classroom; and 3) to provide insight into the process of how scholars conduct research on religious phenomena. We sponsored four different presentations (see Appendix A for a full listing) and were delighted with the strong turnout. At the first presentation, we had 63 people in attendance (roughly 50 of which were students). The other presentations drew between 20 and 40 attendees. Because of the success of the colloquium series, we extended it into the 2009-2010 academic year.

   • Our final effort to improve the undergraduate program has entailed a concerted attempt to make sure that our course offerings help students make progress toward degree completion. In recent years, the previous director has done an admirable job of ensuring a diverse
range of course offerings; now we are working to ensure that all our topics classes fit within the key distributional areas of our program requirements.

2. Learning Outcomes Assessment

- We have continued our outcomes assessment process for our core curriculum classes (RELG 107, 263, 264) with ongoing collection of assessment data and formal meetings to discuss and analyze the findings.

- In the past year, we began our program level outcomes assessment process that focuses on student learning over the course of the major. A rubric was designed and data were collected on our 400-level courses. The instructors for these classes also formally met to evaluate the data. As a result of this process, we have decided to pursue some revisions in the assessment rubric and a small committee has drafted a proposal for a Religious Studies capstone course that is designed to help students synthesize and apply the knowledge acquired during their course of study. The Religious Studies Steering Committee has approved the capstone course and we anticipate implementing it during the 2010-2011 academic year.

3. Strengthening Faculty Support of Religious Studies

The Religious Studies Committee is a ten-member faculty board that guides our program and makes key policy decisions. Of these ten members, seven are elected from our larger group of Associated Faculty to serve three-year terms. However, during the Spring 2009 election, we had difficulty in recruiting candidates or even soliciting a strong voter turnout from our Associated Faculty. This indicated that our ties to these individuals and their commitment to the Religious Studies program is weaker than we would like. As a result, we re-evaluated the role of the Associated Faculty as well as our expectations of them. Consequently, the current members of the Religious Studies Committee have developed clearer criteria for joining the Associated Faculty list and we have specified our expectations of them. These expectations include: a) submitting a brief biographical statement on their professional work in the field of religion (which we post on our website); b) agreeing to vote in the annual election; and c) attending one yearly meeting or event sponsored by the Religious Studies program.

We also created a Religious Studies "Interest Group" that would include faculty and community members who want to receive information about our program and events but who do not currently fit the criteria of Associated Faculty.
4. **Catholic Studies Endowed Chair**

After $2.1 million was raised for an Endowed Chair in Catholic Studies in 2008, the plan was to recruit for this position starting in January 2009 when the new Director of Religious Studies was on board. However, with last fall's stock market decline, the endowment was depleted sufficiently that we are currently unable to hire for a permanent Full Professor position. As an alternative, we consulted with the Archbishop's office and they agreed that we ought to hire a Visiting Professor of Catholic Studies until the endowment recovers. Thus in the spring of 2009, we began the search process. Four members of the UNM community are serving on the search committee: Richard Wood, Chair (sociology), Timothy Graham (History), Gabriel Melendez (American Studies), and John Taber (Philosophy). In addition, three individuals have been appointed to the search committee by the archdiocese: Dolly Sokol (Ph.D. Organizational Education), Joanne DuPont Sandoval (Ph.D. Religious Studies), and Joel Garner (Ph.D. Theology). The search committee drafted a job description last spring; the position was advertised over the summer and applications are currently being screened. A Visiting Professor may join us as soon as January 2010 or August 2010.

**B. Significant Plans and Recommendations for the Future**

1. **Curriculum Revision**

   One of the main goals for the 2009-2010 academic year is to conduct a thorough evaluation of our curriculum and propose a new, updated curriculum plan. We have already formed a curriculum subcommittee that will begin by analyzing the curricula of various comparable programs throughout the country.

2. **Religious Studies Events**

   - **Film Series**: A subcommittee has been formed to organize a Religion Film Series on campus. We are currently working on submitting a grant to the New Mexico Humanities Council to cover basic expenses and to potentially provide funding to bring in directors or experts to serve as discussants. We anticipate starting the film series in the fall of 2010.

   - **Religious Studies Research Colloquium**: Due to the success of last semester's events, we have continued to sponsor research presentations for students, faculty, and interested community members. See Appendix B for a listing of speakers for the Fall 2009 semester.
In addition, the Religious Studies program is continuing to co-sponsor events and guest speakers with a number of other groups on campus, including American Studies and the Latin American and Iberian Institute.

3. Research Activities through the Southwest Institute on Religion and Civil Society (SIRCS)

Faculty members are continuing to conduct research and write grants in connection with our research institute. Our Web Access for Civil Society Initiatives project is coming to a close in 2009 but two other research grants – focusing on religion on the U.S.-Mexico border and Pentecostalism in Central America – are currently in the works.

C. Appointments to Faculty/Staff

Sharon Erickson Nepstad joined the Religious Studies program as Director in January 2009. No other faculty or staff appointments have been made.

D. Separation of Faculty/Staff

Richard Wood (Associate Professor of Sociology) has stepped down as Director of Religious Studies but is continuing to serve as Director of the Southwest Institute on Religion and Civil Society.

E. Publications

Candelaria, Michael (Lecturer, Religious Studies & Philosophy)

Graham, Timothy (History, member of the Religious Studies Committee)

Hayes, Richard (Philosophy, member of the Religious Studies Committee)


Nepstad, Sharon Erickson (Sociology, Director of Religious Studies)


Obermeier, Anita (English, Member of the Religious Studies Committee)


Oberst, Joachim (Lecturer, Religious Studies)


**Watson, Paul** (Biology, Member of the Religious Studies Committee)


**F. Outside Professional Activities**

**Gerber, Lisa** (Lecturer, Religious Studies and Philosophy)


**Graham, Timothy** (History, Member of the Religious Studies Committee)

"To Hell and Back with Dante": A presentation of Dante's description of Inferno in the first canticle of his Divine Comedy, delivered to the Albuquerque OASIS group, August 2008.


Pre-conference workshop on "Medieval Manuscripts" at the annual meeting of the Arizona Center for Medieval and Renaissance Studies, held in Tempe, Arizona. February 2009.


“Through Purgatory to Paradise with Dante,” A presentation covering the last two canticles of the work, delivered to the Albuquerque OASIS group, August 2009.

Program Co-chair of the Annual Medieval Association Meeting at UNM 2009.

**Hayes, Richard** (Philosophy, Member of the Religious Studies Committee)

Respondent to three papers at the Pacific division meeting of American Philosophical, Association Society for Asian and Comparative Philosophy, on topic of ethics and epistemology in Indian Buddhism. Vancouver, British Columbia. April, 2009.


**Nepstad, Sharon Erickson** (Sociology, Director of Religious Studies)


**Obermeier, Anita** (English, Religious Studies Committee)


Program Chair of the Annual Medieval Association Meeting at UNM 2009.

**Wolne, Daniel** (Lecturer, Religious Studies)


**G. Outside Sponsored Research**

Appendix A: Spring 2009 Religious Studies Research Colloquium Presentations

April 3, 2009: Daniel Wolne, “Ridicule and the Ethics of Evangelical Atheism” (Attendance: 63)


June 30, 2009: Mozafar Banihashemi, “What is Happening in Iran?” (Attendance: 20)

Appendix B: Fall 2009 Religious Studies Research Colloquium Presentations

September 28, 2009: Kevin LaPoint, “Liberal and Devout: The Sources of Organizational Enthusiasm and Commitment in Liberal Churches.” (Attendance: 23)

October 16, 2009: Cynthia Geppart, “Return of the Plague? The Spiritual and Ethical Implications of Pandemic Influenza”

DEPARTMENT OF SOCIOLOGY

College of Arts and Sciences

University of New Mexico

ANNUAL REPORT

JULY 1, 2008 – JUNE 30, 2009

Dr. Beverly Burris, Department Chair
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Significant Developments and Professional Activities
During the Academic Year 2008-2009

Departmental

- The department held a day-long retreat on April 17, 2009 at the Sheraton Uptown. During this time we discussed revisions to our Rules of Governance, Outcomes Assessment, and our 2009/2010 Hiring Plan.

Dr. Lisa Broidy

Consulting


Presentations

Invited Presentations:

  - Presented September 2008 to the Chief Justice of the NM Supreme Court.

Presentations at Professional Meetings:


Service

Service for Professional Societies:


Departmental Service:

- Director, UNM Institute for Social Research (ISR), Summer 2006-present.
- Criminology Search Committee, Chair. Fall 2008. Sociology Department—University of New Mexico.
- Criminology Task Force, Chair: Spring 1999-Present. Sociology Department—University of New Mexico.

University Service:

- College of Arts and Sciences Research Advisory Committee, Member. Fall 2007-present.

Community Service:

- Director, NM Statistical Analysis Center (NMSAC), Spring 2006-present. University of New Mexico, Institute for Social Research.
- Member, New Mexico Prisoner Reentry Council Executive Steering Committee, Spring 2009-present.
- Member, New Mexico Death Review Team, Fall 2004-present.

Dr. Beverly Burris

- “Restructuring the Academic Workplace.” Paper presented at the 2008 ASA Meeting, Boston, MA.
Dr. Robert Fiala

Service

- Outcomes Assessment Coordinator, Sociology Dept. 2007-present.

Dr. Jane Hood

Unpublished Reports


Submitted Papers

- "Inconvenient terms and haphazard thinking: Re conceptualizing non probability sampling." (For Sociological Methodology) (July 20 2009)

Presentations:

- Presenter: "A hands-on approach to teaching research methods (with Web CT, Listserv, and students' laptops in the classroom)," Office of Support for Effective Teaching conference (February 18 2009, UNM, Albuquerque NM).

Reviews for the Profession:

- Sociological Quarterly #07-522Rr (6/11/08)
- Gender & Society 08-4868: "We've solved it well by not solving it at all" (11/5/08)

Service:

- Accessibility Services Advisory Board (Fall 2004-to present).
- Honors Coordinator (2002-present)
- Alpha Kappa Delta Advisor & Chapter Representative (2004-present).

Dr. George Huaco

Dr. Roberto Ibarra

- PI on a Latin American Studies project to identify, index, annotate and begin conservation of over 1,000 19th c. letters and other documents belonging to the family of Gen. Diego Ybarra, a close friend and relative of Gen. Simon Bolivar.

Dr. Nancy Lopez

Presentations

- 2008 "Hegemonic and Common Sense Understandings of Social "Race" in U.S. Schools: From the Supreme Court to High School Classrooms in the Southwest," University of California-Irvine, May.
- 2008 Diplomado, Race and Latino Students in NM Schools, UNM International Exchange, September.
- 2008 "Toward an Intersectional Approach to Educational Disparities" Pomona College, February 27.
- 2008 "Racial Stratification in New Mexico," co-presenter with Maria Velez, Mellon Foundation Fellowship, Speakers Series, December.
- 2008 "See No Evil, Hear No Evil: Discipline in NM Schools," co-presented with Jane Hood, Sociology Speakers Series, April

Dr. Christopher Lyons

Conference Presentations


Invited Presentations

- Lyons, Christopher J. 2009 (March). "Data Collection and Analyses, McNair/ROP training seminar, University of New Mexico.
Departmental Service

- Criminology Task Force, member
- Criminology Faculty Search Committee, member
- Graduate Committee, member
- Executive Committee, member
- Website Committee, member
- SGSA Faculty Representative

Dr. Sharon Nepstad

Presentations


Awards

- 2008. Visiting Fellow, Kroc Institute for International Peace Studies, University of Notre Dame

Service to Profession

- Collective Behavior and Social Movements Section
- Publications Committee member, 2008-2011

Dr. John Roberts

Service

- Chair, Arts & Sciences Junior Promotion and Tenure Committee, 2008-09.
- Chair, Department Undergraduate Committee, 2008-09.

Presentation


Dr. Wayne Santoro
Sociology – B. Burris | 2008/2009

Service/University

- Committee of the Status of Lectures (2009)

Scholarly presentations


Dr. Andrew Schrank

Awards


Invited Presentations:

- “Social Remittances in the Dominican Republic: Empathy, Hypocrisy, or Fantasy?” Presented at the workshop on “Immigrants and their Homeland Connections,” Department of Sociology, University of California at Los Angeles, Los Angeles, California, November 21, 2008.

Conference Presentations:

- “From industrial sociology to industry studies: Is sub-disciplinary failure a basis for inter-disciplinary success?” Presented at the 103rd Annual Meeting of the American Sociological Association, Boston, Massachusetts, August 4th, 2008.

Panel Participation


Manuscript and Grant Reviewer
Sociology – B. Burris 2008/2009


**Editorial Activity**

- *American Journal of Sociology,* consulting editor, 2008-
- *Latin American Politics and Society,* board member, 2007-
- *Politics and Society,* board member, 2008-
- University of New Mexico Department of Sociology: Acting Director of Graduate Studies, July 2009-
- Latin American Studies: Interdisciplinary Committee on Latin American Studies, member, 2005-
- Latin American and Iberian Institute: Executive Committee, member, 2007-
- American Sociological Association: Regular Session on Globalization, organizer, 103rd annual meetings, 2008
- Society for the Advancement of Socio-Economics. Executive Council, member, 2009-2012.
- Annual Meeting Program Committee 2008, member, 2007-2008
- Social Science Research Council, Selection Committee member, International Dissertation Fellowship Program, 2009-10.
- Latin American Studies Association: Organized Section on Labor, council member, 2009-
- Organized Section on Economics and Politics, co-chair, 2006-2009

**Dr. Susan Tiano**

**Service**

- Director, Latin American and Iberian Institute (March 2009 to present)
- Co-Chair, Governor Richardson’s Task Force on Poverty Reduction (May-September 2008)
- Member, Academic Program Review Team, UNM Department of Geography, 2008-09.
- Evaluator, NIH-funded program, Minority Access to Research Careers (MARC), UNM, June 2006 to present
- Evaluator, NIH-funded program, Initiatives for Minority Student Development (IMSD), UNM, February 2005 to present

**Awards**

- Alumni Association’s Faculty Award, 2009

**Presentations**

- “Latin American Area Studies Programs: Retaining a Core of Excellence While Increasing Program Relevance,” Latin American Studies Association, Rio de Janeiro, Brazil, June 2009

**Dr. Maria Velez**

**Awards**
Robert Wood Johnson Foundation, Center for Health Policy, Senior Fellow

Service on UNM or other committees:
- Robert Wood Johnson Foundation, Center for Health Policy, Fellowship Selection Committee (2009)
- Mellon Foundation Advisory Committee (2007 to present)
- Graduate Committee member
- Criminology Task Force member

Offices held at UNM or elsewhere:
- Member of the Steering Committee for Racial Democracy, Crime and Justice Network housed at The Ohio State University
- Chair, Minority Affairs Committee, American Society of Criminology

Outside Professional Activities: including conferences attended, papers presented.
- Presented on the “Sociological Take on the Economic Crisis” for a panel for the UNM Law School during Teach-In on the Economic Crisis.
- Attended the 2008 American Society of Criminology meetings in St. Louis, Missouri
- Presented “The Consequences of Bank Disinvestment on Violent Crime” with Christopher Lyons at the 2009 western Social Science Association Meetings in Albuquerque, New Mexico

Dr. Howard Waitzkin

Awards
- Distinguished Professor (Highest Faculty Rank), University of New Mexico, 2006-present.
- Who's Who in America, 1992-2010
- Who's Who in Medicine and Healthcare, 2002-2010
- Selected for Guide to America’s Top Physicians, Consumers’ Research Council of America, 2002-2009

Teaching
- New course developed: Medical Sociology and Health Policy, during spring 2009
- In 2002-2009, I have consulted on the development and implementation of courses in health sciences, UNM – Taos campus

Service
- In 2007-2009, I served on the Search Committee for Professor of Medical Sociology under the Robert Wood Johnson Foundation Center on Health Policy. In 2008-2009 I was elected to serve on the Executive Committee.
- I serve as an advisor in the Department of Sociology’s graduate student recruitment efforts.
- At UNM I frequently participate as an invited speaker in courses and conferences in sociology,
anthropology, and Latin American studies.

- In 2005-2009, I collaborated in the development of the new B.A.-M.D. Program, designated as the highest UNM priority for legislative funding. I taught the first integrative seminar for freshman students, titled “Contours of Health in New Mexico” in fall 2007 and fall 2008; planning began in 2005.

- In 2006-2009, I have served in planning and as a core faculty member and senior fellow in the new National Center for Health Policy at the University of New Mexico, funded by the Robert Wood Johnson Foundation in January 2007. This Center emphasizes training, research, and policy analysis to address the needs of Latino, American Indian, and other underserved populations.

- External reviewer for promotion and tenure committee: Northeastern University; Albert Einstein College of Medicine, 1995-2009.

- Initiator; member of leadership committee; responsible for needs assessment survey, East Mountain Health Care (a coalition to initiate a network of community-based, rural health centers, New Mexico; first health center opened in Edgewood, NM, April 2003), community advisory board member of First Choice Community Healthcare rural health center, 1999-2009.

- Founder and president, Salvador Allende Program in Social Medicine (a charitable 501c3 tax-exempt organization), incorporated in New Mexico, 2005-2009

- Initiator and coordinator, Civilian Medical Resources Network, a national network of health and mental health professionals to provide independent medical assessment and treatment for active duty members of the armed forces, in collaboration with the GI Rights Hot Line and the Military Law Task Force of the National Lawyers Guild, 2005-2009 (http://www.civilianmedicalresources.net)


- Elected co-chair, Marxist Sociology Section, American Sociological Association, 2008-2010.

- Member, Fair Trade Steering Committee, Town of Taos, New Mexico, 2008-2009.


- Visiting Professor, Institute of Social Medicine, State University of Rio de Janeiro, Brazil, October-November 2008; conference: “O Fim do Imperialismo, na Saúde... e no Geral? [The end of imperialism, in health... and in general]?.”

- Consultant on Health Policy, Senators Jeff Bingaman and Tom Udall, New Mexico, 2008-2009.


Dr. Richard Wood

Reviewing for academic book publishers:


Reviewing for journals:
• Active reviewer for *American Sociological Review; Sociology of Religion; Mobilization; Sociological Theory; Sociological Focus; Research in Social Movements, Conflicts and Change; Qualitative Sociology, City & Community; Journal of Church and State; Sociological Perspectives*, and other professional sociological journals.

Administrative work in Department:

• Member, Faculty Search Committee (Criminology; Yvonne Zylan hired); 2008-2009.
• Outcomes assessment administration and course analysis, Soc 514 course, Spring 2009

Administrative work and service in College and University:

• Director, Southwest Institute on Religion and Civil Society (active but informal, pending institutionalization); June 2005-present. Founder and director of center for research and public engagement on role of religion in civil society in the U.S., Latin America, and the Middle East (~$1.3 million in research funding from federal government and major foundations from 2005-2009). Has supported at least 8 UNM graduate students for periods of 1-3 years each, in the Departments of Sociology, Communications & Journalism, Foreign Languages & Literatures, Art History, and Anderson School of Management.
• Director of Religious Studies Program, January 2004 to January 2009. College of Arts and Sciences, University of New Mexico. Major work in restructuring undergraduate major, revising curriculum, and assessing potential M.A. program in Religious Studies. Organized colloquia series, including major participation from the NM community and across the university.
• Co-Chair, Committee on Governance of the UNM faculty (major time commitment during pivotal year in UNM governance).
• Chair, search committee for Visiting Professor of Catholic Studies (Spring, Summer & Fall 2009).
• Active in re-launching of UNM Chapter of the American Association of University Professors (2009).
• Member, search committee for new Director of Religious Studies at UNM. January through July 2008; lead to arrival of Dr. Sharon Nepstad in Department of Sociology in January 2009.

Recent presentations at professional meetings:

• "American Public Catholicism: Cultural & Institutional Presence, and Future Promise," paper presentation at a convening on Catholicism in the United States at the University of Notre Dame (September 2009).
• Organizer and Presider at special invited session on “The Role of Community Organizing In Democratic Renewal” at the annual meeting of the American Sociological Association in San Francisco (August 2009).
• Moderator, Jewish-Muslim-Catholic Dialogue, all-day community colloquium on the perspectives of three faith traditions, Albuquerque, New Mexico (March 2008, March 2009).
• Invited participant (one of 12 nationally) in "Religion at the Edge" conference of scholars of religion, Princeton University (October 2008).
participants include more than 100 academic scholars, officials from local and national governments, and representatives from non-governmental organizations. University of New Mexico (September 12, 2008).

- “The Fire of Public Life: Religion, the public arena, and the new cultural sociology,” paper presented at Yale University, sponsored by the Macmillan Center Initiative on Religion and Politics (September 9, 2008).

- Primary sponsor and organizer of major international meeting of 28 leaders from 15 non-governmental organizations from Jordan, Syria, Egypt, and Saudi Arabia (plus the United Nations Development Program’s regional offices): Web Access for Civil Society Organizations, at the Royal Scientific Society in Amman, Jordan (August 11-14, 2008).

- “American culture and social change,” paper presented at Ghost Ranch conference center, for health care reform organizers from Colorado (August 7, 2008).


DEPARTMENT OF SOCIOLOGY
JULY 1, 2008 – JUNE 30, 2009

Appointments and Separations

- The Sociology Department hired one new faculty member during this year: Dr. Sharon Nepstad (Professor of Sociology and Director of Religious Studies) who started in January 2009.

DEPARTMENT OF SOCIOLOGY
JULY 1, 2008 – JUNE 30, 2009

Faculty Publications

Dr. Lisa Broidy

Peer Reviewed:


**Book Chapters:**


**Technical Reports:**

• Denman, Kristine, Danielle Albright, Lisa Broidy, Erin Kleymann. 2009. Petitioning for a Domestic Violence Order of Protection: An Examination of Abuse Descriptions, Outcomes, and Multiple Petition Filings. Final report to *Bureau of Justice Statistics*.


• Albright, Danielle, Lisa Broidy, Kristine Denman, 2008. Results from the New Mexico Gang Threat Assessment Survey. Final Report to New Mexico USAO and the Project Safe Neighborhoods Steering Committee.


**Dr. Richard Coughlin**


**Dr. Robert Fiala**

Book chapter published


Paper published:


**Dr. Nancy Lopez**

**Articles**


**Encyclopedia Entry**

Book Review


Dr. Christopher Lyons

Articles Published


Other Publications


Dr. Sharon Nepstad

Articles


Book Reviews

Publications


Dr. Andrew Schrank

- “Export Processing Zones in the Dominican Republic: Schools or Stopgaps?” World Development 36 (8) 2008

Edited Volume


Book Review:


Dr. Susan Tiano

Book chapter:


Other publication:
Dr. Maria Velez


Dr. Howard Waitzkin

- Waitzkin H, Noble M. Caring for active duty military personnel in the civilian sector. Social Medicine/ Medicina Social 2009;4:56-69

Dr. Richard Wood

Articles in refereed journals:

**Contracts and Grants**

**Dr. Lisa Broidy**

- Evaluation of New Mexico’s Transition from Prison to Community Model. Principal Investigator: Lisa Broidy. Grant from *New Mexico Department of Corrections*. July 2009-June 2009. ($125,000).

**Dr. Christophe Lyons**

- "Criminal Justice Professionals' Attitudes Towards Offenders: Assessing the Link Between Global Orientations and Specific Attributions." Lisa Broidy (PI) and Christopher J. Lyons. *Bureau of Justice Statistics/JRSA*. ($50,000)

**Dr. Susan Tiano**


**Dr. Maria Velez**

- Research Allocation Committee grant with Christopher Lyons ($4,000)

**Dr. Howard Waitzkin**

- Program Director, National Institute of Mental Health, 1 R25 MH60288, "New Mexico Mentorship and Education Program," $323,822 over 2 years, funded 1999-2001; refunded for
$484,890 over 3 additional years, 2002-2005; assigned “high program priority” by NIMH National Advisory Mental Health Council; refunded for $1,232,029 over 5 years, 2005-2010.

- Consultant, National Institute of Mental Health, 1R01 MH076084-01, “Multi-Method Ethnographic Assessment of Behavioral Health Reform in New Mexico,” $449,072 (year 1), $3,479,342 (over 5 years), 2005-2010 (Cathleen Willging, Behavioral Health Research Center of the Southwest, Pacific Institute for Research and Evaluation, Principal Investigator)
- Principal Investigator, UNM Research Allocations Committee, “Civilian-Sector Services for Active-Duty Military Personnel and Veterans Suffering from Trauma,” $4,000, 2009
- Principal investigator, Robert Wood Johnson Foundation Center for Health Policy, University of New Mexico, “The County as the Fundamental Unit of Health Access in the United States,” $16,162, 2008-2009

Dr. Richard Wood

- Web Access for Civil Society Initiatives (October 2006 to September 2009 $949,200)
- Principal investigator; grant funding for coordinating project in Jordan, Syria, Egypt, and Saudi Arabia, focused on the internet as a communications tool in civil society. Primary focus on Islam and democracy, human rights, and women’s empowerment. Supports six UNM graduate students, including two in the Department of Sociology (Anwar Ouassini and Mozafar Banihashemi). U.S. Department of State.

DEPARTMENT OF SOCIOLOGY
JULY 1, 2008 – JUNE 30, 2009

Graduates

Spring 2009


Colin Olson, Ph.D. Dissertation: “Who rules the city? how growth coalition elites believe they influence decision-making.”

Criminology B.A. graduates: 43
Sociology B.A. graduates: 30

Fall 2008
Chris D. Volke, M.A. Thesis: "An assessment of four Christian denominations' ideology toward homosexuality."

Criminology B.A. graduates: 48
Sociology B.A. graduates: 24

Summer 2008

Geshu Zhu, M.A. Thesis: "Globalization or regionalization: geographical patterns and the dynamics of foreign direct investment in the contemporary world automotive industry."

Criminology B.A. graduates: 8
Sociology B.A. graduates: 5

DEPARTMENT OF SOCIOLOGY
JULY 1, 2008 – JUNE 30, 2009

DEPARTMENTAL LECTURES AND PRESENTATIONS

9/12/2008  Ben Edwards

"Introduction to Artificial Neural Networks for the Social Sciences."


"The Rebirth of Catholic Collective Action in Central America: A New Model of Church-Based Political Participation."

10/10/2008: Criminology Student Panel - Danielle Albright, Erin Kleymann, Jeff Nowacki, and Dale Willits.

10/24/2008: Sophie Hammett –

"Voluntourism: Toward an Empirical Test."

11/14/2008: Darrin Kowitz –

"Veterans and Higher Education in the US: Applied Sociology and the Conversion of Military Expenditures into Social Investment."

12/12/2008: Felipe Gonzales –

"Liberal Integration, Hegemonic Colonialism, Ethnic Federalism and Other Sexy Concepts in the Conquest and Annexation of the Nuevomexicanos, 1836-1912."

2/27/2009: Jane Hood, Nancy Lopez, and Rebecca Erickson –

"Disentangling the School-Prison-Pipeline: A Multivariate Analysis"
"Cross Cutting Solidarity Ties and Mobilization: The Impact of Anglo Social Ties on Mexican American Protest Participation."

4/10/2009: Howard Waitzkin and Darrin Kowitz —
"Civilian-Sector Services for Active-Duty Military Personnel and Veterans Suffering from Trauma."

4/24/2009: Colin Olson —
"Who Rules the City? How Growth Coalition Elites Believe they Influence Decision-Making"
Annual Report
Institute for Social Research, 2008-2009

Prepared by Dr. Lisa Broidy and Dianne Mulder
October, 2009
The Institute of Social Research is the research arm of the Sociology Department, which reports up through the College of Arts & Sciences at the University of New Mexico. Founded in September of 1987, ISR operates entirely on contracts and grants. Its mission is to conduct high quality research and evaluation that contributes to informed decision making among local, state, and federal policymakers and practitioners involved in social policy and to provide an intellectual training ground for both graduate and undergraduate students.

The Institute is home to multiple centers and state agencies that conduct basic and applied research and policy evaluation for local, state, federal, and private contractors. Our centers (described in more detail below) conduct research that informs policy and practice in the areas of criminal justice, education, substance abuse, and healthcare. In addition, two state agencies, the New Mexico Sentencing Commission and the New Mexico Statistical Analysis Center, are housed at ISR and both work closely with other ISR centers (particularly the Center for Applied Research and Analysis—CARA) whose research focuses on crime, criminal justice interventions, and statutory policy at the local and state levels. Much of the research ISR is contracted to conduct occurs in collaboration with various state and local agencies and community stakeholders. In this sense, the work conducted at the ISR advances both the research mission of the University as well as its community service and outreach goals.

Despite the recent economic downturn, ISR is currently experiencing renewed growth, and we expect this trend to continue in the coming years.

**Structure:**

The ISR Director (Dr. Lisa Broidy), in consultation with the Executive Committee, is responsible for the overall operation of the Institute. Executive Committee members follow:

Lisa Broidy, PhD
Richard Boyle, PhD
Paul Guerin, PhD
Michael Hall, JD
Dianne Mulder
Caryl Trotter, PhD
Howard Waitzkin, M.D., PhD
ISR Administrative Staff
Director: Lisa Broidy
Staff:
Dianne Mulder – Unit Administrator (full time)
Veronica Gonzales – Senior Fiscal Technician (.50 FTE)
Teddy Saenz – Office Administrator (.25 FTE)
George Scott – Systems Administrator (Undergraduate (.75 FTE)
Barry Crow – Undergraduate Student IT worker (.50 FTE)
Jennifer Bustos – Undergraduate Receptionist & Office Assistant (.15 FTE)

All ISR business operations, particularly as related to contract and grant accounting, payroll, and HR, are processed through this office. The Front Office staff also acts as the liaison between the numerous Centers operating under the ISR umbrella.

Centers:
Descriptions of the Centers operating out of the Institute for Social Research follow, along with a breakout of employees:

Albuquerque Metropolitan Central Intake
Director: Caryl Trotter
Staff:
Mark Correa, Business Manager
Sara Corry, Substance Abuse Counselor
Rod Falanga, Analyst/Programmer 3
Tim S. Griffin, Substance Abuse Counselor
Troy Mantel, Office Administrator
Julie Morgan, Senior Substance Abuse Counselor
Marcia Pacheco, Senior Program Therapist
Justin Robbs, Computing Services Manager
Jacque Schafer, Senior Substance Abuse Counselor
Patricia Salazar, Occupational Therapy Tech
Jacque Schaefer, Senior Substance Abuse Counselor
Sherrie, Michael, Substance Abuse Counselor
Merle Snider, Analyst/Programmer 3
Carol Vigil, Senior Program Therapist

Albuquerque Metropolitan Central Intake became part of ISR effective July 1, 2007. AMCI is the result of a strategy proposed by the Target Cities Project to improve the substance abuse treatment delivery system by creating a central intake system. This method provides a way for clients needing treatment for substance abuse to be assessed and referred to treatment through a single point of entry. The City of Albuquerque is the funding agency.
New Mexico Sentencing Commission (NMSC)
Executive Director: Michael Hall
Staff:
LaDonna Laran – Business Manager
Tony Ortiz – Senior Attorney
Randall Cherry – Senior Attorney
Banyat Adipat – Technical Project Manager
Dan Cathey – Research Scientist 3
Nancy Gettings – Program Coordinator
Margie Lueras – Program Coordinator (on-call)
Johnathan Ochsankehl – Undergraduate Student Office Assistant (.75 FTE)

The Sentencing Commission is funded by the state legislature to conduct research and analysis on criminal adult and juvenile justice issues. It reports annually to the legislature on the fiscal and societal impact of sentencing and the need for further reforms. In addition, the commission reviews proposed legislation that would create a new criminal offense or change a classification or range in sentence. The Sentencing Commission also includes the state’s Sex Offender Management Board and Justice Information Sharing Council.

Center for Applied Research and Analysis (CARA)
Director & Principal Investigator: Paul Guerin
Staff:
Linda Freeman – Research Scientist 3
Jennifer Honey – Administrative Assistant 2
Alex Adams – Research Assistant
Elizabeth Watkins – Research Assistant
Ben Edwards – Graduate Student Project Assistant (.25 FTE)
Saravanan Poosanthiram – International Graduate Student P.A. (.50 FTE)
Padmapiya Palanisamy – International Graduate Student P.A. (.50 FTE)
Sheng-Yang Wang – International Graduate Student P.A. (.50 FTE)
John Michel – Undergraduate Research Assistant 2 (.75 FTE)

CARA provides evaluation research, basic applied research, training, and technical assistance under multiple projects. The bulk of CARA’s work is related to local and state level criminal justice policy. Among other things, CARA is currently involved in research on addictions treatment in the correctional setting, serious violent offender re-entry, and the impact of sentencing reform at the State level. The CARA team also provides research support for and works in close collaboration with the NMSC. CARA also works to strengthen the links between research and education at UNM by providing research experience for graduate and undergraduate students.
New Mexico Statistical Analysis Center (NMSAC)
Director & Principal Investigator: Lisa Broidy
Staff:
Kristine Denman – Senior Research Scientist 3 (.63 FTE)
Danielle Albright – Graduate Student Researcher (.75 FTE)
Erin Kleymann – Graduate Student Researcher (.25 FTE)
Dale Willits – Graduate Student Researcher (.50 FTE)
1 Volunteer – Cleans data

The NMSAC is designated by the Governor as the State's Statistical Analysis Center. The NMSAC conducts research that addresses key local and state level criminal justice policy issues. It is currently the research partner for the local Project Safe Neighborhoods Initiative, focusing on the local gang and gun violence problems. The NMSAC is also working on multiple state and federally funded projects focusing on offender re-entry. All SAC research is developed and implemented in partnership with local and State agencies and/or in collaboration with SACs around the country to facilitate multi-state analysis of broad national criminal justice issues.

New Mexico Mentorship and Education Program (MEP)
Principal Investigator: Howard Waitzkin
Staff:
Amy Whitfield – Undergraduate Program Support Staff 5 (.50 FTE)
Jennifer Bustos – Undergraduate Administrative Assistant (.50 FTE)

MEP in Mental Health Services Research is funded by the National Institute of Mental Health (NIMH) and first received funding in August of 1999. Focusing on minority mental health issues in primary care settings, especially disparities in mental health outcomes, the MEP provides an intensive, one-week annual training session, which introduces mental health services research to minority junior faculty members and graduate students. The MEP also enhances ongoing mentorship relationships with outstanding mental health researchers who serve as both advisers for the trainees' research and as role models in their career development.
Financial Growth:
ISR had a healthy financial trajectory from 1993 through 2002, during which time its total award dollars and F&A return steadily increased. In 2003, ISR's revenues began to decline, as did its operating budget, which is largely driven by its F&A return. Since 2006 ISR's revenues have been on the rise. Our goal is to trend over $200,000 F&A annually.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Total Awards</th>
<th>Total F&amp;A Amount</th>
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<tbody>
<tr>
<td>1993</td>
<td>Not Available</td>
<td>$40,915</td>
</tr>
<tr>
<td>1994</td>
<td>N/A</td>
<td>$68,534</td>
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<tr>
<td>1995</td>
<td>N/A</td>
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<td>1996</td>
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<td>$1,034,420</td>
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<td>$202,000</td>
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<tr>
<td>2000</td>
<td>1,621,506</td>
<td>$232,000</td>
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<tr>
<td>2001</td>
<td>1,218,604</td>
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<td>2002</td>
<td>1,089,127</td>
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<td>2004</td>
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<tr>
<td>2006</td>
<td>695,708</td>
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<td>2007</td>
<td>770,295</td>
<td>$151,143</td>
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<td>2008</td>
<td>2,069,235*</td>
<td>$186,085</td>
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*REF: Office of the Vice President for Research website – this figure may not be comparable to that reported for prior years because the report date references 3/20/08.

A listing of the grants/contracts run through ISR during the 2008/2009 Fiscal Year is shown on the following page.
## ISR Account List -- Fiscal Year 08/09

### Unrestricted Indexes

<table>
<thead>
<tr>
<th>INDEX CODE</th>
<th>ACCOUNT NAME</th>
<th>FUND #</th>
<th>DT</th>
<th>LOC</th>
<th>Agency</th>
<th>Budget</th>
<th>Start Date</th>
<th>End Date</th>
<th>POS/SPASE</th>
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<tbody>
<tr>
<td>9-31037</td>
<td>An/ISR L.S. Dev &amp; T.A.</td>
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<td>n/a</td>
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<td>Second Chance Center # 2 - Front Office</td>
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<td>7/01/08</td>
<td>6/30/09</td>
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<td>9-31350</td>
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### Restricted Indexes

<table>
<thead>
<tr>
<th>INDEX CODE</th>
<th>ACCOUNT NAME</th>
<th>FUND #</th>
<th>DT</th>
<th>LOC</th>
<th>Agency</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-31157</td>
<td>&quot;Mindfulness&quot; Track 1: QI-12 hydroponics-Hied Kin Gracie</td>
<td>27521</td>
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<td>0%</td>
<td>Tim Gutierrez - UNM</td>
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<td>ANHE - Education</td>
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<td>9-31278</td>
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<tr>
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<td>Soroptimist</td>
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<td>C.O.D.-Info Sys Dev &amp; TA - Bernalillo County</td>
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<td>SIC/UNM</td>
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<td>9-31283</td>
<td>A.R.L. Police Dept. Calls for Service Research</td>
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<td>Mental Health Research Grants</td>
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<td>9-31351</td>
<td>Year 4 - UNH - MPH</td>
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<td>9-31296</td>
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<td>Bail/Probation: Substance Abuse &amp; Alcohol Treatment</td>
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<td>9-31301</td>
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</tbody>
</table>

Note: The table includes various accounts with different fund numbers, agencies, and budget amounts. Some notes indicate projects related to mental health research, drug policy, and corrections department research.
DEPARTMENT OF SPANISH AND PORTUGUESE

CHAIR: RICHARD SANTOS

DEPARTMENT ADMINISTRATOR II: ROSARIO JOHNSON

ANNUAL REPORT

JULY 1, 2008 – JUNE 30, 2009

I. TEACHING FACULTY AND STAFF

A. TENURED AND TENURE TRACK FACULTY

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthony J. Cárdenas-Rotunno</td>
<td>Professor</td>
</tr>
<tr>
<td>Enrique Lamadrid</td>
<td>Professor</td>
</tr>
<tr>
<td>Tey Diana Rebolledo</td>
<td>Professor</td>
</tr>
<tr>
<td>Kimberle López</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Miguel López</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Kathryn McKnight</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Susan Rivera</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Rena Torres Cacoullos</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>María Dolores Gonzales</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Anna Nogar</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Mary B. Quinn</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Eleuterio Santiago-Díaz</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Julie Sykes</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Catherine Travis</td>
<td>Assistant Professor</td>
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Portuguese

<table>
<thead>
<tr>
<th>Faculty</th>
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<tbody>
<tr>
<td>Margo Milleret</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Leila Lehnen</td>
<td>Assistant Professor</td>
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</table>
### B. LECTURERS

<table>
<thead>
<tr>
<th>Lecturer</th>
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<tbody>
<tr>
<td>Stephanie Becker</td>
<td>María Nieves de Aabjo</td>
<td>Jerry Gurule</td>
</tr>
<tr>
<td>Veronica Plaza</td>
<td>Patricia Rosas Lopátegui</td>
<td>Theodore Walker</td>
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### C. EMERITUS PROFESSORS

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<thead>
<tr>
<th>Emeritus Professor</th>
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<tr>
<td>John Bergen</td>
<td>Garland Bills</td>
<td>Rubén Cobos</td>
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<tr>
<td>Pelayo Fernández</td>
<td>Rosa Fernández</td>
<td>Dick Gerdes</td>
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<tr>
<td>Erlinda Gonzales-Berry</td>
<td>Tamara Holzapfel</td>
<td>Raymond MacCurdy</td>
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<tr>
<td>Alfred Rodríguez</td>
<td>Jon Tolman</td>
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### D. TEACHING ASSISTANTS

#### Ph.D.

<table>
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<tr>
<th>Teaching Assistant</th>
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<tbody>
<tr>
<td>Erin Amason Montero</td>
<td>Elena Avilés</td>
<td>Sonia Balasch</td>
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<tr>
<td>David Briggs</td>
<td>Felix Burgos-Trujillo</td>
<td>Verónica Calvillo</td>
</tr>
<tr>
<td>Dora Careaga-Coleman</td>
<td>María Conklin</td>
<td>Héctor Contreras-López</td>
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<td>Vanessa de Veritch</td>
<td>Jennifer Dumont</td>
<td>Evelyn Durán-Urrea</td>
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<td>Jorge Estrada</td>
<td>Lorena Galván-Valenzuela</td>
<td>Adrienne Gonzales</td>
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<td>Kiley Guyton</td>
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<td>Sonia Hicks-Rodriguez</td>
<td>Carmen Holguín-Chaparro</td>
<td>Alena Johnson</td>
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<tr>
<td>Antonio Naula-Rodriguez</td>
<td>Hiram Smith</td>
<td>Theodore Walker</td>
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#### M.A. Spanish

<table>
<thead>
<tr>
<th>Teaching Assistant</th>
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<tr>
<td>Carlos Alvarez</td>
<td>María Ambriz</td>
<td>Angela Arenivar</td>
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<tr>
<td>Sonya Barela</td>
<td>Anna Bellum</td>
<td>Ana Benscoter</td>
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<td>Sandra Cano</td>
<td>David Criddle</td>
<td>Marcus Flores</td>
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<tr>
<td>Jonathan Harrell-Naranjo</td>
<td>Arturo Hernández</td>
<td>Elizabeth Herring</td>
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<td>Noemí Hinojosa-López</td>
<td>Leah Houle</td>
<td>Linda Lemus</td>
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<tr>
<td>Lilia Martínez</td>
<td>Rebecca M. Martínez</td>
<td>Rebecca Martínez-Gomez</td>
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<tr>
<td>Alex Mego-Flores</td>
<td>Karina Peña</td>
<td>Juan Romero</td>
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<tr>
<td>Nancy Varelas</td>
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#### M.A. Portuguese

<table>
<thead>
<tr>
<th>Teaching Assistant</th>
<th>Teaching Assistant</th>
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</thead>
<tbody>
<tr>
<td>Fernanda Bartolomei</td>
<td>Glenia Lima</td>
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ARTS AND SCIENCES INTERDEPARTMENTAL TEACHING ASSISTANTS

Edwar Calderón     Angely Cárcamo-Gallardo     José Hugo García Macías
Jannette Hermina  Karol Ibarra Zetter       Pablo López Oro
Bridget Mullins   Stephanie Knight          Mariana Pereira
Whitney Purvis    Anne Santos               Agripino Silveira
Simoni Valadares  Victor Valdivia Ruiz      Benjamin Waddell

E. OFFICE STAFF

Rosario Johnson  Department Administrator II
Martha Hurd      Graduate Administrative Assistant II,
                 Administrative Graduate Advisor
Katharine E. Merrill  Department Administrative Assistant II,
                      Administrative Undergraduate Advisor for Spanish
Vanessa Vander Galien  Language Instruction Administrative Assistant II

F. WORK STUDY STAFF

Olivia Chávez       Miguel Gallegos     America Leyva
Jonathan Ortiz     Leobarda Zacarias

G. DEGREES AWARDED

Summer 2008

DOCTORATE IN SPANISH AND PORTUGUESE

Earl Brown - Dissertation Title:
A Usage-based Account of Syllable- and Word-final /s/ reduction in four Dialects of Spanish.

Teresa Dovalpage - Dissertation Title:
De Señora casera a jinetera: imágenes de la mujer en la narrativa cubana del siglo XX y principios del XXI.

Olga Rios-Soria - Dissertation Title:
Políticas de transformación y liberación social en la narrativa de Luis Humberto Crosthwaite.

Master of Arts in Spanish

Aaron Taylor

Bachelor of Arts in Spanish

Jennifer Brower
BACHELOR OF ARTS, SECOND MAJOR IN SPANISH
Salvador Alfaro Ayala Ramón García Verónica Gonzales
Angelina González-Aller Jennifer Janke Jessica Jaramillo
Sarah Kiellyka

Fall 2008

DOCTORATE IN SPANISH AND PORTUGUESE
Theodore Walker - Dissertation Title:
The Humorous Rupture of Ramón Gómez de la Serna in the Poetry of Ángel González: Approaching the Limits of Modernism.

M aster of Arts in SPANISH
Sonya Barela Lilia Martínez Karina Peña de López

BACHELOR OF ARTS IN SPANISH
Autumn Akers Margarita Aragon-López Debra Au
Katherine Bransford Christina de la Cruz Victoria Dimas
Adrian Gonzales Linda Gonzales Lynsey Gooding
Pauline Labar-Shelton Angelica Nelson Juan Ortega
Maribel Posada

BACHELOR OF ARTS, SECOND MAJOR IN SPANISH
Cristina Campos Marta Chávez Graham Golden
Jerra Gonzales Raquel Guzman-Vega Jorge Hernández
Bo Johnson Jaclyn Keaty Morgan Kekich
Ashely King Erica Logue Marissa Mireles
Marcus Nuñez Rosalinda Olivas Laura Perlichek
Laura Piñon Harris Schurmeier Claire Smith
Sam Smith Lorinda Toledo Evan Vincent

BACHELOR OF ARTS, SECOND MAJOR IN PORTUGUESE
Pauline Labar-Shelton

Spring 2009

DOCTORATE IN SPANISH AND PORTUGUESE
Michelle Salazar - Dissertation Title:
Cultural Identity and School Success in a Bilingual Mixed Heritage Community in Rural Colorado.
III. DEPARTMENTAL HIGHLIGHTS

The Department entered the 2008-09 academic year with a considerable shortage of faculty, especially at the senior rank and core areas such as Hispanic Linguistics, and Portuguese. A shortage of faculty also characterized other graduate areas in the Department. Nevertheless, the Department remained productive, and made significant contributions to its mission, with numerous scholarly publications, research grants, as well as hosting and participating in academic conferences. The Department distinguished itself though student and staff awards, additional staff responsibilities, and placement of its graduate students. The Department’s curriculum offerings were enriched by its matrix of undergraduate and graduate courses, and its active curriculum assessment.
To ameliorate the shortage of senior faculty available to serve as Department Chair, the faculty requested the Dean in the College of Arts and Sciences to appoint an external chair from another department to serve as the chair. Richard Santos, Professor of Economics was appointed by the Dean to serve as the Interim Chair for the academic year.

The major challenges for the Department were to obtain approval for a faculty search in Hispanic Linguistics and not to lose one of the two full-time faculty in the Portuguese Program, specifically the loss of a junior faculty. The Department was not successful in getting approval for a faculty search in Hispanic Linguistics, which was and remains the top priority hire for the Department. The Department was however successful in its faculty retention efforts in the Portuguese Program.

To address the faculty shortage in Hispanic Linguistics, the Department worked with Chair of the Linguistic Department and with the support of the College of Arts and Science to better coordinate its Linguistic offerings. The two departments also worked to better outline the duties of our joint faculty appointment in Spanish and Portuguese and Linguistics. The Department resubmitted its faculty hiring plan to the College Arts of Sciences to search for a Hispanic Linguist in 2009-2010.

The Portuguese Program achieved its goal of full strength, with the faculty retention of Assistant Professor Leila Lehnen who was on a leave without pay during 2008-09. Professor Lehnen will return to the Department in Fall 2009. These efforts to maintain the Portuguese Program were made possible through faculty support, support from the College, the Provost’s office, as well as the Latin American Institute and Iberian Institute. These efforts also generated a spousal lecturer hire for the Department for the 2009-2010 academic year.

The Portuguese Program will be further strengthened with the presence of a Fulbright Scholar from Brazil to teach in the Department.

Additional successes during the year in other faculty areas are worth noting, especially in faculty development and scholarship. Assistant Professor Eleuterio Santiago Diaz had a successful promotion and tenure review. Assistant Professor Mary B. Quinn had a successful mid-probationary review and she was granted a research semester (release from teaching) in Spring 2009. Associate Professor Catherine Travis was on sabbatical in Australia during the academic year.

A major challenge for the Department in the next year will be to develop a hiring plan for its Spanish as a Heritage Program. Assistant Professor, Maria Dolores Gonzales, the Coordinator of the Spanish as a Heritage Program retired in Summer 2009. The program enjoys a national reputation in teaching Heritage Spanish as well as a historical distinction in New Mexico and the leadership of Professor Gonzales will be missed. As a response to the immediate vacancy in the Spanish Heritage Language Program in Fall 2009, The College of Arts and Sciences authorized the appointment of a Senior Teaching Associate to coordinate the Spanish and Heritage Program in the Fall, and lecturer appointment in Spring 2010.

A Department response to its Academic Program External Review and an Action Plan was submitted to the Provost Office of Academic Affairs in Spring 2009. Specifically, the Action Plan outlines a long range faculty hiring plan, curriculum issues, leadership development, and other departmental issues.

The Department was especially pleased to receive a scholarship endowment in Spring 2009 which was established by Patrick Conroy, an alumnus of the Department. The scholarships will provide an opportunity for undergraduate students in Spanish and Portuguese to study and travel abroad.
An encouraging area of course development for undergraduates was its popular offering of medical Spanish. The Department worked with Latin American Studies and School of Human Medicine to broaden its courses in medical Spanish and other courses in Spanish to health sciences students.

The Department actively participated in assessment of its undergraduate and graduate offerings. The graduate and undergraduate committees met in early Summer 2009 to discuss the assessment findings and will report to the faculty in the Fall.

The Staff was recognized for its productive and superb contributions to the Department and University by receiving the Provost’s Outstanding Work Group Award, Spring 2009.

During the year, faculty addressed leadership issues and the faculty made a recommendation for a new Department Chair to the Dean in the Spring. The Dean appointed a new Department Chair, Professor Enrique Lamadrid, for the 2009-2010 academic year.

A. STAFF CHANGES

- Tey Diana Rebolledo stepped down as Chair, June 2008.
- Richard Santos, Professor of Economics, served as interim chair for the academic year.
- Professor Maria Dolores Gonzales retired, July 2009.
- Martha Hurd took on additional responsibilities as the Administrative Graduate Advisor, July, 2008.
- Katharine E. Merrill took on the additional responsibilities as the Administrative Undergraduate Advisor for Spanish, July, 2008.
- Vanessa Vander Galien resigned her position as Language Instruction Administrative Assistant, August 2009.

B. AWARDS

STAFF
Outstanding Workgroup Award, April 29, 2009.

The Department of Spanish and Portuguese Office Staff: Rosario Johnson, Department Administrator II; Martha Hurd, Administrative Graduate Advisor; Katharine E. Merrill, Administrative Undergraduate Advisor for Spanish; and Vanessa Vander Galien, Language Instruction Administrative Assistant II, received the award from the Provost’s Committee for Staff.

PROFESSORS

Enrique Lamadrid
- Heritage Preservation Award - Office of the State Historian - University of New Mexico Press, for the Pasó por Aquí series for New Mexico Heritage Scholarship. May 2, 2009. Series Editor, two titles in the series.

Anna Nogar
- Nominee for the Outstanding Dissertation Award, The University of Texas at Austin;
• The University of Texas Continuing Fellowship; June 2007-August 2008. Full year dissertation funding (due to UNM visiting instructor appointment, only used in the summer).

Eleuterio Santiago-Díaz
Outstanding Faculty Award 2009, UNM Faculty of Color. Presented by The Project for New Mexico Graduates of Color (PNMGC), University of New Mexico, May 2009.

Julie Sykes
2007 Article of the Year from the Computer Assisted Language Instruction Consortium (CALICO) Journal (co-authors, Barbara A. Lafford and Peter Lafford). Awarded 2008; Published article voted by readers as the best article in the journal for 2007.

GRADUATE STUDENTS

Sonia Rodríguez-Hicks
Spanish and Portuguese Graduate Student Association Award, Fall 2008. $ 297.90 to present at the 56th Annual Rocky Mountain Council for Latin American Studies conference.

Hiram Smith
• Awarded Best in Session at the 13th Annual Anthropology Graduate Research Symposium at the University of New Mexico, March, 2009.

IV. DEPARTMENTAL ACTIVITIES

A. EVENTS

Professor Julie Sykes presented the role of emerging, innovative digital contexts in L2 pragmatic development. A Department of Linguistics Colloquia. Held in the Humanities building, room 134.

“Celebramos nuestra herencia con Día de los muertos” October 30 & 31, 2008.
The Sabine Ulibarri Spanish as a Heritage Language Program instructors and students celebrated the holiday with an alter contest and a presentation of the play La Llorona. Held in the Ortega Hall third floor lounge.

Professor Thomas D. Spaccarelli, University of The South, presented his talk in the Ortega Hall Reading Room.
Professor Julie Sykes presented the workshop which covered various aspects of foreign language teaching methodology. Sponsored by the Spanish and Portuguese Graduate Students Association and held in Ortega Hall Reading Room.

“¡Tertulia!” February 20, 2009.
A Spring presentation of poems, short stories, music and other forms of creative expressions. Co-organized with the Spanish and Portuguese Graduate Students Association and Professor Tey Diana Rebolledo, who held the event in her home.

Professors Eleuterio Santiago-Diaz and María de Abajo presented Carmen Holguín-Chaparro's new book of poetry. Held in the Ortega Hall Reading Room.

“Yo quiero que haya Mundo...Elena Garro 50 años de dramaturgia.” March 25, 2009.
Professor Patricia Rosas Lopátegui presented portions of her book with help from undergraduate and graduate students. Sponsored by the Spanish faculty and the Student Organization of Latin American Studies. Held in Ortega Hall Reading Room.

Professors Neddy A. Vigil and Garland Bills presented their long awaited atlas by discussing their findings and signing books. Held at the University of New Mexico Bookstore.

The Sabine Ulibarri Spanish as a Heritage Language Program and the University Libraries’ CHIPOLTE program presented Levi Romero who read selections from his new book. Held in the Willard Room at Zimmerman Library.

Poet and novelist Dr. Margarita Cota-Cárdenas, presented her newest work in the Ortega Hall third floor lounge. Organized by Professor Tey Diana Rebolledo.

Presented by Professor Anthony Cárdenas and his Spanish 629 students who performed the play in the Ortega Hall Reading Room. Sponsored by W.T.H. Productions.

B. INVITED TALKS

Anthony J. Cárdenas
Anna Nogar
“From Center to Periphery: Sor María de Agreda in Colonial New Spain” *Lady in Blue: Sor María de Jesús de Agreda, A University of New Mexico Homage* University of New Mexico, Department of Spanish and Portuguese. April 24 2009. Albuquerque.

**Tey Diana Rebolledo**
- Introduction for Nicolás Kanellos, *Critica Nueva Prize*, University of New Mexico, November, 2008.

**Susan Rivera**

**Eleuterio Santiago-Díaz**
- Book presentation of *A tu prójimo amarás,* a collection of poems by Carmen Julia Holguín Chaparro. The University of New Mexico, April 1, 2009.

**Julie Sykes**

**Rena Torres Cacoullos**
• "The study of code-switching in its social and linguistic context." Department of Spanish, Italian and Portuguese, Penn State University. December 4, 2008.

Catherine Travis
• "Yo and I in New Mexico: Accounting for variation in evaluating convergence via code-switching" (co-authored with Rena Torres Cacoullos). Seminar Series, Department of Linguistics, La Trobe University. April 23, 2009. Melbourne, Australia.
• "Convergence via code-switching?: Yo and I in New Mexico" (co-authored with Rena Torres Cacoullos). Seminar Series, Department of Linguistics University of Melbourne, Australia. April 27, 2009.

C. FACULTY PUBLICATIONS

Enrique Lamadrid
Book:

Articles in Refereed Journal:
"Rutas del Corazón: Pilgrimage and Cultural Commerce on the Camino Real de Tierra Adentro" with photographs by Miguel A. Gandert. New Mexico Historical Review 83, 4 (Fall 2008): 422-429.

Book chapters:

Encyclopedia Entries:

Kimberle López
Articles in Refereed Journals:
• "Governing Juana: Madness and Manipulation of Power in Three Spanish American


**Encyclopedia Entry:**

**Book Reviews:**


**Miguel López**
**Articles in Refereed Journals:**


**Kathryn McKnight**
**Book chapter:**

**Anna Nogar**
**Textbook:**

**Encyclopedia Entries:**


Susan Rivera
Edited Anthologies:

Articles in Refereed Journals:
• “Persona privilegiada.” Cuadernos Hispanoamericanos: Colección: Los Complementarios, 17 (Agosto 2008): 7-9

Julie Sykes
Conference Proceedings:
• “Learner Requests in Spanish: Examining the Potential of Multiuser Virtual Environments for L2 Pragmatic Acquisition.” In L. Lomika and G. Lord (Eds.) The Second Generation: Online collaboration and social networking in CALL, 2009 CALICO Monograph.

Chapters in Edited Volumes:

Rena Torres Cacoullos
Articles in Refereed Journals:
• “Phonological and grammatical variation in exemplar models” with Joan Bybee. Studies in Hispanic and Lusophone Linguistics 1.2: 399-413. (Fall 2008).

Book chapter:

Selected conference proceeding:
“La evolución de estar + V-ndo hacia expresión obligatoria del aspecto progresivo en

Catherine Travis

D. GRADUATE STUDENT PUBLICATIONS

Vanessa de Veritch Woodside
Journal Article:

Carmen Holguín Chaparro
Book of Poetry:
A tu prójimo amarás published by the Universidad Nacional Autónoma de México (UNAM), Department of Advanced Studies Zaragoza. (2008)

E. PAPERS READ BY FACULTY

Anthony J. Cárdenas
• “¿Dios, qué buen vassallo, si oviessse buen señor!: Alfonso VI en el siglo XVI.” Congreso Internacional XII Jornadas Medievales. Aula Magna de la Facultad de Filosofía y Letras Universidad Nacional Autónoma de México. México, D.F. 29 de septiembre al 3 de octubre de 2008.

Enrique Lamadrid
“‘Qué lejos estoy del suelo donde he nacido’- From Canción Mixteca to los Tigres del
Norte: Transnationalism and Identity in the Songs and Ballads of Greater Mexico


Kimberle López


Miguel López


Kathryn McKnight


Margo Milleret


Anna Nogar

- “Attenuated Transgressions in New Spain: The Numinous Conversions of Sor María de Agreda,” Latin American Studies Association XXVIII International Congress. June


Mary B. Quinn

- "‘And every lass a queen’: the Reina Sultana of Guerras Civiles de Granada,” at the Renaissance Society of America, University of California, Los Angeles and The Getty Museum, April, 2009.

Susan Rivera


Eleuterio Santiago-Díaz


Julie Sykes


Rena Torres Cacoullos

- “Convergence via code-switching? Yo and I in New Mexico,” with Catherine E. Travis New Ways of Analyzing Variation (NWAV)37, Rice University-Hotel, November 6-9,
• “Variation in Spanish clitic placement: constructional and pragmatic effects,” with Scott Schwenter 39th Linguistic Symposium on Romance Languages (LSRL), University of Arizona, Tucson. March 28, 2009.

Catherine Travis

F. PAPERS READ BY GRADUATE STUDENTS

Vanessa de Veritch Woodside

Sonia Rodríguez-Hicks

Hiram Smith

G. OTHERS RESEARCH PROJECTS OR CREATIVE WORKS IN PROGRESS OR COMPLETED

Anthony J. Cárdenas
Research Grant:

Works in progress:
• Cid Homage Volume, Actas of the 15th Annual University of New Mexico Conference on Ibero-American Culture and Society: Heros and Anti-Heros, Celebration of the
Cid - 800th Anniversary. February 27-29, 2008.

- Edition of Teresa de Cartagena’s Arboleda de los enfermos y Admiración operum Dey.
- Article: “Enrique fi de Oliva, ¿literatura infantil?”

Works submitted but not yet published:

- Article “Ambiguity, Aporia, Augustine and Acedia: The Greek-Roman Conundrum in the Libro de buen amor” Submitted to Libro de buen amor Studies.
- Article “¡Dios, qué buen vassallo, si óbviase buen señor!”: Alfonso VI en el siglo XVI” Submitted to Medievalia in Mexico City.

Enrique Lamadrid

Exhibitions & Festivals (public sector folklore work):

- “Gutiérrez-Hubbell House” Bernalillo County Open Space Program - curator, bilingual interpretative signage for the permanent exhibit.

Miguel López

Works Forthcoming:

- Book review of La literatura del desierto in Revista Iberoamericana.
- Book review of Icons of Mexican Literature in Estudios Hispánicos.

Works in Progress:

- Article, "Bajo la sombra de Comala: la influencia de Juan Rulfo en la narrativa del México globalizado."
- Article, "Recovering Women Migratory Experience in norteño Writers."
- Article, "Las vigilias del suefio: agencia y retórica del cambio en Baltín Canán de Rosario Castellanos."
- Book, Women Romancing the Nation: Feminism and Indigenous Societies after the Mexican Revolution (1930-1950)
Kathryn McKnight

Works Forthcoming:

Anna Nogar

Research and Travel Grants:
• “Attenuated Transgressions in New Spain: The Numinous Conversions of Sor María de Agreda,” University of New Mexico Latin American and Iberian Institute Faculty Travel Support. $473.00 April 2009. Travel for conference in Rio de Janeiro, Brazil.
• “Transatlantic Literary Evangelization: Sor María de Agreda’s Diaspora in Colonial Northern New Spain,” University of New Mexico Research Allocation Committee Grant. $3,401.00 March 2009. To conduct archival research in Mexico for book.

Works in Progress:
• Article, “Cherrie Moraga’s Conception of Motherhood in *The Hungry Woman: A Mexicana Medea*.” For submission to *Frontiers*.
• Book review, “La imaginación novelesca. Bernal Díaz entre géneros y épocas.” For submission to *Revista Iberoamericana*.
• Article, “Repositioning Mango: Elena Poniatowska’s Translation of House on Mango Street.” For submission to *Latin American Literary Review*.
• Article, “A Sense of Place in Jim Sagel’s *Tunomás Honey*.” For submission to *Western Literature*.
• Article, “Inscribing ‘La voz de la conversión’ in Colonial Northern New Spain: Architecture, Art and Conceptual Landscape.” For submission to *Colonial Latin American Review* or *Hispania*.
• Article, “Rolando Hinojosa-Smith: The Art of Self-Translation in the Contemporary Mexican-American Novel.” For submission to *Aztlan* or *Melus*.

Mary B. Quinn

Book Review Accepted but Not Yet Published:

Works in Progress:
• Book, *Absence as Aperture: The Moor, the Ballad, and the Origin of the Novel in Early Modern Spain*.
• Article, “Transcending Ekphrasis: Garcilaso’s Third Eclogue as Gesamtkunstwerk.”
Tey Diana Rebolledo

Articles in Edited Books Forthcoming:

Susan Rivera

Works Accepted but Not Yet Published:
- Article "Palabras para una presentación." *Revista de Agramante*.
- Non-refereed essay, "La manzana de mis ojos." *Publicaciones del Centro Asturiano de Madrid*.
- Non-refereed essay, Palabras para el disco de Paco Ortega "El éxito de todos mis fracasos."

Julie Sykes

Research Grants:
- “Mobile Technologies for the Facilitation of Place-Based, Hands-On Learning,” Principal Investigators: Julie M. Sykes, Christopher Holden. Interdisciplinary Research Allocation Committee Grant, University of New Mexico. $9,526.00 awarded February, 2009.

Submitted Article:

Works Forthcoming:

Rena Torres Cacoullos

Research Grant:
Catherine Travis
Research Grant:
"Code-switching and variable subject expression in New Mexico." Research Allocation Committee Large Grant, University of New Mexico, $6,860.00. Compilation (including collection and transcription) of a corpus of interviews and conversational data from Spanish / English bilingual New Mexicans to examine the effect of code-switching on variable subject expression. Project dates: July – Nov 2008.

Works Submitted but Not Yet Published:
• Book, Introducción a la lingüística hispánica (2nd ed.). Co-authors: José Ignacio Hualde, Antxon Olarrea, Anna Maria Escobar.
• Article, “The Role of Frequency in First-Person Plural Variation in Brazilian Portuguese: Nós vs. a gente,” co-authored with Agripino S. Silveira. Studies in Hispanic and Lusophone Linguistics.

H. Activities in Learned and Professional Societies

Anthony J. Cárdenas
• Co-Organizer of the one-day symposium Lady in Blue, Sor María de Jesús de Ágreda: A University of New Mexico Homage. April 24, 2009.
• Organizer of "Medieval Secular Best Sellers: Spain" a session for the 44th International Congress on Medieval Studies.
• Member of the Executive Committee of Medieval Hispanic Languages, Literatures, and Cultures responsible for establishing annual program for this area.

Enrique Lamadrid
• Member of the Editorial Board for Pasó por Aquí, University of New Mexico Press.
• Member of the New Mexico Historical Review Editorial Board.
• Member of the New Mexico Historical Society Board.
• Member of the Advisory Board for the Smithsonian Center for Folklife and Cultural Heritage.

Miguel López
• Reader for Aztlan, 2008.

Kathryn McKnight
• Member of the Editorial Board of Tulsa Studies in Women’s Literature, 2008 -
• Member of the Editorial Board of the Colonial Latin American Historical Review, 2007 -

Margo Milleret
Secretary for the Executive Committee of the American Portuguese Studies Association, 2009 - 2011
Anna Nogar
Co-Organizer (with Dr. Anthony Cárdenes) of the one-day symposium *Lady in Blue, Sor María de Jesús de Ágreda: A University of New Mexico Homage.* April 24, 2009.

Mary B. Quinn

Tey Diana Rebolledo
- Member of the Editorial Board for *Paso por Aquí*, University of New Mexico Press.
- Member of the Nominations Committee for the Modern Language Association, 2009-2010.
- Manuscript Appraisal of *Galvez Latina* for University of Arizona Press.

Susan Rivera
- Reviewed book manuscript: *Mañana no será lo que dios quiera,* by Luis García Montero for Editorial Alfaguara, Madrid, Spain, Spring 2009.
- Editor, preparation and edition of the manuscript: Ángel González, *Almanaque.* Spring 2009-present.
- Compilation and organization of Spanish poet Ángel Gonzalez' personal papers and library.

Julie Sykes
- Track Chair for Technology, Scholarly Resources, and Pedagogy, for the Latin American Studies Association (LASA) 2010, 2009-2010.
- Co-chair for Computer-Mediated Communication Special Interest Group, CALICO, 2008-present.
- Member of the Organizing Committee Realms of Possibility: Games and Learning at University of New Mexico, 2008-present.
- Reviewer for *Language Learning,* 2009-present.
- Reviewer for *Computer Assisted Language Instruction Consortium* (CALICO), 2009-present.
- Reviewer for *Language Learning and Technology,* 2008-present

Rena Torres Cacoullos
Editor of *Language Variation and Change.*

Catherine Travis
- Reader for *Journal of English Linguistics,* 2009. ‘*Have To, Have Got To,* and *Must:* NSM Analyses of English Modal Verbs of “Necessity.”’
• Reader for Forma y función, 2008. ‘A un modelo lingüístico del chisme’.
• Reader for Spanish in Context, 2008. ‘Referring expressions, discourse strategies, and
dialect variation in Spanish switch reference contexts’.

I. OTHER PROFESSIONAL ACTIVITIES (EXHIBITS, OFF CAMPUS TALKS, ETC)

Anthony J. Cárdenas

“From the Cid to Coronado: Medieval Meanderings.” Medieval Day at the Albuquerque Academy, November 24, 2008.

Kathryn McKnight

Presentation on Latin American Literature, Academic Decathlon Team at Belén High School. Invited by the Center for Latin American Resources and Outreach at the Latin American and Iberian Institute, March 24, 2009.

J. NON-TEACHING UNIVERSITY, COLLEGE, AND DEPARTMENT SERVICE

Anthony J. Cárdenas

• Study Abroad Coordinator for España Literaria IV, May 18 to June 1, 2009.
• Faculty Undergraduate Advisor for Spanish 2008 - 2009.
• Member of Theo Walker’s PhD Dissertation Committee, completed Fall 2008.
• Member of Sara Vicuña Guengerich’s PhD Dissertation Committee, completed Spring 2009.
• Chair of Aaron Taylor’s MA Thesis Committee, August 2008.
• Director of Aaron Taylor’s Graduate Independent Study course, Fall 2008.
• Director of Alma Robles’s Graduate Independent Study course, Spring 2009.
• Director of Heather Lauritzen’s Undergraduate Independent Study course, Fall 2008.
• Director of Debra Au’s Undergraduate Independent Study course, Fall 2008.
• Director of Laura Maldonado’s Undergraduate Independent Study course, Spring 2009.
• Director of Alejandro Barrazas’ Undergraduate Independent Study course, Summer 2009.
• Director of Angelica Nelson’s BA Honors Thesis, Fall 2008.
• Director of José A. Domínguez’ McNair Project, “Editing the Crónica valeriana, el Cid.” Spring 2009. In progress.
• Tenure consultant for University of Alabama-Birmingham, Fall 2008.
• Tenure consultant for Columbia University, Fall 2008.
• Tenure consultant for University of Delaware, Summer 2009.
• Tenure consultant for Ohio State University, Summer 2009.
• Tenure consultant for Purdue University, Summer 2009.

Enrique Lamadrid

• Director of Chicano Hispano Mexican Studies.
• Member of Theo Walker’s PhD Dissertation Committee, completed Fall 2008.
• Director of Steven Miera’s Independent Study course, Spring 2009.
• Director of Daniel Abeyta’s McNair Project, Summer 2008.
• Director of Briana Chávez’ McNair Project, Summer 2009.

Kimberle López
• Chair of Héctor Contreras-López’ Dissertation Committee, "Genealogía, transtextualidad y memoria: Tres acercamientos a Las genealogías de Margo Glantz."
• Chair of Jorge Estrada’s PhD Exam Committee, Fall 2009.
• Chair of Sonia Rodríguez-Hicks’ PhD Exam Committee, Summer 2009.
• Chair of Teresa Dovalpage’s Dissertation Committee, "De señora casera a jinetera: Imágenes de la mujer en la narrativa cubana masculina del siglo XX y principios del XIX," completed Summer 2008.
• Member of Olga Ríos-Soria’s PhD Dissertation Committee, "Políticas de transformación y liberación social en la narrativa de Luis Humberto Crosthwaite," completed Fall 2008.
• Member of Kiley Guyton’s PhD Exam Committee, completed Fall 2008.

Miguel López
• Chair of Olga Ríos-Soria’s PhD Dissertation Committee, "Políticas de transformación y liberación social en la narrativa de Luis Humberto Crosthwaite," completed Fall 2008.
• Member of Lorena Galván Valenzuela’s PhD Exam Committee, Fall 2008.
• Member of Anna Mabel González’s MA Exam Committee Latin American Studies Program, Summer 2008.
• Faculty Graduate Advisor, 2008 - 2009.

Kathryn McKnight
• Associate Director for Academic Programs, Latin American and Iberian Institute, February 2009-
• Acting Chair, Department of Spanish and Portuguese, Summer 2008.
• Associate Chair, Department of Spanish and Portuguese, August 2008-January 2009
• Chair of Sara Vicuña Guengerich’s PhD Dissertation Committee, completed June 19, 2009.
• Chair of Afena Johnson’s PhD Dissertation Committee.
• Member of Angélica Sánchez-Clark’s, PhD Dissertation Committee.
• Director of Jared Najjar’s Undergraduate Independent Study, Summer 2008.
• Tenure consultant, Department of Foreign Languages and Literatures, Colorado State University, Summer 2008.

Margo Milleret
• Coordinator of the Portuguese Program.
• Undergraduate Advisor for Portuguese.
• Chair of Fernanda Bartolomei’s MA Thesis, Portuguese, completed Summer 2009.
• Chair of Jeremy Lehnen’s PhD Dissertation Committee, Latin American Studies.
• Director of Ines Ortíz’ Graduate Independent Study course, “Service Learning in Brazil:
• Director of Glenia Lima’s Graduate Independent Study course, “Brazilian Cinema,” Summer 2009.

Anna Nogar
• Director of Victoria Dimas’ Independent Study Course, Nursing, Fall 2008.

Mary B. Quinn
• Member of Aaron Taylor’s MA Thesis, completed Summer 2008.
• Member of Dolores Ruiz-Falabella’s PhD Comprehensive Exam Committee.
• Member of Stefania Gray’s MA Comprehensive Exam Committee, Department of Comparative Literature, Fall 2008.
• Director of Erin Weddington’s BA Honors Thesis.

Tey Diana Rebolledo
• Organizer of Margarita Cota-Cárdenas’ presentation, Fall 2008.
• Organizer of Demetria Martínez’ presentation, Spring 2009.
• Chair of Lorena Galván Valenzuela’s PhD Examination Committee, Fall 2008.
• Director of Jeanette Mata’s BA Honors Thesis, completed Spring 2009.
• Director of Carlos Alvarez’s Graduate Independent Studies course, Summer 2008.
• Director of Vanessa de Verich’s Graduate Independent Studies course, Summer 2008.
• Director of Elena Aviles’ Graduate Independent Studies course, Summer 2008.
• Tenure consultant for Dr. José David Saldivar for promotion to Professor Tier 5, University of California - Berkeley.
• Tenure consultant for Dr. Kelli Lynn Johnson to Associate Professor, Miami University.
• Tenure consultant for Dr. Isabel Dulfano to Associate Professor, University of Utah.

Susan Rivera
• Chair of Theo Walker’s PhD Dissertation Committee, completed Fall 2008.
• Chair of David Briggs’ PhD Dissertation Committee.
• Member of Juan Carlos González-Granja’s PhD Dissertation Committee.

Eleuterio Santiago-Díaz
• Director of Juan Carlos González-Granja’s Graduate Independent Studies course, Fall 2008.

Julie Sykes
• Coordinator of the Spanish as a Second Language Program.
• Chair of Adrienne Gonzales’ PhD Comprehensive Exam Committee, completed Summer 2009.
• Member of Michelle Salazar’s PhD Dissertation Committee, completed Spring 2009.

Rena Torres Cacoullos
• Chair of Mary Copple’s PhD Dissertation Committee, A diachronic study of the Spanish perfect(ive): Tracking the constraints on a grammaticalizing construction. Completed Spring 2009.
• Member of Michelle Salazar’s PhD Dissertation Committee. *Sociocultural and historical factors affecting school success: heritage Hispanics in Colorado’s San Luis Valley schools.* Completed Spring 2009.
• Member of Celeste Rodriguez-Louro’s PhD Dissertation Committee. *Perfect evolution and change: A sociolinguistic study of Preterit and Present Perfect usage in contemporary and earlier Argentina.* School of Languages and Linguistics, Faculty of Arts, The University of Melbourne. Completed Spring 2009.
• Tenure consultant for University of Colorado, Denver, Fall 2008.

**Catherine Travis**
• Member of Mary Copple’s PhD Dissertation Committee, completed Spring 2009.
• Member of Angus Grieve-Smith’s PhD Dissertation Committee, Linguistics, completed Spring 2009.
• Chair of Susan Buescher’s MA Thesis, Linguistics, completed Fall 2008.
• Member of Sonia Balasch’s PhD Comprehensive Exam Committee, completed Fall 2008.

**K. Diversity**

Throughout the last academic year the Department maintained its pursuit of diversity, making efforts to attract women and minority groups. The Department issued contracts to seventy teaching assistants, Fulbright Fellows and lecturers; thirty eight of whom are Hispanic-Americans, three are of African descent, and twelve are Hispanic individuals from such diverse places as Brazil, Bolivia, Colombia, Mexico, Spain, Peru, Puerto Rico, and Venezuela. Our Portuguese teaching assistants are from Brazil. Women accounted for 60 percent of the total, of which twenty-one are Hispanic. A total of six lecturers taught on a part-time basis, four of them are women, and four of them are Hispanic. The work study team was composed of five students, all of whom are Hispanic, and three are women.
I. Significant Developments

A. Accreditation

The department's fifth annual report, covering the period April 1, 2007 – March 31, 2008, was approved by the Council on Academic Accreditation of the American Speech-Language-Hearing Association (ASHA-CAA). The department is currently accredited for the full eight-year cycle of April 1, 2004 – March 31, 2012.

B. UNM Speech-Language-Hearing Clinic and related activities

The following chart summarizes the total number of sessions and the populations served (number of individuals) by the clinic for AY 2008-2009 (FS, SS, Summer).

<table>
<thead>
<tr>
<th>Total Sessions</th>
<th>Age</th>
<th>Ethnicity</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Child</td>
<td>Adult</td>
<td>White</td>
<td>Hispanic</td>
<td>Black</td>
<td>Native American</td>
<td>Asian</td>
<td>Not reported</td>
</tr>
<tr>
<td>1471</td>
<td>102</td>
<td>61</td>
<td>89</td>
<td>36</td>
<td>6</td>
<td>0</td>
<td>12</td>
<td>20</td>
</tr>
</tbody>
</table>

In addition to individual treatment for a wide range of speech and language disorders, the clinic provided group sessions for adults with aphasia, children with language delay, children with autism spectrum disorders, transgender voice, fluency and articulation clients. An adult fluency support group was conducted in collaboration with Earley and Associates. Preschool children identified in the Albuquerque Public Schools “Child Find” program were also seen for treatment in our clinic. We have begun providing AAC (Augmentative and Alternative Communication) evaluations to individuals. UNM SHS is one of very few provider agencies in the state that can provide this much-needed service to individuals with speech and motor impairments that call for AAC technology. We have increased contact services to local agencies (preschools, etc.) in need of speech and hearing screening for their clients, particularly agencies who service low socioeconomic and bilingual children. We participated for the first time in World Voice Day, offering free voice screenings on campus. The clinic also provided diagnostic and treatment sessions for clients wishing to modify their English pronunciation. Many of these clients are UNM graduate assistants whose first language is not English. (All these sessions are included in the figures above.)

Despite the continuation of programs and initiation of new ones, the numbers in the table above are down from the previous year. This is due to having a reduced number of graduate students (see Section D below), which means that fewer clients can be served.

A fund, established by a gift from Charlotte and Keith Lough (Charlotte Lough is our former Clinic Director), assists clients who cannot afford the established Clinic fees for speech-language pathology services.
C. Acquisition of Equipment and Major Materials

The department received $4020 as part of the College of Arts & Sciences Equipment Allocation. The funds were used for (1) a computer, peripherals, and software for creating and editing DVDs for clinical training and classroom teaching purposes; 2) a portable video camera to complement the fixed installations in our clinic rooms, and for use in rooms without a fixed installation; and 3) two new computers for our student computer lab.

The department also applied for, and received funding of $3500 from the UNM Teaching Allocation Committee to acquire a Kay Visi-Pitch IV system. The Visi-Pitch is the most widely used clinical speech instrumentation tool, and is used for assessing and treating a wide range of speech and voice disorders. This new system replaces an older, less functional and less reliable system.

D. Budgetary Constraints on the Size of the Graduate Program in SHS

At the end of the 2006-2007 year, our contract with the Albuquerque Public Schools ended. For a number of years, the Department of Speech & Hearing Sciences had been able to maintain a larger graduate program training speech-language pathologists (SLPs) than otherwise possible, thanks to this contract. APS, as the largest single employer of our graduates, provided this support in order to increase the number of SLPs trained, and to increase the likelihood that individual graduates would chose APS for their initial position.

For a number of reasons, primarily fiscal constraint, APS terminated this contract at the end of the 2006-2007 year. This would necessitate reducing the size of our graduate program by 35-40%, as the limiting, most expensive component of graduate training is the clinical supervision required. There is, however, a very severe shortage of SLPs in New Mexico. The Dean’s Office has provided some ‘one-time’ limited transitional support for the past two years. With these funds, which allowed us to stay at 3.75 clinical supervisors (down from approximately 5 during the APS contract), and some juggling of clinic schedules, we have been able to hold the reduction to approximately 20% (roughly, down from 23-25 students to 18-19 students).

However, in planning for 2008-2009, given the constraints on UNM from the current economic situation, it appeared likely that we would lose the temporary funding for the .75 position, which would have mean a substantial further reduction. On that basis, we admitted an even smaller class of 12 graduate students. After the admissions deadline of April 15, the College was able to find additional funds to cover .50 of that position, and the department committed to fund the other .75, so we would not lose that position. It is our hope that we can stabilize at this level, and return to 18-19 students in future years.

E. Absence of a Departmental Administrator

Without question, the most adverse event of the 2008-2009 academic year for SHS was the absence of a Departmental Administrator for most of the year. In October, Ms. Diana Gourlay resigned that position to take another position in the university. Unfortunately, this coincided with the start of the ‘pause and hold’ at UNM. We were not granted approval by the EVP for Academic Affairs to replace this position for many months, and then had to deal with the newly installed UNMJobs system. As a result, we did not have a D.A. until April 27, 2009, when Ms. Catherine Fletcher took the position. In a small department with only two staff persons, the D.A. and an Administrative Assistant II, not having a D.A. added greatly to the
workload and stressload of the department chair, the administrative assistant, and all the faculty. (It is the chair’s opinion that a department could get along with a chair more easily than it could get along without a D.A.) We did survive, however, and are delighted with our new D.A., Ms. Fletcher.

F. Comunidad Crecer

For 19 years, we have conducted a program in which a team of graduate students and supervisors traveled to Mexico City to Comunidad Crecer, a private school/clinic for children and young adults with multiple handicaps. The team includes speech-language pathology graduate students, occupational therapy graduate students, speech-language pathology supervisors and occupational therapy supervisors. The team is generally in Mexico City for 7-10 days, evaluating and re-evaluating 30-35 students, providing inservice presentations on a variety of topics for parents and CC staff, and holding parent conferences with results and recommendations from the evaluations. During times that the team members are not working with the children, they are taken by the parent group to museums, the pyramids of the sun and moon, a performance of the Folkloria ballet, the floating gardens, and other cultural sites. We planned to conduct this program again in May, 2009, and made the usual arrangements. However, the emergence of the H1N1 flu last spring led to a recommendation by the University that all such programs in Mexico be cancelled, and we followed that recommendation. It was not possible to schedule it later due to other commitments. We look forward to resuming this program next year, and anticipate that our new Clinic Director, Dr. Sandra Nettleton, will be coordinating the program in 2010.

G. Camp of the Rising Sun

A high priority for our clinical training program is providing experience in the widest possible range of service delivery models. As part of this effort, we have recently begun participating in Camp of the Rising Sun. This camp is specifically designed for approximately 35 individuals with Autism and is held every summer in July. The project is an interdisciplinary one, involving students and supervisors in Speech-language Pathology, Occupational Therapy, and Education. Additionally, it is an interagency collaborative project between UNM SHS, Center for Development and Disabilities (CDD), and the Southwest Autism Project in Albuquerque. The team this year included 5 speech-language pathology students, 12 occupational therapy students, 2 special education students and 3 supervisors. The camp takes place at Camp Oro Quay, located in the east mountains, with a mission of providing quality service to children and adolescents with autism, along with a quality camp experience. An additional focus is to provide respite for family and guardians. Graduate students in SLP learned interdisciplinary techniques and strategies for the children, and gained a unique experience of providing self-help and daily needs for children with autism. Parents were provided with suggested strategies for communicating with their children while at home. The project was coordinated this year by Dr. Sandra Nettleton, UNM SHS Clinic Director.

II. Significant Plans and Recommendations

- In the present economic climate, our department, like others, must be more entrepreneurial, particularly in order to fund more clinical supervisors, who are the limiting resource for the size of our graduate program. We are grateful to the College for
its support, but realize that we must develop other sources of funding. We are actively seeking contracts with schools, nursing homes, and other agencies to provide services by graduate students under direct professional supervision. We hope to approach Albuquerque Public Schools with a contract proposal which would be more to their benefit. We also plan to investigate the possibility of our clinic being a Medicare/Medicaid provider, to accommodate clients who are covered by these programs.

- Although we are gratified by increased interest in our field by students, as shown by increased enrollments, this has produced problems in terms of class size, and also of graduating students who will not be able to get into our or other graduate programs due to insufficiently strong credentials. We are seeking to institute selective admission to the undergraduate program. This will allow us to do more in the way of mentoring and other experiences to prepare students better for the highly competitive process of applying to graduate programs in SHS.

- We continue to work toward improved programs for the training of speech-language pathologists in a linguistically and culturally diverse state. A new course on Multicultural Issues in Speech-Language Pathology (SHS 539) has been developed by Dr. Rodriguez for graduate students. Drs. Rodriguez, Patterson, and Dale are preparing a Personnel Preparation grant for the US Office of Special Education Programs for the training of bilingual speech-language pathologists. We are also working with colleagues at New Mexico State University for sharing of resources and the development of new programs.

III. Appointments to Faculty and Staff

There were no additions to the faculty. As mentioned above. Ms. Catherine Fletcher has joined the department as Departmental Administrator. One of our clinical supervisors, Ms. Elizabeth Meek, will be leaving at the end of December, and we are currently recruiting a replacement for her.

IV. Separations of Faculty and Staff

As noted above. Ms. Diana Gourlay resigned as Departmental Administrator in October, 2008, and now has been replaced.

V. Faculty Achievements

A. Publications

**Binger, Cathy**


Dale, Philip


Neel, Amy


Palmer, Phyllis


Rodriguez, Barbara


B. Conference Presentations

Binger, Cathy


*Dale, Philip*


*Neel, Amy*


Patterson, Janet


Rodriguez, Barbara

Noun phrase gender agreement in emergent Spanish-English bilingual preschoolers. Poster presented at the Symposium on Research in Child Language Disorders. Madison, WI.


C. Outside Professional Service

Binger, Cathy
Consulting Editor: Augmentative and Alternative Communication, 2008-2010
Reviewer: Journal of Speech, Language, and Hearing Research, American Journal of Speech-Language Pathology

Dale, Philip
Editor, Journal of Child Language
Reviewer: Journal of Speech-Language-Hearing Research

Neel, Amy
Reviewer for textbook manuscripts: Wolters-Kluwer Publishing/Lippincott Williams & Wilkins.

Palmer, Phyllis
Reviewer for Journal of Speech-Language-Hearing Research; Dysphagia
Website manager for dysphagia.com

Patterson, Janet
Reviewer: American Journal of Speech-Language Pathology, Early Childhood Services, Journal of Research in Reading

Rodriguez, Barbara
Editor, American Speech Language Hearing Association, Division 14, Perspectives on Communication Sciences and Disorders in Culturally and Linguistically Diverse Populations

Grant Review Panel: Chairperson, F&2009 Center for Early Care and Education Research: Dual Language Learners, Administration for Children and Families.

Reviewer: Language Speech and Hearing Services in the Schools; Journal of Early Childhood Literacy, American Journal of Speech-Language Pathology
VI. Outside Sponsored Research

**Binger, Cathy**
Binger, C. (PI) Filling in the ‘GAP’: A Grammar Acquisition Program for Children who use AAC.
$75,000
(under review)

**Dale, Philip**
Dale, P. (Co-Applicant) Genetic and environmental contributions to speech development: Searching for the heritable phenotype [Marianne E. Hayiou-Thomas, University of York, PI]
The Wellcome Trust (UK)
£295,578
(submitted February, 2009; not funded)

National Institutes of Health
$2,414,621.49
(submitted March, 2009; under review)

**Patterson, Janet**
Patterson, J. (PI). Dynamic screening for language impairment in Spanish-speaking and bilingual preschool children
Institute of Educational Sciences
$1,203,649
(submitted October, 2008; not funded)

**Rodriguez, Barbara**
Rodriguez, B. (Lead Investigator), Assessing Bilingual Phonological Development in Young Children [Principal Investigator: Adele W. Miccio, Pennsylvania State University]
NIH/Child Development and Behavior Branch
Consortium with The Pennsylvania State University
10/2005 to 6/2010
$484,044
(continuing funding)

Rodriguez, B. (co-PI). Dynamic screening for language impairment in Spanish-speaking and bilingual preschool children
Institute of Educational Sciences
$1,203,649
(submitted October, 2008; not funded)

VII. Students

A. Graduates

From Fall, 2008, through Summer, 2009, 16 master's students received their degrees. 16 students received the Bachelor of Arts degree majoring in Speech & Hearing Sciences.

We also have a substantial, but fluctuating number of students at any point in time who are officially “non-degree” students. Most have undergraduate degrees in other fields who are taking foundation courses in SHS on a part-time basis in order to apply for graduate programs. There were approximately 25 of these students last year.

B. Applications to the Graduate Program

There were 62 applications for fall, 2009, entry into the master's program in speech-language pathology. Due to financial constraints (see I.D above), we accepted just 15 of those applicants, and 12 enrolled in the program this fall.

C. Enrollment composition

At present, 86 undergraduate A&S students are majors in Speech & Hearing Sciences, and an additional 20 students in the major were registered in University College. These included 47 White/non-Hispanic, 39 Hispanic, 5 Native American, 3 African-American, 5 Asian/Pacific Islander, and 5 students not reporting ethnicity.

The master's degree program served 34 enrolled graduate students, including 24 White/non-Hispanic, 8 Hispanic, 1 Native American, and 1 student not reporting ethnicity.