Annual Report of the University, 1997-1998, Volumes 1-4

University of New Mexico

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ANNUAL REPORTS
1997-98

VOLUME I

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PROVOST/VICE PRESIDENT FOR ACADEMIC AFFAIRS

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University of New Mexico

Annual Report

1997-98
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The 1997-98 academic year was an important one for the Anderson Schools of Management. The Anderson Schools' faculty, staff and students made significant progress toward meeting the Anderson Schools' goals, despite facing a year of limited resources and tight budgets. This report highlights our progress in three important areas:

- The Anderson Schools of Management strive to recruit top quality students from the state of New Mexico as well as the Southwest region. We also seek to diversify our student population so that our students represent all communities.

  In 1997/98, our undergraduate enrollments increased 9% and our graduate enrollment increased 1%. In addition, both our programs are increasingly diverse.

- We seek to provide a high quality education that will enable students to become productive participants in their professional and community lives at the local, regional and national levels. We encourage our students to think critically and to develop an interest in life-long learning. In surveys of our alumni and of student graduating in 1997/98, students give the Anderson Schools of Management high marks in these areas, as well as for our programs in general.

- We pursue national and international recognition for our research activities through publication in respected refereed academic and professional journals and through presentations at distinguished learned societies. Our faculty continues to excel in their fields of expertise. In addition, many of faculty provide leadership in new areas of academic inquiry, including the study of diversity in organizations, business ethics, the role of accounting in organizations, and entrepreneurial studies. Our full-time 47 full-time faculty members contributed over 200 scholarly publications and presentations during 1997/98.

This report reviews the Anderson Schools' many accomplishments during 1997/98. It is only a snapshot of our efforts to provide an education of enduring value and to contribute to the academic and intellectual growth of our respective fields.

Howard L. Smith
SIGNIFICANT PROGRAM DEVELOPMENTS 1997/98

Bachelor of Business Administration

Changes in number of students:

- Enrollment increased significantly in 1997-98. In Spring of 1998, a total of 891 students were enrolled in our undergraduate program. This represents approximately a 9% increase over 1997 enrollment and continues a five-year trend of increasing admissions in our undergraduate enrolments.
- The Undergraduate student population is approximately 50% female and 50% male.
- The diversity of the Undergraduate student population mirrors that of UNM as a whole. There have been significant improvements in the percentage of Native American, African American and Asian American students enrolled compared with 1988.

Ethnicity of Students 1997-98

<table>
<thead>
<tr>
<th></th>
<th>Summer</th>
<th>Fall</th>
<th>Spring</th>
<th>ASM 1988</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enrolled</td>
<td>Graduate</td>
<td>Enrolled</td>
<td>Graduate</td>
</tr>
<tr>
<td>African American</td>
<td>3%</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Asian American</td>
<td>7%</td>
<td>6%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>35%</td>
<td>34%</td>
<td>32%</td>
<td>45%</td>
</tr>
<tr>
<td>Native American</td>
<td>5%</td>
<td>14%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>White/other</td>
<td>49%</td>
<td>40%</td>
<td>55%</td>
<td>47%</td>
</tr>
<tr>
<td>Did not indicate</td>
<td>2%</td>
<td>3%</td>
<td>3%</td>
<td>0</td>
</tr>
</tbody>
</table>

Concentrations:

- Accounting, Finance, General Management and Marketing continue to be the most popular concentrations.

Graduates by Concentration 1997-98

(Double concentrations are counted twice)

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Summer</th>
<th>Fall</th>
<th>Spring</th>
<th>Total</th>
<th>Percent 1997-98</th>
<th>Previous year percentages</th>
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</thead>
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<tr>
<td>Accounting</td>
<td>4</td>
<td>47</td>
<td>47</td>
<td>98</td>
<td>24</td>
<td>26</td>
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<tr>
<td>MIS</td>
<td>5</td>
<td>3</td>
<td>14</td>
<td>22</td>
<td>5</td>
<td>6</td>
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<tr>
<td>Entrepreneur</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>9</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Finance</td>
<td>3</td>
<td>14</td>
<td>32</td>
<td>49</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Gen mgmt</td>
<td>9</td>
<td>39</td>
<td>46</td>
<td>94</td>
<td>23</td>
<td>16</td>
</tr>
<tr>
<td>Hum res mgmt</td>
<td>3</td>
<td>20</td>
<td>18</td>
<td>41</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Internl mgmt</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>18</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Marketing</td>
<td>4</td>
<td>25</td>
<td>26</td>
<td>55</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Product/Ope</td>
<td>1</td>
<td>5</td>
<td>11</td>
<td>17</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Travel/tour</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>11</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>38</td>
<td>163</td>
<td>213</td>
<td>414</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Master Degree in Business

Changes in number of students and credit hours:
- The number of graduate students has increased slightly, returning to the number of enrolled student in earlier years. The number of new students registering for the MBA program has increased slightly over the last three years.
- The total attempted credit hours at the graduate level has increased, returning to 1994/95 levels.
- The division between full and part-time students fluctuates around 50% and has not changed significantly in the last five years.

Attempted Student Credit Hours (500, 600 and 700 level)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>1194</td>
<td>1495</td>
<td>1534</td>
<td>1649</td>
<td>1723</td>
</tr>
<tr>
<td>Fall</td>
<td>3522</td>
<td>3562</td>
<td>3997</td>
<td>3424</td>
<td>3408</td>
</tr>
<tr>
<td>Spring</td>
<td>3664</td>
<td>3619</td>
<td>3844</td>
<td>3411</td>
<td>3568</td>
</tr>
<tr>
<td>Total</td>
<td>8380</td>
<td>8676</td>
<td>9375</td>
<td>8484</td>
<td>8699</td>
</tr>
</tbody>
</table>

Headcount AGSM for Spring Semesters

<table>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>212</td>
<td>248</td>
<td>204</td>
<td>269</td>
<td>229</td>
<td>240</td>
</tr>
<tr>
<td></td>
<td>(48%)</td>
<td>(56%)</td>
<td>(47%)</td>
<td>(61%)</td>
<td>(54%)</td>
<td>(55%)</td>
</tr>
<tr>
<td>Part-time</td>
<td>226</td>
<td>193</td>
<td>234</td>
<td>172</td>
<td>193</td>
<td>197</td>
</tr>
<tr>
<td></td>
<td>(52%)</td>
<td>(44%)</td>
<td>(53%)</td>
<td>(39%)</td>
<td>(46%)</td>
<td>(45%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>438</td>
<td>441</td>
<td>438</td>
<td>441</td>
<td>422</td>
<td>437</td>
</tr>
</tbody>
</table>

Concentrations:
- The percentage of graduating students completing a general MBA without concentration continues to climb (41.2% this year, 33% last year, 36% in 1995-96.)
- Students continue to chose from a large number of concentrations. Around 10% of graduating seniors selected Financial Management as their concentration. The remaining students were spread across the remaining concentrations, with Accounting, OB/HRM, Policy & Planning and Operations & Management Science graduating fewer than 5% of students per concentration.

Number of Students Graduating in Each Concentration, 1997-1998

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Summer</th>
<th>Fall</th>
<th>Spring</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Financial Management</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>General Management</td>
<td>4</td>
<td>14</td>
<td>17</td>
<td>35</td>
</tr>
<tr>
<td>International</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>International-Latin America</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>MIS</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Management of Technology</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Marketing Management</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>OB/HRM</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Policy &amp; Planning</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Operations &amp; Mgt. Sci</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>MS – Accounting</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>8</td>
<td>33</td>
<td>44</td>
<td>85</td>
</tr>
</tbody>
</table>
Diversity:

- Our graduate population remains about 60% male and 40% female.
- The ethnic mix of our graduate students has changed slightly since last year. The most significant change is a 1% drop in Asian students and a 1% drop in Hispanic students.

### MBA Students
Ethnicity of Graduate Students (including EMBA)

<table>
<thead>
<tr>
<th></th>
<th>Fall 1996</th>
<th>Spring 1997</th>
<th>Fall 1997</th>
<th>Spring 1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENDER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>40%</td>
<td>43%</td>
<td>42%</td>
<td>39%</td>
</tr>
<tr>
<td>Male</td>
<td>60%</td>
<td>57%</td>
<td>58%</td>
<td>61%</td>
</tr>
<tr>
<td>ETHNICITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian</td>
<td>1.77%</td>
<td>2.61%</td>
<td>2.39%</td>
<td>2.75%</td>
</tr>
<tr>
<td>African American</td>
<td>1.22%</td>
<td>1.42%</td>
<td>1.30%</td>
<td>1.37%</td>
</tr>
<tr>
<td>Asian</td>
<td>3.76%</td>
<td>3.08%</td>
<td>2.82%</td>
<td>2.52%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10.84%</td>
<td>10.66%</td>
<td>10.63%</td>
<td>9.84%</td>
</tr>
<tr>
<td>White, non-hisp.</td>
<td>57.08%</td>
<td>56.87%</td>
<td>52.71%</td>
<td>55.15%</td>
</tr>
<tr>
<td>Foreign</td>
<td>4.65%</td>
<td>4.74%</td>
<td>4.99%</td>
<td>4.35%</td>
</tr>
<tr>
<td>Decline to state</td>
<td>20.58%</td>
<td>20.62%</td>
<td>25.16%</td>
<td>24.03%</td>
</tr>
</tbody>
</table>
SIGNIFICANT FACULTY DEVELOPMENTS

CHANGES IN FACULTY

- Appointments: There were no appointments to full-time tenure track faculty lines during the academic year.
- Resignations: Professor Banbury resigned her position in December 1997.
- Retirements: Professor Radosevich retired in December 1997
- Leaves without pay: Professor Coes took a leave of absence without pay for the full academic year.
- Sabbaticals: Tom Mauck (Accounting), Laurie Schatzberg (MIDS), and Richard Reid (MIDS) took sabbatical leaves during 1997/98.

FULL TIME FACULTY

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Department</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baker, Kenneth G.</td>
<td>Mktg/InfoDecSci</td>
<td>Associate professor</td>
<td>PhD U Oregon</td>
</tr>
<tr>
<td>Banbury, Catherine</td>
<td>Fin/IntlTech</td>
<td>Assistant professor</td>
<td>PhD U Michigan</td>
</tr>
<tr>
<td>Bannister, Geoffrey J.</td>
<td></td>
<td>Assistant professor</td>
<td>PhD U Texas/Austin</td>
</tr>
<tr>
<td>Bernstein, Judith*</td>
<td>Parish Librarian</td>
<td>Associate professor</td>
<td>MLS/MS Columbia/Connell</td>
</tr>
<tr>
<td>Bose, Ranjit</td>
<td>Mktg/InfoDecSci</td>
<td>Associate professor</td>
<td>PhD U Texas/Austin</td>
</tr>
<tr>
<td>Bougen, Philip</td>
<td>Accounting</td>
<td>Associate professor</td>
<td>Phd London Sch Econ</td>
</tr>
<tr>
<td>Bullers, William L.</td>
<td>Mktg/InfoDecSci</td>
<td>Professor</td>
<td>Phd Purdue</td>
</tr>
<tr>
<td>Burd, Stephen D. (Chr)</td>
<td></td>
<td>Associate professor</td>
<td>Phd U Cal/Irvine</td>
</tr>
<tr>
<td>Champoux, Joseph E.</td>
<td>Mktg/InfoDecSci</td>
<td>Professor</td>
<td>Phd U Pittsburgh</td>
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<tr>
<td>Chwastiak, Michele</td>
<td>Accounting</td>
<td>Associate professor</td>
<td>Phd Princeton</td>
</tr>
<tr>
<td>Coes, Donald V.</td>
<td>Fin/IntlTech</td>
<td>Associate professor</td>
<td>Phd U New Mexico</td>
</tr>
<tr>
<td>Corzine, Jan</td>
<td>Org studies</td>
<td>Associate professor</td>
<td>Phd U So Carolina</td>
</tr>
<tr>
<td>Dillard, Jesse F.</td>
<td>Mktg/InfoDecSci</td>
<td>Professor</td>
<td>Phd U Illinois</td>
</tr>
<tr>
<td>de Gouvea Neto, Raul</td>
<td>Dir. Travel/Tourism</td>
<td>Associate Professor</td>
<td>Phd Texas A&amp;M</td>
</tr>
<tr>
<td>Logsdon, Jeanne M.</td>
<td>Mktg/InfoDecSci</td>
<td>Professor</td>
<td>Phd U Pennsylvania</td>
</tr>
<tr>
<td>Logsdon, Jeanne M.</td>
<td>Mktg/InfoDecSci</td>
<td>Professor</td>
<td>Phd U Pennsylvania</td>
</tr>
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<td>Logsdon, Jeanne M.</td>
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<td>Professor</td>
<td>Phd Arizona State</td>
</tr>
<tr>
<td>Logsdon, Jeanne M.</td>
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<td>Phd U Virginia</td>
</tr>
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<td>Logsdon, Jeanne M.</td>
<td>Mktg/InfoDecSci</td>
<td>Professor</td>
<td>Phd U Cal/Boulder</td>
</tr>
<tr>
<td>Logsdon, Jeanne M.</td>
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<tr>
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<td>Phd MIT</td>
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<td>Logsdon, Jeanne M.</td>
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<td>Professor</td>
<td>Phd U Wis/Madison</td>
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<td>Professor</td>
<td>Phd U Pittsburgh</td>
</tr>
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<td>Logsdon, Jeanne M.</td>
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<td>Professor</td>
<td>Phd UCLA/UCLA</td>
</tr>
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<td>Phd Temple</td>
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<td>Phd Carnegie-Mellon</td>
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<td>Phd U Texas/Austin</td>
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<td>Mktg/InfoDecSci</td>
<td>Professor</td>
<td>Phd Northwestern</td>
</tr>
<tr>
<td>Logsdon, Jeanne M.</td>
<td>Mktg/InfoDecSci</td>
<td>Professor</td>
<td>Phd U Michigan</td>
</tr>
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<td>Logsdon, Jeanne M.</td>
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<td>Logsdon, Jeanne M.</td>
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<td>Logsdon, Jeanne M.</td>
<td>Mktg/InfoDecSci</td>
<td>Professor</td>
<td>Phd U Utah</td>
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</table>

Anderson School of Management
Annual Report 1997/98
ENDOWED CHAIR
New Mexico Bankers Chair of Banking

PROFESSORSHIPS
Arthur Andersen Professorship (Accounting)
ASM Foundation Professorship
Albert Black Professorship (Entrepreneurship)
Douglas Minge Brown Professorship (Finance)
KPMG Peat Marwick Professorship (Accounting)
Rutledge Professorship
UNM Regents Professorship

LECTURESHPs
Baldridge Lumber Lectureship
Lobo Center/Norwest Lectureship
Rogoff Diamond Walker Lectureship (Accounting)
Sandia Federal Lectureship I (Finance)
Sandia Federal Lectureship II (Finance)
UNM Regents Lectureship
Ed Wood Lectureship

Part-time Faculty

ACCOUNTING
Dawn Addington
Deborah Bower
Gary Caplan
Maria Castellano
Patricia Elliot (emerita)
Steve Erickson
David Euler
Eileen Illes
Donald McFall
G. E. Phillips (emeritus)
Dennis Sterosky
Robert Tepper
Louise Umbrage

FINANCE/INTERNATIONAL & TECHNOLOGY MGT
Vic Berniklau
Wendy Cain
Dante DiGregorio
Richard Engstrom
Chris Fogel
Ahmad Saad

MARKETING/INFORMATION & DECISION SCIENCES
Renee Barela
John Benavides
Glenn Byrnes
Robert Caltagirone
William Epier
Donald Larrichio,
Jernann Montoya

Donald G. Simonson
Allistair Preston
Suleiman K. Kassicieh
John Young
Dwight Grant
Jesse F. Dillard
Richard Reid
Alien M. Parkman
Jacqueline N. Hood
Donald Coes
James Hamill
Gautam Vora
John Schatzberg, John Finkelstein
Joseph Champouz, Avraham Shama
Jeanne Logsdon, Helen Muller
Terry Othick
Kerry Perry
Alex Sezzu

ORGANIZATIONAL STUDIES
John Ackerman
Renee Barela
Raymond Becich
Tom Bonafair
Tarby Bryant
David Euler
Jerise Flowers
Helen Gonzales
James Hayes
Pat Jones
Anthony Louderbough
Nick Nicholson
Jack Ning
Marina Oboratova
Drew Parsons
Ed Perregaux
Peter Rames
Rebecca Rigney
Paul Sandervaf
Patricia Setz
Stephen Snyder
Merry Stubblefield
Holly Traver
Jacuelle Woodcock
FACULTY ACTIVITIES

DEPARTMENT OF ACCOUNTING

Workshop presentations

09/19/97  Mary A. Kaidonis (University of Wollongong)
Accounting as an ideological instrument in public sector reforms: An Australian experience

10/24/98  Susan Anders (Texas Tech)
Topic analysis for dissertation proposal on the effectiveness of the earned income tax credit

10/28/97  Craig White (Texas Tech)
The response of stock returns to unexpected earnings under different capital gain and ordinary income tax rates; An analysis based on the Ohlson valuation model

02/10/98  Laurie Pant (Suffolk University)
The effect of the interaction of individual moral development and management control systems on managers' ethical behavior.

03/27/98  Ulrike Schultze (Southern Methodist University)
Constructing high tech space: Mind, body and place in knowledge

Intellectual Contributions

Bougen, Philip D.

Publications


Dillard, Jesse F.

Publications


Discussion of "The threat of ethical accountants: An application of Foucault's concept of ethics to accounting education & some thoughts on ethically educating for the Other". *Proceedings, Interdisciplinary Perspectives on Accounting Conference*. University of Manchester (UK), July 1997.

**Presentations**


*Social constructs & AIS research*. Presented at INFORMS National Conference, October 26-29 1997, Dallas. (Abstract published in proceedings, 32.)


*The ethical twilight zone of accounting information systems* Presented at Critical Accounting Workshop, December 1997, University of Alberta.
Hamill, James R.

Publications


Invited articles:


LLCs, family partnerships may lead to tax savings. *Succession Solutions*, Winter 1998, 2.


Mouck, Tom

Panglossian capital budgeting theory in a complex adaptive world. Proceedings of the Fifth Interdisciplinary Conference on Accounting, 4, Manchester (UK), July 1997, 4.1.1-17.

Oakes, Leslie

Presentations


Conference presentations: American Accounting Association, Dallas; Interdisciplinary Perspectives on Accounting Conference, University of Manchester (UK).

Preston, Alistair

Publications

Diagnosis-related groups and the problem of government rationing health care to the elderly (with W. Chua & D. Neu). Accounting, Organizations & Society.


Presentation


Contract/Sponsored Research


Togo, Dennis F.

Publications


Young, Joni J.

Publication


Presentation

Accounting as it intertwines with the political. Presented at the 5th Interdisciplinary Perspectives on Accounting Conference, Manchester (UK), July 1997.

Yuthas, Kristi

Publications


Presentations


DEPARTMENT OF ORGANIZATIONAL STUDIES

Workshop presentations

Jean Bartunek (Boston College)

Mary Ellen Capek (Visiting Scholar)
*Women and Philanthropy: Old Stereotypes and New Challenges*

Virginia Gerde (Virginia Tech)
*A Just Organization: Organization Structure and Corporate Social Performance*

Sharon Matusik (University of Washington)
*Ephemeral Resources and Organizational Knowledge: The Case of the Contingent Workforce*

Violina Rindova (New York University)
*Competing for the Mind: Building Competitive Advantage in the Specialty Coffee Industry*

Paula Silva (University of Florida)
*An Empirical Investigation of the CEO Performance Appraisal Process*

Intellectual contributions

Champoux, Joseph

Publications


Corzine, Janice

Publications


Hood, Jacqueline

Publications


Presentations


Logsdon, Jeanne

Publications


Muller, Helen

**Publications**


**Presentations**


Parkman, Allen

**Publications**


Presentations


Porter, James

Publications


Rehder, Robert

Publications


Sarason, Yolanda

Publications


**Presentations**


**Publications**


**Presentations**

DEPARTMENT OF FINANCE, INTERNATIONAL AND TECHNOLOGY MANAGEMENT

Intellectual Contributions
Geoffrey Bannister


Don Coes
No report given.

Raul de Gouvea


John Finkelstein


Dwight Grant


Sul Kassicieh


John Schatzberg


Don Simonson

Gautam Vora


MARKETING/INFORMATION AND DECISION SCIENCES

Intellectual Contributions

Baker, K.


Bullers, W.,


Bose, R.,


Burd, S.,


Hozier, G.,


Ravinder, H.,


Reid, R.,


Rogers, R.,


Schatzberg, L.,


Shama, A.,


Yourstone, S.,


<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bell, Cheryl M.</td>
<td>Coordinator, special events</td>
</tr>
<tr>
<td>Bower, Deborah K.</td>
<td>Academic administrator II</td>
</tr>
<tr>
<td>Burke, Lisa J.</td>
<td>Coordinator, community education</td>
</tr>
<tr>
<td>Chastain, Loyola O.</td>
<td>Program coordinator</td>
</tr>
<tr>
<td>Cromer, Mary M.</td>
<td>Administrative assistant to the dean</td>
</tr>
<tr>
<td>Fachman, Mary M.</td>
<td>Manager, placement</td>
</tr>
<tr>
<td>Foley, Sandra A.</td>
<td>Administrative assistant I</td>
</tr>
<tr>
<td>Francis, Janet L.</td>
<td>Administrative assistant I</td>
</tr>
<tr>
<td>Kirby, Lisa F.</td>
<td>Coordinator, student employment</td>
</tr>
<tr>
<td>Livingston, Katherine G.</td>
<td>Senior program manager</td>
</tr>
<tr>
<td>Lucero, Jennie C.</td>
<td>Administrative assistant II</td>
</tr>
<tr>
<td>Martin, Kristl L.</td>
<td>Administrative assistant I</td>
</tr>
<tr>
<td>McHale, Analise</td>
<td>Coordinator, special events</td>
</tr>
<tr>
<td>Merrell, Margaret N.</td>
<td>Editorial technician</td>
</tr>
<tr>
<td>Murray, Roberta A.</td>
<td>Administrative assistant I</td>
</tr>
<tr>
<td>Occhialino, Sally L.</td>
<td>Senior academic advisor</td>
</tr>
<tr>
<td>Otero, Deborah L.</td>
<td>Administrative assistant II</td>
</tr>
<tr>
<td>Parsons, Drew</td>
<td>Program manager</td>
</tr>
<tr>
<td>Podeyn, Marilyn Sue</td>
<td>Manager, systems &amp; programming</td>
</tr>
<tr>
<td>Seazzu, Alessandro F.</td>
<td>Administrative assistant I</td>
</tr>
<tr>
<td>Teel, Jacqueline W.</td>
<td>Administrative assistant II</td>
</tr>
<tr>
<td>Trujillo, Darlene J.</td>
<td>Coordinator, community education</td>
</tr>
<tr>
<td>Trujillo, Ernestine</td>
<td>Senior academic advisor</td>
</tr>
<tr>
<td>Willard, Doris</td>
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UNIVERSITY OF NEW MEXICO

University Art Museums

Annual Report
1997 – 1998

Peter Walch
Director

September 11, 1998
1. Significant Developments

Administratively, much of 1997-98 was spent dealing with the futures of the two University Art Museums satellite operations: 5-1-6 (downtown) and the Jonson Gallery. As this is written, 5-1-6 is back up and running after a five-month closure and reconstitution as “University Museums Downtown,” while the Jonson Gallery still struggles to gain a secure reprieve from a University plan to demolish the present historical home to make way for a new parking garage.

At the main museum, we enjoyed a record year of cash support for our operations (primarily in the form of $80,000 from our valued friends at the Stockman Family Foundation, plus $50,000 from the Albuquerque Community Foundation) and acquisitions (here, the primary gifts came as over $60,000 cash support from the Mattis-Hochberg family, plus continuing help from our Friends of Art).

We have made some progress toward resolving our long-standing environmental issues, especially that of humidity control (or our lack thereof). William Lull, of Garrison and Lull Associates, visited, inspected, and prepared a report on our HVAC (and related) systems. As a result, the University has commissioned an engineering plan from the local firm Bridgers and Paxton. They will work in close consultation with Mr. Lull to design a retrofit system to bring our humidity fluctuations within accepted museum standards. If all goes well, we may even get this retrofit funded by the University in FY98-99.
Meanwhile, our Conservation Program (initiated and continued under a series of grants from the Stockman Family Foundation) this year expanded to include a seminar, offered in June of 1998, aimed at both New Mexico museum professionals and museum studies students at UNM, and devoted to collection care issues. We are now studying the possibility of expanding this program, possibly to include a program of museum outreach programs under an IMLS grant.

During 1997-98, and under the direction of Curator Kathleen Howe, we formed a consortium of UNM faculty and staff (drawn primarily from the Center for Southwest Research and the Department of Art and Art History) to design a program of conservation, exhibition, and publication of the historic collection of Mexican prints produced at the Taller de Grafica Popular and acquired by the Library and the Museum in 1997. As this is written, word has just been received that UNM Press has officially approved our book publication plans.

Also in 1997-98, Curator Howe and Director Walch visited the Hispanic Society of America in New York City. Under a planning grant from the Museum Loan Network, we made preliminary selections of materials from the collections of the Hispanic Society, which materials will be made available for extended loan for both study and exhibition purposes.

Under the direction of Education Curator Jeanette Entwisle, the Museum continued and strengthened its nationally-recognized partnership with Art in the Schools, Inc.
Workshops this year centered around the city-wide celebration “The Prints of Albuquerque,” funded through the afore-mentioned Albuquerque Community Foundation grant, written and administered by the Museum.

Among the several awards and recognitions accorded the Museum and its staff in 1997-98, the most outstanding must be that bestowed by the Registrars Committee of the American Association of Museums upon UAM Registrar Kittu Longstreth-Brown. At the annual AAM meeting (in Los Angeles), Longstreth-Brown received the highest honor awarded in her profession: the Dudley-Wilkinson Award of Distinction.
2. Plans and Recommendations

Where we are to be located and for how long are questions which hang over our head. The University wants us downtown as part of a broader University engagement in the current Downtown Revitalization effort (and we want to be there as part of our community outreach effort), but for how long, and at what cost? The Jonson Gallery mandate (both legal and moral) under the Jonson Agreements must be carried forward: can this be done if the threatened demolition of the current structure has only been postponed, not discarded? What effort and money should be devoted to bringing our current main gallery (and its attendant spaces) up to acceptable standards? When will the University finally provide adequate facilities for our programs and our collections?

We have these critical issues still unresolved, yet we move forward with plans for exhibitions, programs, and improvements to our current facilities. We also continue to build strategic alliances (with, e.g., Art Education, Popejoy Hall, Cultural Studies, Latin American Studies, and Albuquerque Public Schools, as well as those entities mentioned above) to bring our collections, and programs to the widest possible audiences, both on and off campus. Though these efforts, we hope to fulfill our mission: "To educate about and through art, and to directly support the educational programs at the University of New Mexico."
3. Staff Appointments

4. Staff Separations

Krista J. Kersh
Helen R. Lucero

July 15, 1997
August 29, 1997
5. Achievements/Products

A. Exhibitions

University Art Museum

Upper Gallery

1997
Oct. 5 - Jan. 18, 1998 The Prints of Albuquerque: Into the Nineties: Prints from the Tamarind Institute Curator: Kathleen Howe

1998
Feb. 8 - May 17 Faculty Choices Curator: Peter Walch

Jun. 9 - Sept. 27 Better than the Picture of the Camera: Early Twentieth-Century Pueblo Indian Painting Curators: J. J. Brody and Peter Walch

West Gallery

1997

1998
Feb. 8 - May 17 Documentary Photographs (also Coke Gallery) Curator: Kathleen Howe

Jun. 9 - Sept. 27 The Modernists and the Pueblo Painters Curator: Peter Walch

Van Deren Coke Gallery

1997

1998
Feb. 8 - May 17 Documentary Photographs (also West Gallery) Curator: Kathleen Howe
Van Deren Coke Gallery

1998
Jun. 9 – Jul. 19  Romantic Views of the Southwest
Curator: Kathleen Howe

Study Gallery

1997
Aug. 26 - Öct. 26  Photography's Objects
Curators: Geoffrey Batchen and Kathleen Howe

Nov. 11 - Jan. 11, 1998  Photo + Object: Thomas Barrow
Curator: Kathleen Howe

1998
Jan. 27 - Mar. 29  Drawing from Tradition: Drawings from the Permanent Collection
Curator: Kathleen Howe

Curators: Monica Garza and Kathleen Howe

Jun. 30 - Aug. 30  Odas y Cantos
Curator: Kathleen Howe

Lower Gallery

1997
Sept. 5 - Oct. 26  Prints from El Nopal Press
Curator: Helen Lucero

1998
Jan. 6 – Jun. 21  The Non-Dissenters
Curator: Peter Walch

Jan. 6 - Jun. 21  Spanish Traditions
Curator: Peter Walch

Mar. 24 – Jun. 21  The World of Dickens
Curator: Kathleen Howe
Jonson Gallery

1997
Jun. 1 – Aug. 15  Vision and Spirit: The Transcendental Painting Group
Curator: Tiska Blankenship

Aug. 26 – Sept. 19 Laura Telander: Ritual Object
Curators: Tiska Blankenship and Scott Williams

Aug. 26 – Oct. 24 Albuquerque Collects Raymond Jonson
Curator: Tiska Blankenship

Sept. 23 – Oct. 17 Under the Influence: William Conger
Curator: Tiska Blankenship

Sept. 23 – Nov. 14 The Prints of Albuquerque:
Prints in the Desert
Curator: Tiska Blankenship

Oct. 21 – Nov. 14 Jasmine Tabesch: M.F.A. Thesis Exhibition
Curators: Tiska Blankenship and Scott Williams

Oct. 31 – Dec. 19 Raymond Jonson’s Other World: Biomorphic Strangeness
or Grand Perceptions?
Curator: Tiska Blankenship

Nov. 18 – Dec. 12 Anonymous: Lilith
Curators: Tiska Blankenship and two anonymous students

1998
Oct. 31 – Jan. 18 Vision and Spirit: The Transcendental Painting Group
Curator: Tiska Blankenship

Nov. 18 – Jan. 16 The Visions of Santa Iconographica: Elizabeth Kay
Curator: Tiska Blankenship

Dec. 16 – Jan. 16 Mokuhanga: An Exhibition of Japanese Prints
Curator: Scott Williams

Jan. 13 – Mar. 13 A Rational Intuitionism: Raymond Jonson's Art from 1930 to 1950
Curator: Tiska Blankenship

Curators: Tiska Blankenship and Scott Williams
Jonson Gallery

1998
Jan. 20 – Mar. 13
Jack Garver: Electric
Curator: Tiska Blankenship

Feb. 17 – Mar. 13
Off the Wall – Again! (New Acquisitions)
Curator: Tiska Blankenship

Mar. 24 – May 8
Fourth Annual Juried Graduate Student Exhibition
Jurors: Harmony Hammond/Linda Durham
Curators: Tiska Blankenship and Scott Williams

May 26 – Aug. 14
Professor Jonson: Teacher of Art and Ideals
Curator: Tiska Blankenship
University Art Museum Downtown

Foyer

1997
Jun. 6 – Aug. 20  Wilson Hurley: Niagara Falls in the Mist  Curator: Peter Walch


North Bay & West Wall

1997
July 5 – Aug. 23  Prints from El Nopal Press  Curator: Helen Lucero


Mid & South Bay & West Wall

1997
May 10 – Aug. 23  Everyday Art: Well-designed Objects for Daily Living  Curator: Robert Peters and Peter Walch


Upstairs Bays:
South Bay & West Wall

1997

Jul. 29 – Aug. 30  Shooting Stars: War Photographers in Hollywood  Curator: Carol McCusker
University Art Museum Downtown

West Wall

1997
Sept. 9 – Nov. 1 The Prints of Albuquerque: Contemporary American Prints from the Abrams Collection Curator: Kathleen Howe and Jonathon Abrams

South Bay & West Wall

Nov. 8 – Dec. 20 Eliot Porter: Photographs from the Permanent Collection Curator: Kathleen Howe

North & Mid Bays & West Wall

May 24 – Dec. 20 Madre de Todos: The Virgin Mary in the New World Curator: Charlene Villaseñor Black, Susan Gandert, Helen Lucero

5 1 6 University Art Museum Downtown Closed from January 5 – May 14, 1998

Re-Opening as 5 1 6 University Museums Downtown on Friday, May 15, 1998 Upstairs galleries not used for exhibition space.

Foyer

1998
May 15 – Jun. 8 Jack Lembeck: Alligator Curator: Peter Walch
Jun. 8 – Jul. 11 Willard Nash: WPA Paintings Curator: Peter Walch

North Bay

May 15 – Jul. 11 Of Earth and Water Made: A World of Ceramics Curator: Peter Walch and Garth Bawden

South Bay

May 15 – Jul. 11 Eliot Porter: Photographs Curator: Kathleen Howe
B. Print Study Room

During Fall Semester 1997 and Spring Semester 1998, the Print Study Room supported classes offered through the Departments of Art and Art History, History, and English, and the General Honors College. Graduate seminars in Victorian Studies and the History of the Mexican Revolution met in the Print Study Room, as did studio classes in photography, printmaking, painting and drawing. Four class meetings of a General Honors College senior seminar met in the Print Study Room with the Curator of Prints and Photographs to consider the print as an art form. In all, faculty scheduled fifty-eight class meetings in the Print Study Room. Over 827 individual student and faculty visits were logged during Fall 1997 and Spring 1998 semesters.

Non-UNM visitors to the Print Study Room included classes from the College of Santa Fe, Santa Fe Community College, Moriarty High School, Cibola High School, Albuquerque Academy Summer Art Camp, the Contemporary Art Society, and the Albuquerque Camera Club. In addition, researchers from University of Exeter, England, London College of Painting, Glasgow School of Art, University of Kentucky, and the Whitney Museum of American Art used the resources of the Print Study Room.
C. Purchases and Gifts

Purchases

University Art Museum

Photographs

Barnard & Gibson, and other artists
Group of sixteen 19th and 20th cen. works
Albumen and gelatin silver prints
97.53.1-16
Museum purchase

Bedford, Francis, other artists
Group of twenty-one 19th cen. travel photographs
Albumen silver prints
98.24.1-21
Museum purchase

Blumann, Sigismund
Seven works, 1920s
Lithobromes
98.4.6
Museum purchase

Disderi, A. A. E.
M. Basilewski 1867
Albumen silver print
97.41.1
Museum purchase

Gandert, Miguel
Group of eight portraits, 1994
Polaroid prints
97.25.1-8
Purchase with funds from Elizabeth Wills, the Contemporary Art Society, anonymous donors, and Arlene and Walter Kleweno

Hanna, Forman
Twenty untitled works
Gelatin silver prints
97.44.1-20
Museum purchase

Olivieri, A.
Corteggio Funebre della Salma de S. M. Vittoria Emanuele II° RE
Albumen silver print
98.24.3
Museum purchase

Prout, Victor
Duke of Buccleuch's Mansion, Richmond 1862
Albumen silver print
97.41.2
Museum purchase

Reid, Giorgina
Thirty-five untitled New York City Scenes c.1950-65
Gelatin silver prints
98.8.1-35
Museum purchase
Various artists
Album of European Scenes c.1880
Albumen silver prints
98.3
Museum purchase

Weems, Carrie Mae
Untitled, from Kitchen Table Series 1997
Gelatin silver print
98.16
Museum purchase

Wilding, Dorothy
Five portraits, c.1940
Gelatin silver prints
98.9.1-5
Museum purchase

Wolcott, Marion Post
American Indian Children Watching Turtle in Pot 1957
Gelatin silver print
97.52.1
Museum purchase

Wolcott, Marion Post
Young American Indian Girl Painting at Easel 1957
Gelatin silver print
97.52.2
Museum purchase

Wolcott, Marion Post
American Indian Child with Garfield School T-shirt 1957
Gelatin silver print
97.52.3
Museum purchase

PRINTS

Adam, Victor
Le Bois 1830s or 40s
Lithograph
97.54.1
Museum purchase

Adams, Clinton, and others
Sixty-two works, 1997
Lithographs
98.7.1-62
The Tamarind Archive Collection

Amaya, Jesús Alvarez, and others
Group of prints and posters, 1938-1979
97.40.1-56
Taller Grafica Popular Collection

Earlom, Richard
The Royal Academy of Arts 1773
Mezzotint
97.54.2
Museum purchase
Fizeau, Hippolyte Louis
Two Young Men c.1841
Daguerrean gravure
97.32
Purchase through the Julius L. Rolshoven Memorial Fund

Huard, Charles
Pêcheurs à la Ligne 1896
Lithographs
97.24
Museum purchase

West, Benjamin
The Angel of the Resurrection 1801
Pen lithograph
97.55
Purchased with funds from the Friends of Art
Gifts

University Art Museum

Drawings

Garver, Alice
Untitled study for a mural 1958
Crayon and ink
98.10
Gift of Francis E. and Suzanne R. Stanley

Nash, Willard
Study for WPA Painting c.1934
Conte crayon
97.46
Gift of Mr. and Mrs. Gerald Peters

Wood, Staff
'There you are my dears, that's the best photo you've ever 'ad
Ink
97.47.9
Gift of Joan and Van Deren Coke

PAINTINGS

Baizerman, Eugenie
Landscape with a Willow Tree 1919
Oil on canvas
97.49.14
Gift of Virginia Zabriskie

Benrimo, Tom
Pastorale c.1949
Painting
97.29
Gift of the Estate of Helen M. Derbyshire

Hopkins, Budd
Painting #10 1959
Oil on canvas
97.49.11
Gift of Virginia Zabriskie

Kacere, John
Abstraction 1954
Oil on canvas
97.49.17
Gift of Virginia Zabriskie

Lever, Hayley
Portrait of Elsie n.d.
Oil on canvas
97.49.18
Gift of Virginia Zabriskie

Miller, Kenneth Hayes
Three Generations n.d.
Oil on masonite
97.49.15
Gift of Virginia Zabriskie
Miller, Kenneth Hayes
Folded Hills 1925
Oil on canvas
97.49.16
Gift of Virginia Zabriskie

Pasalis, Felix
The Hunt 1957
Oil on canvas
97.49.12
Gift of Virginia Zabriskie

Schmidt, Katherine
The Shepherd's House 1915
Oil on canvas
97.49.13
Gift of Virginia Zabriskie

PHOTOGRAPHS

Arambourou, Charles
 Untitled n.d.
 Albumen silver print
 97.49.9
 Gift of Virginia Zabriskie

Archivio S. A. T. I. Z.
 Six (6) scenes of bombing destruction
 Gelatin silver prints
 97.50.1-6
 Gift of the Hochberg-Mattis Family

Barnard & Gibson
Fortifications on Heights of Centreville, Virginia 1862
Albumen silver print by A. Gardner
98.6.2
Gift of Judith Hochberg and Michael Mattis

Barnard & Gibson
Ruins at Manassas Junction 1862
Albumen silver print by A. Gardner
98.6.1
Gift of Judith Hochberg and Michael Mattis

Barrow, Thomas
Gelatin silver print
98.17
Gift of the artist

Beato, Antonio
Four (4) works
Albumen silver prints
97.49.2-5
Gift of Virginia Zabriskie

Belcher, Ray
Twenty-two photographs
Gelatin silver prints
97.35.1-22
Gift of the artist
Bourne, Samuel
Untitled c.1860s
Albumen silver print
98.2.3
Gift of Daniel and Noemi Mattis

Carnevali, L.
Notte de 17 Maggio 1925 1925
Gelatin silver print
98.20.6
Gift of Judith Hochberg and Michael Mattis

Croner, Ted
Taxi, New York Night 1947-48
Gelatin silver print 1995
97.34
Gift of the artist

De Mauny, F.
Pêcheuse de Crevettes n.d.
Albumen silver print
97.49.6
Gift of Virginia Zabriskie

Duval, A.
Untitled n.d.
Albumen silver print
97.49.8
Gift of Virginia Zabriskie

Edwards, Fred
#2 no title n.d.
Gelatin silver print
97.50.2
Gift of the Hochberg-Mattis Family

Fichter, Robert
Untitled n.d.
Polaroid
97.27
Gift of Laurie and Thomas Barrow

Iturbide, Graciela, and others
Group of thirteen 19th and 20th cen. works
Albumen and gelatin silver print
98.1.1-13
Gift of Judith Hochberg and Michael Mattis

Jaques, Bertha
Early Cherries Tokyo Apr 08 1908
Cyanotype
98.18.1
Gift of Eric Alterman

Laboratorio Fotografico and others
Group of twenty-four works, 19th and 20th cen.
Albumen and gelatin silver prints
97.50.1-24
Gift of the Hochberg-Mattis Family in honor of Carol Hochberg
Le Secq, Henri
Amiens Cathedral 1859
Callotype
98.2.1
Gift of Daniel and Noemi Mattis

Le Secq, Henri
Rheims Cathedral Entrance n.d.
Callotype
98.2.2
Gift of Daniel and Noemi Mattis

Martin, Ed
The Singing Gladiator 1998
Direct positive dye destruction print
98.19.1
Gift of the artist

Martin, Ed
Missile of Hate 1997
Dye destruction print
98.19.2
Gift of the artist

Nagatani, Patrick
Alamagordo Blues 1986
97.48.1
Gift of Austin Lamont

O'Sullivan, Timothy
Blandford Church, Petersburg, Virginia 1865
Albumen silver print by A. Gardner
98.6.3
Gift of Judith Hochberg and Michael Mattis

Penn, Irving
Portrait of an Unidentified Man c.1948
Gelatin silver print
98.6.4
Gift of Judith Hochberg and Michael Mattis

Penn, Irving
Untitled n.d.
Gelatin silver print
98.18.3
Gift of Eric Alterman

Penn, Irving
Untitled n.d.
Gelatin silver print
98.18.2
Gift of Eric Alterman

Pervez, Jules; Guéranne, A.
Untitled n.d.
Albumen silver print
97.49.7
Gift of Virginia Zabriskie
Plossu, Bernard
Mexico 1966
Fresson print
97.36.1
Gift of Judith Hochberg and Michael Mattis

Plossu, Bernard
Kathy in Santa Fe 1981
Fresson print
97.36.2
Gift of Judith Hochberg and Michael Mattis

Porter, Eliot
Trees, 1988
Portfolio of dye transfer prints
97.48.2
Gift of Austin Lamont

Stackpole, Peter
Untitled c.1940s
Gelatin silver print
97.36.3
Gift of Judith Hochberg and Michael Mattis

Tripe, Linneaus
Untitled Elliot Marbles, No 120 1859
Albumenized salt print
98.2.4
Gift of Daniel and Noemi Mattis

Tripe, Linneaus
Untitled Elliot Marbles, No 128 1859
Albumenized salt print
98.2.5
Gift of Daniel and Noemi Mattis

Unknown
Untitled c.1925
Gelatin silver print
98.20.5
Gift of Judith Hochberg and Michael Mattis

Unknown artist, 20th cen.
Untitled - Jackson in Panama c.1900
Gelatin silver print, printed later
97.19.3
Gift of Joan and Van Deren Coke

Unknown, 19th cen.
Onne de Juillet n.d.
Albumen silver print
97.37.2
Gift of Daniel and Noemi Mattis

Unknown, 19th cen.
Hotel de Ville n.d.
Albumen silver print
97.37.3
Gift of Daniel and Noemi Mattis
Unknown, 19th cen.
St. Cloud n.d.
Albumen silver print
97.37.4
Gift of Daniel and Noemi Mattis

Unknown, 19th cen.
Album cover n.d.
Leatherette
97.37.1
Gift of Daniel and Noemi Mattis

Unknown, 19th cen.
Rue de Lille n.d.
Albumen silver print
97.37.5
Gift of Daniel and Noemi Mattis

Wolcott, Marion Post
American Indian Children Watching Turtle Climb up Arm 1957
Gelatin silver print
97.51.1
Gift of Linda Wolcott-Moore

Wolcott, Marion Post
Young American Indian Girl Looking up from Easel 1957
Gelatin silver print
97.51.2
Gift of Linda Wolcott-Moore

PRINTS

Various artists, 19th cen.
A group of forty-six prints about photography
97.47.1-46
Gift of Joan and Van Deren Coke

Adams, Clinton
Mykonos I 1984
Lithograph with chine collé
97.30.1
Gift of the artist

Adams, Clinton
Triad I n.d.
Silkscreen print
97.30.3
Gift of the artist

Adams, Clinton
Mykonos II 1984
Lithograph with chine collé
97.30.2
Gift of the artist

Chamberlain, Samuel
Untitled n.d.
Etching
97.43.1
Gift of Richard D. Olson
Fleger, Rudolph
Untitled c.1890-1910
Etching on silk
97.33
Gift of Edward C. Hume, Jr.

Kern & Ralveroni
Group of twelve works, n.d.
Offset reproduction
97.26.1-12
Anonymous gift

Knight, Dame Laura
Juanita c.1927
Intaglio
97.43.3
Gift of Richard D. Olson

Luccioni, Luigi
Theme in White 1955
Etching
97.43.2
Gift of Richard D. Olson

Nason, Thomas W.
Untitled 1942
Wood engraving
97.43.4
Gift of Richard D. Olson

Piranesi, Gian Battista
Veduta Dell' Arco Ditito n.d.
Engraving (later)
97.43.6
Gift of Richard D. Olson

Rodriguez, José L.
Set of six works, 1997
Etching with aquatint and drypoint
97.28.1-6
Gift of the artist

Vikainu, Vritto
Untitled 1955
Woodcut
97.43.7
Gift of Richard D. Olson

Walker, Kara
Freedom 1997
Offset
97.56
Gift of the Peter Norton Family

Wengenroth, Stow
Marshalls Point Light n.d.
Lithograph
97.43.5
Gift of Richard D. Olson
Yunkers, Adja
Untitled c.1968
Intaglio
97.49.1
Gift of Virginia Zabriskie

SCULPTURE

Freund, Tom
Della 1997
Mixed media
97.57
Anonymous gift

Goto, Joseph
#7 n.d.
Steel
97.49.10
Gift of Virginia Zabriskie
Jonson Gallery

Walker, Frank
Lost Treasures, 1996
Mixed media
97.31.1
Gift of Frank Walker

Walker, Frank
Expolistra, 1996
Mixed media
97.31.2
Gift of Frank Walker

Walker, Frank
Prophesy, 1996
Mixed media
97.31.3
Gift of Frank Walker

Walker, Frank
The House of Omar Kyam, 1996
Mixed media
97.31.4
Gift of Frank Walker

Caird, Mary
Respite in Santis pac, c.1980
Oil on canvas
97.38
Gift of Frank McCulloch

Hocks, Paula
Cocteau Chair, c.1940s
Wood/walnut
97.39
Gift of Paula Hocks

Ocepek, Louis
In My House, 1997
Gouache/acrylic on foam core
97.45
Gift of Louis Ocepek
Hocks, Paula
Ariadne’s Head, 1992
Mixed media
98.11
Gift of Paula Hocks

Funk, Mark
Launch Pad, 1979
Acrylic on masonite
98.12
Gift of Mark Funk

O’Hara, Frederick
not titled, n.d.
Gouache and pencil
98.13.1
Gift of Kathryn Lewis Crane

Bisttram, Emil
not titled, 1959
Linocut
98.14
Jonson Gallery Archives

Attributed to B.J.O. Nordfeldt
Sketch of lan Jilson, n.d.
Crayon on paper
98.15
Gift of Taylor Sloan

Prints in the Desert Portfolio
Prints and photographs
98.21
Gift of Tad Anderman

Walker, Frank
Dorothy, 1947
Watercolor
98.22
Gift of Frank Walker

Raymond Jonson’s Field Palette
98.23.1
Gift of Frank Walker
Raymond Jonson's Field Case for Painting Panels
98.23.2
Gift of Frank Walker
### D. Works Deaccessioned

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<tr>
<th>ARTIST</th>
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<tr>
<td>Asay, Roger</td>
<td>Cube, 1967</td>
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<td>Bates, Patricia Estill</td>
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<td>Bjork, Ann</td>
<td>Billy Bates, 1960</td>
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<td>Boal, Susan</td>
<td>60.2</td>
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<tr>
<td>Brown, Malcolm</td>
<td>Peñasco Blanco y Pueblo Bonito</td>
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<td>Forman, Madelyn</td>
<td>1982</td>
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<td>Kutkus, Kristina Montvidas</td>
<td>83.57</td>
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<tr>
<td>Littlefield, Lee</td>
<td>Two Halves of One, 1969</td>
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<td>Lumpkins, Janette W.</td>
<td>69.31</td>
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<tr>
<td>Meeks, Martha Fowler</td>
<td>Undulant Function, 1963</td>
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<td>Miller, Kenneth</td>
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<td>Neuforth, Dean</td>
<td>Canyon in the Red, 1969</td>
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<td>Petersen, Roland</td>
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<td>Smith, Robert L.</td>
<td>Building No. 1 – Lawrence Ranch, 1978</td>
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<td>Smith, Robert Lewis</td>
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<td>Sprague, Jane</td>
<td>Mystery of the Mountains, 1968</td>
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<td>Stuart, Signe Nelson</td>
<td>68.60</td>
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<td>Walker, Eugene</td>
<td>Untitled (blue and yellow)</td>
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<td>Wilkinson, Lanette</td>
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<td>Woodman, George</td>
<td>Untitled (landscape)</td>
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<td>Biography of Lautrec, 1970</td>
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<td>Untitled, 1954</td>
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<td>Fields of Fire – Paradox, 1975</td>
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<td>Untitled (Indian dancers), 1950</td>
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<td>Untitled (Indian motifs), 1950</td>
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<td>Saguache, 1969</td>
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<td>Construction in Stockholm, 1960</td>
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<td>Old Town, 1961</td>
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<td>Untitled, c.1963</td>
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<td>The Tryst, 1963</td>
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### University Art Museum

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<thead>
<tr>
<th>Medium</th>
<th>Artist</th>
<th>Accession Number</th>
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<tbody>
<tr>
<td>Motorized metal</td>
<td>Charles Mattox</td>
<td>97.5.28</td>
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<tr>
<td>Prints</td>
<td>93 various</td>
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<tr>
<td>Drawings</td>
<td>Five various</td>
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<tr>
<td>Watercolors</td>
<td>Cady Wells</td>
<td>70.47, 70.63</td>
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<tr>
<td>Oil on canvas</td>
<td>Joan Brown</td>
<td>76.250a-b</td>
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<tr>
<td>Photographs</td>
<td>106 various</td>
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### Jonson Gallery

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<tr>
<th>Medium</th>
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<tr>
<td>Woodcut</td>
<td>Yunkers, Adja</td>
<td>82.221.1690.10</td>
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<td>Woodcut</td>
<td>Walters, Robert</td>
<td>82.221.1690.5</td>
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<tr>
<td>Pencil on paper</td>
<td>Morang, Dorothy</td>
<td>95.16.1</td>
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<tr>
<td>Etching</td>
<td>Johnston, Ynez</td>
<td>82.221.1303</td>
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<tr>
<td>Gouache on paper</td>
<td>Von Auw, Emilie</td>
<td>82.221.2</td>
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<tr>
<td>Tri-tec on board</td>
<td>McKoewn, Joan O.</td>
<td>82.221.1396</td>
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<td>Woodcut</td>
<td>Toyokunki Il</td>
<td>82.221.1664</td>
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<td>Woodcut</td>
<td>Yoshitoshi</td>
<td>82.221.1634</td>
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<td>Woodcut</td>
<td>Yoshitoshi</td>
<td>82.221.1636</td>
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<tr>
<td>Woodcut</td>
<td>Hiroshige</td>
<td>82.221.1646</td>
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<tr>
<td>Woodcut</td>
<td>Shigenobu</td>
<td>82.221.1635</td>
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<td>Woodcut</td>
<td>Hiroshige</td>
<td>82.221.1638</td>
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<tr>
<td>Woodcut</td>
<td>Kuniyoshi</td>
<td>82.221.1662</td>
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<tr>
<td>Woodcut</td>
<td>Hiroshige</td>
<td>82.221.1637</td>
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<tr>
<td>Woodcuts</td>
<td>Unknown</td>
<td>95.40.1-4</td>
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<tr>
<td>Watercolor</td>
<td>Agnes Martin</td>
<td>86.20.1</td>
</tr>
</tbody>
</table>
F. Institutions to Which We Have Loaned Work

University Art Museum

The Albuquerque Museum
Albuquerque, New Mexico

Center for Southwest Research
Zimmerman Library, UNM
Albuquerque, New Mexico

Haggar Gallery
University of Dallas
Irving, Texas

The Harwood Museum
Taos, New Mexico

Museum of Fine Arts
Museum of New Mexico
Santa Fe, New Mexico

Oakland Museum of California
Oakland, California

and tour to:
National Museum of American Art
Washington, D. C.
Crocker Art Museum
Sacramento, California

Traveling Exhibition: Clinton Adams
Twenty-five Lithographs from Fifty Years
Kennedy Museum of American Art
Ohio University
Athens, Ohio

Long Beach Museum of Art
Long Beach, California
Jonson Gallery

Harwood Foundation Museum
Taos, New Mexico

Museum of Fine Arts
Museum of New Mexico
Santa Fe, New Mexico

Rockford College
Rockford, Illinois

University Art Museum
University of New Mexico
Albuquerque, New Mexico

Maxwell Museum of Anthropology
University of New Mexico
Albuquerque, New Mexico

Center for Southwest Research
Zimmerman Library, UNM
Albuquerque, New Mexico

University House
University of New Mexico
Albuquerque, New Mexico
G. Programs, Receptions and Other Events

The 1997-98 total attendance to the University Art Museums, which included the main Museum in the UNM Center for the Arts, the Jonson Gallery, and 516 University Art Museum Downtown, was 40,764 - a decrease of 10,992 from 1996-97.

Of this number, the combined tours, public programs and special events attendance to all three locations was 9,300, a 2,587 decrease in public program audience from 1996-97.

University Art Museum

Total general attendance to the main University Art Museum was 31,783, a decrease of 3,817 from last year's attendance of 35,600. Although overall attendance was lower, the Museum facilitated more tours and public programs, which proportionately, attracted a larger public audience than the year before. Attendance to all public programs at the main Museum totalled 4,788, an increase of 480 from 1996-97. Out of that number, 2,003 came from UNM classes, public and private schools, and groups scheduling guided tours of the exhibitions, 1,718 attended receptions, gallery talks, and Museum sponsored events; and 1,067 came for special programs sponsored by the University and outside organizations who reserved the Museum as a setting for their event.

Jonson Gallery

Jonson Gallery's total general attendance for 1997-98 was 3,243, ten less than last year's total of 3,253. Out of this number, total attendance to all Jonson Gallery public events and tours came to 843. Within that number attendance to gallery talks and
receptions was 518, a decrease of 524 from last year. Classes and tours contributed 325 visitors.

516 University Museums Downtown

516 University Museums Downtown's total general attendance was 5,738, a decrease of 7,165 over 1996-97. This decrease was anticipated as the building was closed from January to May 15 during its re-organization into a UNM facility jointly managed by the University Art Museum and the Maxwell Museum of Anthropology. Out of the total attendance number, attendance to all public events and tours totaled 3,649 a decrease of 2,868. A breakout of this year's number shows that visiting school and group tours accounted for 540; attendance to gallery talks and receptions was 110; and 29,999 visitors came to the gallery for such community sponsored events as Summerfest, ArtsCrawl and a Mayoral Debate.

**University Art Museum**

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Number</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>July</td>
<td>9</td>
<td>11:30 am</td>
<td>8 Tour: Elderhostel</td>
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<tr>
<td></td>
<td>10</td>
<td>10:30 am</td>
<td>7 Class tour: Outward Bound</td>
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<td>10</td>
<td>11:30 am</td>
<td>43 Class tour: Heights Christian Day Care</td>
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<td>16</td>
<td>11:30 am</td>
<td>12 Tour: Elderhostel</td>
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<td></td>
<td>18</td>
<td>5:00 pm</td>
<td>49* ArtsCrawl</td>
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<td>23</td>
<td>11:30 am</td>
<td>7 Tour: Elderhostel</td>
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<tr>
<td></td>
<td>30</td>
<td>11:30 am</td>
<td>9 Tour: Elderhostel</td>
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<tr>
<td>Aug.</td>
<td>6</td>
<td>11:30 am</td>
<td>12 Tour: Elderhostel</td>
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<tr>
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<td>20</td>
<td>11:30 am</td>
<td>7 Tour: Elderhostel</td>
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<td></td>
<td>26</td>
<td>5:30 pm</td>
<td>91 Gallery talk: Geoffrey Batchen, UNM Art &amp; Art History Dept.</td>
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<td>Sept.</td>
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<td>12 Tour: UNM Mental Health Center</td>
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<td></td>
<td>5</td>
<td>15 Class tour: UNM printmaking, Lydia Madrid</td>
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<td></td>
<td>7</td>
<td>12 Class tour: Pico Elementary School</td>
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<tr>
<td>Date</td>
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<tr>
<td>Sept. 9</td>
<td>9:00 am</td>
<td>Class tour: Manzano Day School</td>
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<td>Sept. 9</td>
<td>4:30 pm</td>
<td>12 Tour: Roswell Museum Docents</td>
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<td>5:30 pm</td>
<td>75 Gallery talk: Francisco Sequieros, &quot;El Nopal Press&quot;</td>
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<td>Sept. 11</td>
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<td>21 Class tour: Manzano Day School</td>
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<td>Sept. 11</td>
<td>10 am</td>
<td>10 Class tour: UNM Printmaking</td>
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<td>Sept. 12</td>
<td>9:00 am</td>
<td>21 Class tour: Manzano Day School</td>
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<td>Sept. 16</td>
<td>9:00 am</td>
<td>23 Class tour: Manzano Day School</td>
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<td>Sept. 16</td>
<td>1:30 pm</td>
<td>5 Tour: Elderhostel</td>
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<td>Sept. 16</td>
<td>5:30 pm</td>
<td>30 Gallery talk: Marion Rodee</td>
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<td>Sept. 23</td>
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<td>Sept. 24</td>
<td>12:30 pm</td>
<td>27 Class tour: Eagle Ridge Middle School</td>
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<td>Sept. 25</td>
<td>9:00 am</td>
<td>23 Class tour: Hubert Humphrey Elementary</td>
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<td>Sept. 26</td>
<td>8 am</td>
<td>8 Class tour: from Santa Fe</td>
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<td>Sept. 28</td>
<td>4:00 pm</td>
<td>56* William Lucas Memorial, College of Fine Arts</td>
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<td>Oct. 1</td>
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<td>7 Class Tour: UNM Lithography I</td>
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<td>Oct. 1</td>
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<td>135* UNM Foundation Legislators' Reception</td>
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<td>176 Reception: &quot;Tamarind Into the Nineties&quot; exhibition</td>
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<td>46 Gallery talk: Malin Wilson, &quot;The Print in Contemporary Art&quot;</td>
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<td>Oct. 15</td>
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<td>Oct. 17</td>
<td>11:00 am</td>
<td>25 Class tour: Placitas Elementary</td>
<td></td>
</tr>
<tr>
<td>Oct. 17</td>
<td>12 am</td>
<td>12 Class tour: School on Wheels</td>
<td></td>
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<tr>
<td>Oct. 17</td>
<td>23 am</td>
<td>23 Class tour: Zia Middle School</td>
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<tr>
<td>Oct. 17</td>
<td>138 am</td>
<td>138 Class tour: Taylor Middle School</td>
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<tr>
<td>Oct. 21</td>
<td>1:30 pm</td>
<td>8 Tour: Elderhostel</td>
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<tr>
<td>Oct. 22</td>
<td>9:30 am</td>
<td>20 Class tour: Monte Vista Elementary</td>
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<tr>
<td>Oct. 22</td>
<td>10:30 am</td>
<td>53 Class tour: Monte Vista Elementary</td>
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<td>Oct. 23</td>
<td>10:30 am</td>
<td>17 Class tour: Adobe Acres Elementary</td>
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<tr>
<td>Oct. 23</td>
<td>1:00 pm</td>
<td>25 Class tour: Hubert Humphrey Elementary</td>
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<td>Oct. 23</td>
<td>10 am</td>
<td>10 Class tour: UNM Drawing II class</td>
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<tr>
<td>Oct. 24</td>
<td>1:30 pm</td>
<td>9 Class tour: Senior Arts</td>
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<td>Oct. 24</td>
<td>6:30 pm</td>
<td>90* New Mexico Symphony Lecture</td>
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<td>Oct. 28</td>
<td>1:30 pm</td>
<td>15 Tour: Elderhostel</td>
<td></td>
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<tr>
<td>Oct. 28</td>
<td>5:30 pm</td>
<td>71 Gallery talk: Lydia Madrid, &quot;Creation, Collaboration and Putting It All Together&quot;</td>
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<tr>
<td>Oct. 29</td>
<td>10:00 am</td>
<td>24 Class tour: Monte Vista Elementary</td>
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<tr>
<td>Oct. 30</td>
<td>9:30 am</td>
<td>25 Class tour: Monte Vista Elementary</td>
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</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Event</td>
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<tr>
<td>Oct. 31</td>
<td>3:00 pm</td>
<td>Tour: Amarillo Museum of Art Docents</td>
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<td>Nov. 4</td>
<td>10:30 am</td>
<td>Class tour: Monte Vista Elementary</td>
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<td>1:30 pm</td>
<td>Tour: Elderhostel</td>
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<td>Nov. 5</td>
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<td>Class tour: UNM Photo I class</td>
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<td>Nov. 8</td>
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<td>Class tour: Hubert Humphrey Elementary</td>
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<td>Nov. 11</td>
<td>1:30 pm</td>
<td>Tour: Elderhostel</td>
<td></td>
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<tr>
<td>Nov. 13</td>
<td>5:30 pm</td>
<td>16 Reception and gallery talk on &quot;The Non-Dissenters&quot; for the Friends of Art</td>
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<td>Nov. 14</td>
<td>7:00 pm</td>
<td>150* New Mexico Symphony Lecture</td>
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<td>Nov. 18</td>
<td>9:45 am</td>
<td>68 Class tour: Bellehaven Elementary</td>
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<td>Nov. 18</td>
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<td>15 Tour: Elderhostel</td>
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<td>Nov. 22</td>
<td>1:30 pm</td>
<td>115* College of Fine Arts: &quot;Arts Alive&quot; open house</td>
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<td>Nov. 26</td>
<td>6:00 pm</td>
<td>70* Friends of Art: Novartis Corporate Dinner</td>
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<td>Dec. 2</td>
<td>1:30 pm</td>
<td>6 Tour: Elderhostel</td>
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<td>Dec. 5</td>
<td>12:30 pm</td>
<td>25 Class tour: Navajo Elementary</td>
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<td>Dec. 9</td>
<td>1:30 pm</td>
<td>16 Tour: Elderhostel</td>
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<tr>
<td>Dec. 16</td>
<td>1:30 pm</td>
<td>9 Tour: Elderhostel</td>
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<tr>
<td>1998</td>
<td></td>
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<tr>
<td>Jan. 9</td>
<td></td>
<td>16 Class tour: Challenge School</td>
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<tr>
<td>Jan. 13</td>
<td>1:30 pm</td>
<td>8 Tour: Elderhostel</td>
<td></td>
</tr>
<tr>
<td>Jan. 27</td>
<td>1:30 pm</td>
<td>5 Tour: Elderhostel</td>
<td></td>
</tr>
<tr>
<td>Feb. 3</td>
<td>1:30 pm</td>
<td>9 Tour: Elderhostel</td>
<td></td>
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<tr>
<td>Feb. 6</td>
<td>6:00 pm</td>
<td>532 Reception: Faculty Choices and Documentary Photos exhibitions</td>
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<tr>
<td>Feb. 10</td>
<td>1:30 pm</td>
<td>12 Tour: Elderhostel</td>
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<tr>
<td>Feb. 10</td>
<td>5:30 pm</td>
<td>48 Gallery talk: Peter Walch, &quot;The Non-Dissenters&quot;</td>
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<tr>
<td>Feb. 15</td>
<td>11:30 am</td>
<td>85* New Faculty Brunch, sponsored by the President's Office</td>
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<tr>
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<td>1:30 pm</td>
<td>5 Tour: Elderhostel</td>
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<td>Feb. 17</td>
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<td>126 Gallery talk: Adrienne Salinger, &quot;Documenting the Ordinary&quot;</td>
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<tr>
<td>Feb. 20</td>
<td>11:00 am</td>
<td>9 Class tour: UNM English As A Second Language class</td>
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<tr>
<td>Feb. 24</td>
<td>10:00 am</td>
<td>12 Class tour: Wesley Pulkka's class from TVI</td>
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<tr>
<td>Feb. 24</td>
<td>1:30 pm</td>
<td>16 Tour: Elderhostel</td>
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<tr>
<td>Feb. 25</td>
<td>7:00 pm</td>
<td>25 Gallery talk: Lee Savary for Theater and Dance class</td>
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<td>Mar. 3</td>
<td>1:30 pm</td>
<td>5 Tour: Elderhostel</td>
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<td>Mar. 3</td>
<td>2:30 pm</td>
<td>12 Tour: Montebello Assisted Living group</td>
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<td>Mar. 4</td>
<td>11:15 am</td>
<td>7 Class tour: Monte Vista Elementary</td>
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<tr>
<td>Mar. 6</td>
<td>9:30 am</td>
<td>43 Class tour: Atrisco Elementary</td>
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</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Event Description</td>
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<tr>
<td>Mar. 10</td>
<td>5:30 pm</td>
<td>Gallery talk: Jack Lieberman, &quot;Soutine&quot; video</td>
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<tr>
<td>Mar. 11</td>
<td>9:30 am</td>
<td>Class tour: UNM English As A Second Language class</td>
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<tr>
<td>Mar. 12</td>
<td>1:30 pm</td>
<td>Tour: Elderhostel</td>
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<tr>
<td>Mar. 13</td>
<td>12:00 pm</td>
<td>Class tour: Moriarty High School</td>
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<tr>
<td>Mar. 13</td>
<td>1:00 pm</td>
<td>Tour: UNM Zimmerman Library staff</td>
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<tr>
<td>Mar. 18</td>
<td>15</td>
<td>Class tour: TVI Drawing class</td>
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<td>Mar. 19</td>
<td>10</td>
<td>Class tour: Design School</td>
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<tr>
<td>Mar. 19</td>
<td>12:00 pm</td>
<td>Class tour: Manzano High School</td>
<td></td>
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<tr>
<td>Mar. 19</td>
<td>10</td>
<td>Class tour: School on Wheels</td>
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<tr>
<td>Mar. 20</td>
<td>35</td>
<td>Class tour: Cibola High School</td>
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<tr>
<td>Mar. 20</td>
<td>12</td>
<td>Class tour: Bernalillo Elementary</td>
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<tr>
<td>Mar. 20</td>
<td>110</td>
<td>Class tour: Rio Grande High School</td>
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<tr>
<td>Mar. 24</td>
<td>10:00 am</td>
<td>22* English Dept: &quot;Nicholas Nickleby&quot; marathon</td>
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<tr>
<td>Mar. 24</td>
<td>5:30 pm</td>
<td>Gallery talk: Kathleen Howe, &quot;Photography and the Victorian Imagination&quot;</td>
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<tr>
<td>Mar. 25</td>
<td>10:00 am</td>
<td>11* English Dept: &quot;Nicholas Nickleby&quot; marathon</td>
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</tr>
<tr>
<td>Mar. 26</td>
<td>10:00 am</td>
<td>7* English Dept: &quot;Nicholas Nickleby&quot; marathon</td>
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<tr>
<td>Mar. 27</td>
<td>10:00 am</td>
<td>5* English Dept: &quot;Nicholas Nickleby&quot; marathon</td>
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</tr>
<tr>
<td>Mar. 29</td>
<td>10:00 am</td>
<td>9* English Dept: &quot;Nicholas Nickleby&quot; marathon</td>
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<tr>
<td>Mar. 31</td>
<td>1:30 pm</td>
<td>8 Tour: Elderhostel</td>
<td></td>
</tr>
<tr>
<td>Apr. 9</td>
<td>12:00 pm</td>
<td>20 Reception: English Dept. Victorian Student Panel</td>
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<tr>
<td>Apr. 10</td>
<td>11:00 am</td>
<td>10 Class tour: UNM Outreach</td>
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<tr>
<td>Apr. 14</td>
<td>1:30 pm</td>
<td>7 Tour: Elderhostel</td>
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<tr>
<td>Apr. 14</td>
<td>5:30 pm</td>
<td>89 Gallery talk: Monica Garza, &quot;Foto-Escultura&quot;</td>
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<tr>
<td>Apr. 15</td>
<td>11:00 am</td>
<td>26 Class tour: Wherry Elementary</td>
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<tr>
<td>Apr. 16</td>
<td>12:00 pm</td>
<td>17 Reception: English Dept. Victorian Student Panel</td>
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<tr>
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<td>25</td>
<td>Class tour: Desert Ridge Middle School</td>
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<tr>
<td>Apr. 21</td>
<td>1:30 pm</td>
<td>9 Tour: Elderhostel</td>
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<tr>
<td>Apr. 21</td>
<td>5:30 pm</td>
<td>25 Gallery talk: Video for Foto-Escultura exhibition: &quot;And the Earth Did Not Swallow Him&quot;</td>
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<tr>
<td>Apr. 23</td>
<td>12:00 pm</td>
<td>25 Reception: English Dept. Victorian Student Panel</td>
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<tr>
<td>Apr. 24</td>
<td>11:00 am</td>
<td>29 Class tour: Sandia Heights Elementary</td>
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<tr>
<td>Apr. 28</td>
<td>5:30 pm</td>
<td>23 Gallery talk: Stella de Sa Rego, on the history of Mexican photography</td>
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<tr>
<td>Apr. 30</td>
<td>12:00 pm</td>
<td>23 Reception: English Dept. Victorian Student Panel</td>
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<tr>
<td>Apr. 30</td>
<td>23</td>
<td>Class tour: La Luz Elementary</td>
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<td>Apr. 30</td>
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<td>Class tour: Bernalillo Elementary</td>
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<tr>
<td>Apr. 30</td>
<td>26</td>
<td>Class tour: West Mesa High School</td>
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<tr>
<td>May 5</td>
<td>6:30 pm</td>
<td>30 Tour: Contemporary Art Society in Print Room</td>
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<tr>
<td>May 7</td>
<td>1:00 pm</td>
<td>95* Reception: Leonard Felberg Retirement: College of Fine Arts</td>
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<tr>
<td>May 7</td>
<td>38</td>
<td>Class tour: Carlos Reyes Elementary</td>
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<tr>
<td>May 7</td>
<td>25</td>
<td>Class tour: Lowell Elementary</td>
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</table>
May 12 1:30 pm 6 Tour: Elderhostel
13 9:40 am 89 Class tour: Los Lunas Elementary
14 17 Class tour: Menaul School
14 7:30 pm 56 Friends of Art Annual Dinner
16 9:00 am 92* Commencement
19 1:30 pm 8 Tour: Elderhostel

Jun. 11 1:30 pm 11 Class tour: UNM Youth Camp
12 6:00 pm 111 Reception: "Better Than The Picture" exhibition
16 11:00 am 15 Tour: Elderhostel
16 7 Class tour: Albuquerque Academy
18 12:00 pm 57* Annual Alumni Award Luncheon: UNM Alumni Association
23 11:00 am 12 Tour: Elderhostel
24 1:00 pm 7 Class tour: Albuquerque Sister City Youth
25 20 Class tour: Outward Bound

Total 4788

Programs Attendance Recap
University Art Museum, UNM Center for the Arts

103 School/other tours 2003
16 Gallery talks 814
7 Receptions 904

17 Non-UAM events* 3721

TOTAL 1067

4788 Combined public events attendance
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event Description</th>
</tr>
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<tbody>
<tr>
<td>Aug. 22</td>
<td>5:00 pm</td>
<td>Opening Reception: “Albuquerque Collects Raymond Jonson”</td>
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<tr>
<td>Sept. 2</td>
<td>5:30 pm</td>
<td>Exhibition Reception and Artist’s Talk: Laura Telander on “Ritual Object”</td>
</tr>
<tr>
<td>Oct. 3</td>
<td>5:00 pm</td>
<td>Exhibition Opening for “Prints in the Desert”</td>
</tr>
<tr>
<td></td>
<td>5:30 pm</td>
<td>Exhibition Reception and Gallery Talk: Robert Walters on “Prints in the Desert” portfolio</td>
</tr>
<tr>
<td></td>
<td>5:00 pm</td>
<td>Halloween Opening Reception: “Jonson’s Other World: Biomorphic Strangeness or Grand Perceptions?”</td>
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<tr>
<td>Nov. 4</td>
<td>5:30 pm</td>
<td>Exhibition Reception and Artist’s Talk: “Jasmine Tabesch: M.F.A. Thesis Exhibition”</td>
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<td></td>
<td>5:30 pm</td>
<td>Exhibition Reception and Artist’s Talk: Elizabeth Kay on “The Visions of Santa Iconographica”</td>
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<td></td>
<td>7:00 pm</td>
<td>Graduate Professional Student Association: Reception for New Mexico legislators</td>
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<tr>
<td>Dec. 2</td>
<td>5:30 pm</td>
<td>Exhibition Reception and Gallery Talk: Anonymous</td>
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<tr>
<td>Feb. 3</td>
<td>5:30 pm</td>
<td>Exhibition Reception and Artist’s Talk: Ashley Alexander on her Honors Thesis Exhibition: “Those Who Cannot Be Separated (More of Some, Less of Others)”</td>
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<td>5:00 pm</td>
<td>Opening Receptions: “A Rational Intuitionism: Raymond Jonson’s Art from 1930 to 1950” and “Off the Wall – Again!”</td>
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<tr>
<td>Mar. 3</td>
<td>5:30 pm</td>
<td>Reception and Slide Talk: Catherine DiCesare, Winner of the 1997-98 Art History Prize sponsored by the Friends of Art: “A New Sun Emergeth”</td>
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<tr>
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<td>5:00 pm</td>
<td>Opening Reception: “Fourth Annual Juried Graduate Student Exhibition”</td>
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<td>Apr. 7</td>
<td>5:30 pm</td>
<td>Reception and Artists’ Talk: Winners of the Art Studio Prize sponsored by the Friends of Art, Julie An and Leigh Anne Langwell.</td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Event</td>
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<tr>
<td>May 29</td>
<td>5:00 pm</td>
<td>25 Opening Reception: &quot;Professor Jonson: Teacher of Art and Ideals&quot;</td>
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7 Receptions
8 Reception/Gallery Talks

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<th>TOTAL</th>
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Combined public events attendance
### University Art Museums Downtown

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<th>Date</th>
<th>Event Time</th>
<th>Number Attended</th>
<th>Event Details</th>
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<td>July 5</td>
<td>6:00 pm</td>
<td>508</td>
<td>Summerfest</td>
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<tr>
<td>July 12</td>
<td>6:00 pm</td>
<td>593</td>
<td>Summerfest</td>
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<tr>
<td>July 19</td>
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<td>355</td>
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<tr>
<td>July 26</td>
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<td>653</td>
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<tr>
<td>August 2</td>
<td>6:00 pm</td>
<td>450</td>
<td>Summerfest</td>
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<td>September 13</td>
<td>1:30 pm</td>
<td>27</td>
<td>Gallery talk: Madre de Todos, Susan Gandert</td>
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<td>September 23</td>
<td>5:30 pm</td>
<td>58</td>
<td>Mayoral Debate</td>
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<tr>
<td>October 7</td>
<td>11:00 am</td>
<td>26</td>
<td>AIS tour: Longfellow Elementary</td>
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<tr>
<td>October 7</td>
<td>12:00 pm</td>
<td>28</td>
<td>AIS tour: Osuna Elementary</td>
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<td>October 7</td>
<td>12:30 pm</td>
<td>25</td>
<td>AIS tour: Hubert Humphrey Elementary</td>
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<td>AIS tour: Manzano Day School</td>
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<tr>
<td>October 8</td>
<td>11:00 am</td>
<td>22</td>
<td>AIS tour: Adobe Acres Elementary</td>
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<td>October 8</td>
<td>1:30 pm</td>
<td>21</td>
<td>AIS tour: Manzano Day School</td>
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<td>Highland Seniors Tour</td>
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<td>Reception: Artscrawl, The Prints of Albuquerque</td>
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<td>October 11</td>
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<td>32</td>
<td>Gallery talk &amp; demonstration, Robert Walters</td>
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<td>October 14</td>
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<td>22</td>
<td>AIS tour: Manzano Day School</td>
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<td>October 16</td>
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<td>AIS tour: Inez Elementary</td>
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<td>Gallery talk: Jon Abrams</td>
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<td>October 22</td>
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<td>AIS tour: Corrales Elementary</td>
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<td>October 23</td>
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<td>22</td>
<td>AIS tour: Monte Vista Elementary</td>
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<tr>
<td>October 24</td>
<td>1:00 pm</td>
<td>19</td>
<td>AIS tour: Manzano Day School</td>
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<td>October 25</td>
<td>11:00 pm</td>
<td>28</td>
<td>AIS tour: Monte Vista Elementary</td>
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<td>1:30 pm</td>
<td>23</td>
<td>Gallery talk: Caring for Your Prints, Kathleen Howe and Kate Guscott</td>
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<td>October 28</td>
<td>1:00 pm</td>
<td>22</td>
<td>AIS tour: Manzano Day School</td>
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<td>1:00 pm</td>
<td>20</td>
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<td>November 13</td>
<td>2:00 pm</td>
<td>30</td>
<td>AIS tour: Cottonwood Montessori School</td>
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<td>November 22</td>
<td>9:00 am</td>
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<td>AIS Teacher Workshop</td>
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1998
May 15 5:00pm 320 Reception: Artscrawl Grand Re-opening, "Of Earth & Water Made" and "Eliot Porter Photographs"

<table>
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<tr>
<th>Event Type</th>
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<td>4 Gallery Talks</td>
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<td>5 Summerfest</td>
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<tr>
<td>21 Tours</td>
<td>540</td>
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<td><strong>TOTAL</strong></td>
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Combined public events attendance
H. Publications

University Art Museum

Gallery Guides and Other Supplemental Materials:

The Language of Prints

Better than the Picture of the Camera: Early Twentieth-Century Pueblo Indian Painting

Catalogs and Handbooks:

Photography’s Objects

Foto-Escultura: A Mexican Photographic Tradition

Jonson Gallery

Catalogs:

Fourth Annual Juried Graduate Student Exhibition

Professor Jonson: Teacher of Art and Ideals
Essay by Tiska Blankenship. 16 pages; 8 color, 7 b/w illustrations. May 1998.
I. Friends of Art

The Board of Directors of the Friends of Art was a hard-working and efficient one. Their primary contribution was a very successful fund-raiser, as an art sale. The art sold came from both the museum and the FOA members, from their attics and garages and basements. The art sale netted $5,590.

Friends of Art purchased a banner to promote itself and increase its membership at various events at UNM, i.e., symphonies, art openings, etc., as well as FOA events such as receptions and the annual dinner.

The amount in the Endowment Fund is $33,390; the amount raised by the 1997-98 Acquisition Fund Drive, $4,650.

The Annual Dinner was held in May at the UNM Fine Art Museum, it earned a profit of $240. At the time the "Best Friend" award was presented to the whole hard-working board.

The Friends also presented the Jonson awards — the Art History award and the Graduate Student Art award, both $150 each — to highly deserving, and thankful, students.
6. Outside Sponsored Research and Collections Development

<table>
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<tr>
<th>University Art Museum</th>
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<tr>
<td>Funding Agent:</td>
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<td>Amount:</td>
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<td>Project Director:</td>
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| Funding Agent:        | Massachusetts Institute of Technology |
| Title:                | Museum Loan Network Travel Grant |
| Amount:               | $3,700 |
| Project Director:     | Kathleen Howe |

| Funding Agent:        | Bea Mandelman Ribak |
| Title:                | Mandelman Traveling Exhibition |
| Dates:                | July 1, 1997 – June 30, 1998 |
| Amount:               | $1,000 |
| Project Director:     | Peter Walch |

| Funding Agent:        | Friends of Art |
| Title:                | Art Acquisitions |
| Dates:                | July 1, 1997 – June 30, 1998 |
| Amount:               | $8,462 |
| Project Director:     | Peter Walch |

| Funding Agent:        | Judith Hochberg & Michael Mattis |
| Title:                | Art Acquisitions |
| Dates:                | July 1, 1997 – June 30, 1998 |
| Amount:               | $9,350 |
| Project Director:     | Peter Walch |

| Funding Agent:        | Daniel Mattis |
| Title:                | Art Acquisitions |
| Dates:                | July 1, 1997 – June 30, 1998 |
| Amount:               | $54,321 |
| Project Director:     | Peter Walch |

| Funding Agent:        | Frank Van Deren Coke |
| Title:                | Collection Publications |
| Dates:                | July 1, 1997 – June 30, 1998 |
| Amount:               | $5,000 |
| Project Director:     | Peter Walch |
Funding Agent: Anonymous Donor
Title: Art Acquisitions
Dates: July 1, 1997 – June 30, 1998
Amount: $11,155
Project Director: Peter Walch
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<tr>
<td>Title:</td>
<td>Laura Telander: Ritual Object</td>
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<tr>
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<td>March 24 - May 8, 1998</td>
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<td>Amount:</td>
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<td>Funding Agent:</td>
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<tr>
<td>Title:</td>
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<td>Project Director:</td>
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</table>
7. Professional Activities

Linda Bahm
Member, Museum Cooperative Council of Albuquerque
Member, Greater Albuquerque Museum Association
Member, New Mexico Association of Museums
Member, Mountain Plains Museums Association

Professional meetings and classes attended:
Creating a World Wide Web Page
UNM Human Resources
August 26, 1997

WWW Funding Resources
UNM Human Resources
September 16, 1997

New Mexico Association of Museums Annual Meeting
Las Cruces, New Mexico
September 17—20, 1997

Microsoft Office
Rockhurst College Continuing Education, Albuquerque
January 13, 1998

Hiring Policies and Procedures
UNM Human Resources
May 11, 1998

Making Things Happen
UNM Human Resources
May 26 and 28, 1998

Travel Policies and Procedures
UNM Human Resources
June 17, 1998

Care of Collections
UNM Art History
June 23 - 26, 1998
Tiska Blankenship
Member, Friends of Art
Member, American Association of Museums
Member, University of New Mexico Staff Organizing Committee
Member, WPA Murals in New Mexico Conservation Committee

Professional meetings and classes attended:
   UNM Human Resources
   Situational Leadership
   April 28 and May 1, 1998

   UNM Human Resources
   Communicating in the Workplace
   May 6, 1998

Publications:
   American National Biography
   Essay
   December 1997

   American Art Review
   Essay
   December 1997

   Women Artists of the West: Florence Miller Pierce and Agnes Pelton
   Essay on the internet for a 3-hour credit course with Purdue University
   June 1998

Presentations at professional meetings and conferences, classes, other:
   Lecturer, "The Transcendental Painting Group"
   Harwood Foundation Museum
   Taos, NM
   November 14, 1997

Jeanette Entwisle
Member, 1997-98 Board of Directors, Art in the School, Inc.
Member, UNM's College of Fine Arts Education Committee

Professional meetings and activities:
   Attendee, two Albuquerque Museum Association meetings
   Albuquerque, NM
   1997
Juror for "Blacks in New Mexico" exhibition
Sponsored by New Mexico African-American Research Group
Albuquerque, NM
August 22, 1997

Slide presentation and talk on Public Art to 100
Art in the School Inc. parent and teacher volunteers
APS, Montgomery Complex
Albuquerque, NM
January 16, 1998

Juror for Albuquerque/Japan Sister City's Youth Exhibition
Sheraton Hotel
Albuquerque, NM
April 19, 1998

Exhibitor in group invitational: Fisher Gallery
Albuquerque, NM
May 1998

Co-coordinated exhibition and teacher workshop featuring visiting
Japanese Master Calligrapher, Fujino Hokushin
Japan America Society
UNM Art Education gallery
Albuquerque, NM
June 2 - 6, 1998.

Kathryn A. Guscott
Professional meetings and classes attended:
Conservation Matting, Framing and Storage
New York University, Conservation Center
New York, New York
July 21 – 23, 1997

Presentations at professional meetings and conferences, classes, other:
Instructor, Matting and Framing Techniques
Care of Collections
UNM Art History
June 23 - 26, 1998

Kathleen Stewart Howe
Member, Cultural Studies Committee, University of New Mexico
Member, Print Council of America
Member, American Association of Museums
Member, College Art Association
Member, Historians of Nineteenth-Century Art
Member, Society for Photographic Education

Professional meetings and classes attended:
College Art Association
Toronto, Canada
February 1998

Print Council of America Annual Meeting
Lawrence, Kansas
May 1998

Print Council of America Fall Meeting
New York, New York
November 1997

Publications:


Revealing the Holy Land: the Photographic Discovery of Palestine. Santa Barbara Museum of Art, 1997

Presentations at professional meetings and conferences, classes, other:

Guest lecturer, Graduate Seminar, History of Photography, University of California at Santa Barbara, January 27, 1998

Guest lecturer, Senior Seminar, General Honors College, Fall 1998.

Kittu Longstreth-Brown
Member, Accreditation Visiting Committee, American Association of Museums
Museum Assessment Program Surveyor, American Association of Museums
Board Member, Mountain-Plains Museums Association
Vice Chair, Registrars Committee, Mountain-Plains Museums Association

Member, American Association of Museums
Member, Mountain-Plains Museums Association
Member, Western Museums Association
Member, New Mexico Association of Museums
Member, Oregon Museums Association
Member, Registrars Committees of AAM, MPMA, WMA

Awards:
  Awarded Dudley-Wilkinson Award of Distinction by the Registrars Committee of the American Association of Museums
  May 1998

Professional meetings and workshops attended:
  Mountain-Plains Museums Association Annual Meeting
  Missoula, Montana
  October 1 - 4, 1997

  New Mexico Art History Conference
  Taos, New Mexico
  October 22 - 24, 1997

  Becoming a Skilled Group Facilitator
  UNM Human Resources
  November 12 -13, 1997

  Negotiating Solutions in the Workplace
  UNM Human Resources
  December 9, 1997

  American Association of Museums Annual Meeting
  Los Angeles, California
  May 9 -14, 1998

Presentations, Publications, other:
  Using Your Site to Raise Money
  MPMA Annual Meeting
  October 2, 1998

  Moving Collections
  AAM Annual Meeting
  May 12, 1998

  How to Succeed as a Registrar
  Registrars Business Meeting
  AAM Annual Meeting
  May 12, 1998
Basic Registration
Care of Collection
UNM Art History
June 22, 1998

Co-author, Section Editor
The New Museum Registration Methods
1988 The American Association of Museums

Exhibition consultant for "Blacks in the Southwest, 1500-1899"
The New Mexico African American Research Group
University of New Mexico
1997-98

Facilitating consultant for Education Department
Albright-Knox Art Gallery
Buffalo, New York
1997-98

Nancy C. Montoya
Co-chair, Career Development Committee of the UNM Staff Council
Facilitator, Career Ladders Task Force
Member, UNM Accounting Network Group

Professional meetings and classes attended:
Women of Colonial Latin America
University of New Mexico
August – December 1997

Evelyn Wood Reading Dynamics for Professionals
Fred Pryor Seminars
November 4, 1998

Beginning Microsoft Windows 95
University of New Mexico
Continuing Education
June 15 and 17, 1998

Information Protection/Computer Security Awareness
UNM Human Resources
August 14, 1997

Introduction to MIRADA for Windows
UNM Human Resources
September 3, 1997
Getting the Most Out of Meetings  
UNM Human Resources  
April 14, 1998

Year 2000: Is Your Department at Risk?  
UNM Human Resources  
April 29, 1998

Understanding the Americans with Disabilities Act  
UNM Human Resources  
May 6, 1998

Workstudy and Student Employment  
UNM Human Resources  
May 8, 1998

Bonnie K. Verardo  
Other:  
Exhibitor “Richard Levy’s Smallest Show On Earth”  
Richard Levy Gallery  
Albuquerque, New Mexico  
December 1997

Scott A. Williams  
Treasurer, New Mexico Association of Museums  
Advisory Board, Albuquerque United Artists  
Board member, Art in the Schools Inc.  
Member, UNM Accounting Network Group

Professional meetings and classes attended:  
Negotiating Solutions in the Work Place  
UNM Human Resources  
September 3, 1997

Conflict Management  
UNM Human Resources  
September 22 and 29, 1997

Understanding the FRS  
UNM Human Resources  
October 13, 1997
Appendices

A. Personnel: University Art Museum, Jonson Gallery and University Art Museum Downtown

B. Committees: University Art Museum, Jonson Gallery and University Art Museum Downtown
A. Personnel: University Art Museum, Jonson Gallery and University Art Museums Downtown

Staff:

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<tr>
<th>Position</th>
<th>Name</th>
<th>Start Date</th>
<th>End Date</th>
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<tr>
<td>Associate Director</td>
<td>Linda Bahm</td>
<td>December 9, 1985</td>
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<tr>
<td>Curator, Jonson Gallery</td>
<td>Tiska Blankenship</td>
<td>April 22, 1985</td>
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<tr>
<td>Curatorial Assistant</td>
<td>Floramae M. Cates</td>
<td>September 19, 1990</td>
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<tr>
<td>Curator of Education and Public Programs</td>
<td>Jeanette Entwistle</td>
<td>July 23, 1990</td>
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<tr>
<td>Conservation Assistant</td>
<td>Kathryn A. Guscott</td>
<td>July 3, 1995</td>
<td></td>
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<tr>
<td>Print/Photo Curator</td>
<td>Kathleen S. Howe</td>
<td>July 11, 1994</td>
<td></td>
</tr>
<tr>
<td>Registrar</td>
<td>Kittu (Kathryn) B. Longstreth-Brown</td>
<td>May 1, 1990</td>
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<tr>
<td>Curator of Hispanic Art</td>
<td>Helen Lucero</td>
<td>November 15, 1995</td>
<td>August 29, 1997</td>
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<tr>
<td>Administrative Assistant</td>
<td>Nancy C. Montoya</td>
<td>July 5, 1988</td>
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<tr>
<td>Exhibitions Curator</td>
<td>Lee Savary</td>
<td>August 3, 1992</td>
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<tr>
<td>Museum Shop Manager</td>
<td>Christine L. Squire</td>
<td>August 10, 1992</td>
<td></td>
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<tr>
<td>516 UAM Downtown Gallery Manager</td>
<td>Bonnie K. Verardo</td>
<td>November 1, 1995</td>
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<td>Director</td>
<td>Peter S. Walch</td>
<td>July 1, 1995</td>
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<td>Curator, Jonson Gallery</td>
<td>Scott Williams</td>
<td>October 1, 1996</td>
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Work Study, Student and Temporary Part-Time Employees:

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<td>Tricia Bently</td>
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<td>Geretta G. Chick</td>
<td>April 29, 1996</td>
<td>December 18, 1997</td>
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<tr>
<td>Connie J. Fulwyler</td>
<td>June 16, 1997</td>
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<td>Carol Gilge</td>
<td>September 2, 1997</td>
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<td>Paula A. Goler</td>
<td>August 26, 1996</td>
<td>May 15; 1998</td>
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<td>Marin Goza</td>
<td>July 14, 1997</td>
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<td>Emily A. Hinch</td>
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<td>Bonnie Holder</td>
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<td>Jayson Hoyt</td>
<td>August 14, 1995</td>
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<td>Brent Johnson</td>
<td>February 13, 1997</td>
<td>July 29, 1997</td>
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<td>Tung Ka</td>
<td>August 26, 1997</td>
<td>September 1997</td>
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<td>Kathleen G. Kloster</td>
<td>April 21, 1998</td>
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<td>Amy D. Linker</td>
<td>June 10, 1997</td>
<td>December 19, 1997</td>
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<td>Carol T. McCusker</td>
<td>March 3, 1997</td>
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<td>Damon J. Montclare</td>
<td>June 24, 1998</td>
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<td>Jan R. Painter</td>
<td>July 9, 1997</td>
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<td>Chris Schelling</td>
<td>September 3, 1997</td>
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Matthew A. Travis  
August 8, 1997 - April 29, 1998

Doris Wagner  
April 29, 1996 - April 21, 1998

Volunteers:

Georgette Ely, Archivist, Jonson Gallery
Megan Goza, Archivist, Jonson Gallery
Elizabeth K. Herrlinger, Receptionist and Sales, Museum Shop
Alejandra I. Jimenez, Researcher, Prints and Photos
Krista J. Kersh, Researcher, Prints and Photos
Janine S. Palmieri, Researcher, Prints and Photos
Maria Teresa Rivera, Researcher, Prints and Photos
Sherry Rundell, Data Entry, Registrar’s Office
Kim A. Schwenk, Receptionist and Sales, Museum Shop

Adjunct Curators:

University Art Museum

Clinton Adams
Thomas F. Barrow
Geoffrey Batchen
David Craven
Christopher Mead
O. J. Rothrock
Charlene Villseñor
University Art Museum
Advisory Committee
1997 – 1998

Clinton Adams, Professor Emeritus, Art and Art History, Chair
Peter Walch, Director, University Art Museum, Secretary

Thomas F. Barrow, Professor, Art and Art History
Flora S. Clancy, Chair, Art and Art History
Van Deren Coke, Professor Emeritus, Art and Art History
Thomas Dodson, Dean, College of Fine Arts
Sheila Garcia, Alumni Representative
Rab Freeman Howden, President, Friends of Art
Judy Jones, Interim Vice President, Institutional Advancement
Susan B. Mullins, University Auditor

Jonson Gallery
Committee on Jonson Collections

Julie Weaks, University Budget Director
Susan Mullins, University Auditor
Joyce Szabo, Associate Professor, Department of Art and Art History

Ex-Officio Members

Peter Walch, Director, University Art Museum
Tiska Blankenship, Curator, Jonson Gallery

Julie Weaks, Susan Mullins, and Joyce Szabo are the Standing Committee of the University Art Museum’s Advisory Committee for the Jonson Collection.

This Committee has unofficially merged with the University Art Museum Advisory Committee as of September 1996. A final meeting of Jonson Committee was suggested in order to finalize the merger.
COLLEGE OF ARTS AND SCIENCES

ANNUAL REPORT

July 1, 1997 - June 30, 1998

MICHAEL R. FISCHER, DEAN
COLLEGE OF ARTS AND SCIENCES

Annual Report, July 1, 1997 - June 30, 1998

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<tr>
<td>II. Administration</td>
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<td>III. Recent Major Developments in the College of Arts and Sciences</td>
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<td>IV. Affirmative Action</td>
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<td>V. Research and Scholarly Activities</td>
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<td>VI. Teaching</td>
<td>6</td>
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<td>VII. Special Projects and Functions</td>
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<td>VIII. Departmental Reports</td>
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I. OVERVIEW

The 1997-98 academic year in the College of Arts and Sciences saw slight decreases both in the head count of students enrolled and in student credit hours recorded, consistent with the trend of the past three years.

The ranks of the tenure-stream faculty in the College increased by a net of three as twenty-nine new faculty were hired and twenty-six resigned or retired. Funds were budgeted for the College in the Spring of 1998 to provide a average salary increase of 5.5% for faculty returning in 1998-99. Although all funds available to the College for 1998-99 exceed funds available in 1997-98, this increase is insufficient to support several aspects of the College’s operations which remain seriously underfunded.

II. ADMINISTRATION

The College’s administration in 1997-98 changed compared to 1996-97. Michael R. Fischer, Dean, appointed Susan Tiano, Laura Crossey and Kenneth Frandsen as Associate Deans. Associate Deans of the College accepted individual responsibilities similar to those identified in annual reports covering the previous two years.

Associate Dean Laura Crossey assumed responsibility for the College’s student advisement effort and for validation of curriculum changes and graduation requirements. She continued to serve as the College office’s liaison with the College’s Undergraduate Education Committee and with the College’s Graduate Education Committee, and provide oversight of the various scholarly publications that the College supports. During 1997-98, she assumed responsibility for coordinating college-wide outcomes assessment.

Associate Dean Kenneth Frandsen continued to provide assistance and information concerning Affirmative Action and Equal Opportunity policies and data sources, liaison with
the Equal Opportunity and Faculty Contracts offices, and oversight of search and
screening efforts in conjunction with the appointment of regular and temporary part-time
faculty in the departments of the College, in the Women Studies Program and in the General
Honors Program. Also, he served as Area Coordinator for the College’s participation in the
University United Way Campaign.

Associate Dean Susan Tiano assumed responsibility for various aspects of College
administration related to faculty, particularly oversight of the process by which files of
individuals being considered for promotion and tenure are prepared, received and reviewed at
the College level. Also, she administered requests for sabbatical leaves, the allocation of
College funds to support special faculty travel and the allocation of funds to support visiting
lecturers and the expenses of professional publications. Christine Kozojet continued to serve as
Development Officer in the College of Arts and Sciences until her resignation.

New Chairpersons were appointed for AY 1997-98 in Communication and Journalism
(Karen Foss), English (Scott Sanders), Mathematics and Statistics (Ronald Schrader), and
Physics and Astronomy (John McIver). Also, a new Director was appointed for Women Studies
(Shane Phelan).

III. RECENT MAJOR DEVELOPMENTS IN THE COLLEGE OF ARTS AND
SCIENCES

Teaching Enhancement Initiatives

Working closely with David Stuart, Associate Vice President for Academic Affairs and
Jan Roebuck, Associate Provost for Academic Affairs, Arts and Sciences departments continue
to make course schedules more responsive to student demand. To accommodate students who
attempt to enroll in closed course sections but fail, departments are raising class caps and adding course sections when appropriate; scheduling classes at the most advantageous times; finding larger rooms for popular class sections; eliminating underenrolled classes and reassigning faculty to courses more in demand. The aim is to make Arts and Sciences scheduling more accountable to enrollment pressures, in particular the growing number of freshmen entering the university.

In addition, to help make the College as a whole more responsive to student concerns, two student advisory councils have been set up: a College of Arts and Sciences Undergraduate Council and a College of Arts and Sciences Graduate Council. Each council is composed of student representatives from each department in the College and is chaired by Dean Fischer and Associate Dean Crossey. The student representatives initiate the agendas for the council meetings, which have thus far dealt with such topics as financial aid, health insurance benefits, and the teaching of writing in the College.

Research Enhancement Initiatives

Our College continues to support faculty and student research programs by providing equipment and computer funds to newly hired faculty, by providing matching funds for faculty who submit research grant proposals, and by supporting collaborative research centers and institutes within the College. The College also supports several professional journals involving disciplines within the Arts and Sciences, it regularly sponsors regional and national research meetings on the campus, and it provides travel funds for faculty attending professional research meetings elsewhere. The College remains especially concerned with the research initiatives of untenured faculty members. We continue to work with department chairs in keeping service commitments to a minimum for these faculty members and in providing adequate mentoring...
from senior faculty. We are also concerned about the many demands on the university’s overhead budget, which have curtailed the Provost Office’s participation in voluntary cost-sharing efforts. Although as a College we are trying to take up the slack, major proposals require the collaboration of every level of the university. The commitments and pressures that have overwhelmed the university’s overhead budget need to be reexamined.

**Major Research Developments**

The creativity and productivity of Arts and Sciences faculty in combination with the College’s support for research efforts have produced numerous increases in highly visible research activities and programs over the past year. In fiscal year 1997, for example, Arts and Sciences faculty members received grant and contract awards totalling $20,503,827. It is notable that the total awards for fiscal year 1997 cited above include only those awards to support work carried out exclusively within the College. Additional awards totalling more than 13.4 million dollars were garnered by Arts and Sciences faculty conducting research in cross-college, interdisciplinary research units. Thus, Arts and Sciences faculty were responsible for obtaining approximately 33.9 million dollars in grant and contract awards during fiscal year 1997, representing a 19% increase over fiscal year 1996.

**Enhancement of Undergraduate Educational Programs**

Over the past few years the College has made significant progress in enhancing the quality of the educational experience it offers to its undergraduate students. Our efforts in this area have focused on the improvement of undergraduate teaching, the expansion of educational and advisement programs and the enhancement of the instructional and laboratory equipment that
is available to our students. In particular, departmental honors programs have continued to benefit from additional college support. Using money donated to the College, A&S helped fund students presenting papers at professional conferences—a key step in preparing for the work force or graduate study. Other students participated in specially designed retreats which gave them the chance to explore their field in greater depth than is possible through regular class and lab sessions.

Enhancing Graduate Educational Programs

One of the College's highest priorities remains strengthening its graduate programs. Toward this end, the Dean has begun working with departments to raise TA/GA salaries, improve fellowship opportunities, and make sure that teaching assistant workloads are equitable and reasonable. Health insurance benefits remain a major concern for teaching assistants that we are pursuing with the central administration.

IV. AFFIRMATIVE ACTION

The College continued its efforts to increase the cultural and gender diversity among its faculty during the 1997-98 AY. Consistent with Regents' policy concerning diversification of search committee membership, several of the members of search committees were from ethnic groups currently underrepresented in the faculty and many of the search committee members were female.

Appointments resulting from conventional searches, conducted during AY 1997-98, added twenty-five new faculty to the College of Arts and Sciences ranks for AY 1998-99. Of those appointed, eleven are female, two are Hispanic, two are Asian and one is Native American. Of the twenty-six separating faculty, five are female and ten are members of protected groups.
Special recruiting efforts, outside the framework of conventional searches, identified one Hispanic female and another female and one Hispanic male and another male who will begin their appointments during AY 1998-99.

During AY 1997-98, the College continued efforts to ensure equity within the faculty salary structure for members of underrepresented groups and to provide support to those faculty for the purpose of career development at the individual level. These efforts to nurture and develop faculty already at UNM will continue during AY 1998-99.

V. RESEARCH AND SCHOLARLY ACTIVITY

The scholarly and creative achievements of Arts and Sciences faculty that resulted in published works during 1997 are thoroughly documented in the annual volume of Faculty Publications and Creative Works issued by the Office of the Associate Provost for Research. The level of activity both in grant expenditures and new grant awards increased in AY 1997-98 compared to AY 1996-97 as detailed in Table 10.

VI. TEACHING

Summary data on various aspects of the College's teaching efforts are presented in Tables 5, 6, 7, 8 and 9. Although classrooms with a better profile of capacities continue to be a requisite for improved efficiency of instructional delivery, the College's numerical productivity has declined only slightly, especially with respect to enrollments in courses offered during evening and weekend hours. This decline is particularly notable in view of only a slight decline in the total FTE budgeted faculty for AY 1997-98 compared to AY 1996-97, as detailed in Table 4. However, our analysis indicates that, in the context of student demand, the College instructional
efforts are seriously understaffed, especially in the category, graduate teaching assistants.

VII. SPECIAL PROJECTS AND FUNCTIONS

Advisement and Record Center

Under the supervision of the Associate Dean for Student Academic Affairs, Laura Crossey, the College Advisement Center admits students to the College, advises them and monitors their academic performance (including placing students on probation or suspending them if necessary), and certifies them for graduation. During the report period, seven advisors conducted 14,000 personal advisement sessions and handled an approximately equal number of telephone inquiries.

The Center operated under modified hours in AY97-98: opening from 8:30 am until 4:30 pm Monday through Friday including lunch. Time from 8-8:30 am and 4:30-5 pm is utilized for processing, caseworking and phone contacts. In addition, advisors assist with new admittees and transfer students on Saturdays and after hours. The Advisement Center offers appointments with individual advisors before 10 AM and after 3 PM. All Arts and Sciences athletes are required to make an appointment with an advisor in Arts and Sciences and report to athletic advisement to confirm that the appointment was kept.

In addition to routine matters, the Center handles all student petitions for waivers and the first steps in grievance procedures. Advisors are responsible for all pre-professional advisement.

The advisors continue to assist the Office of the Registrar with Project Progress: a computerized degree audit system. The Associate Dean and advisors met periodically with the Associate Registrar to clarify the rules and academic regulations in the College of Arts and
Sciences to implement progress for our College. The advisors continue to use computers to provide more consistent and efficient advising. A computer upgrade in 1997-98 provided all advisors with internet and multi-tasking capabilities.

The advisors in Arts and Sciences continue to play a major role in Summer Freshman Orientation and are using trained group leaders to assist in advising students. Freshman students are brought over to Ortega Hall by group leaders on the morning of registration, having already prepared a tentative schedule. An advisor in Arts and Sciences addresses them as a group in the morning, and then throughout the morning the students are brought to the Advisement Center where they meet individually with the advisors in the advisors' offices. There, the advisor uses the computer to check on availability of courses and then the advisor assists the student in actually registering for classes using I-TEL UNM. In this way we ensure greater successful registration for the student's first university schedule.

The Advisement Center office staff helps in the record keeping in advisement by computerizing all the changes in College Curriculum which have been approved and which will be added to the next university catalog.

One or more advisors and the Associate Dean participated in the following extra-mural or campus wide advising activities this year:

Welcome Back Days
Senior Day
New Faculty Orientation
Evening and Weekend Orientation Advisement
High School Visitation Day
African American Student Day
American Indian Student Day
Pre-Dental Reception
Spring Orientation for Freshman
Transfer Day
Star Scholar Reception
American Indian Graduation Ceremony
Advisors Networking Group
Academic Retention Meeting
American Indian Retention Meeting
College Enrichment Program

This year the advisors made multiple trips to the following campuses for advisement:

Gallup
Santa Fe Community College
TVI-Albuquerque
TVI-Montoya
Los Alamos
Valencia
Taos

The advisement staff this year consisted of:

Laura Crossey, Associate Dean
Ahna Khatami, Receptionist
Julie Bustamante, Advisement Co-ordinator
Monique Denzler, Advisement Co-ordinator
Leonor Lucero, Advisor
Mary Lou Wilkerson, Advisor
Susanna Sprague, Advisor
Jan Wallentine, Advisor

College of Arts and Sciences Curriculum

This year the Committee implemented changes in the College curriculum approval process, formulating a combined College Curriculum Committee consisting of Undergraduate and Graduate Advisors.

College of Arts and Sciences Graduate Committee

Charge - The A&S Graduate Committee is responsible for maintaining and enhancing the quality of graduate education in the College. This includes activities related to curriculum
change impacting the College, participating as necessary in periodic reviews of instructional programs, reviewing academic advisement procedures as necessary, and considering changes in administrative or academic regulations which affect graduate programs.

Membership - Each of the 20 academic departments in the College designates one faculty representative (voting faculty as defined in the Faculty Handbook) to the A&S Graduate Committee (see Table 2). In addition, three representatives from this Committee (representing Humanities, Social Sciences and Sciences) serve jointly on the Faculty Senate Graduate Committee. The Committee is chaired by Tom Niemczyk (Chemistry).

Activities Related to A&S Graduate Committee - The A&S Subcommittee on Curriculum comprises six appointed members (three members from the A&S Undergraduate and three from the A&S Graduate Committees). The Subcommittee acts on behalf of the College in curricular concerns as described above. The A&S Subcommittee on Students assists in handling appeals to the College in areas related to graduate student employment in the College. Other types of programmatic changes (e.g., Core Curriculum, College admission/graduation requirements) may be brought to the Committee for discussion/revision/recommendation on an as-needed basis. Members of the Graduate Committee are also called upon as necessary to assist in College selection committees related to undergraduate programs. Members serve as Departmental contacts when the College distributes information pertaining to graduate issues. The Committee assists in implementing administrative changes impacting graduate programs and graduate students.

*College of Arts and Sciences Undergraduate Committee*

Charge - The A&S Undergraduate Committee is responsible for maintaining and
enhancing the quality of undergraduate education in the College. This includes activities related to curriculum change impacting the College, participating as necessary in periodic reviews of instructional programs, reviewing academic advisement procedures as necessary, and considering changes in administrative or academic regulations which affect undergraduate programs.

Membership - Each of the 20 academic departments in the College designates one faculty representative (voting faculty as defined in the Faculty Handbook) to the A&S Undergraduate Committee (see Table 2). The A&S Undergraduate Committee meets in conjunction with 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 provides a brief report at each meeting.

Activities related to A&S Undergraduate Committee - The A&S Subcommittee on Curriculum comprises six appointed members (three members from the A&S Undergraduate and three from the A&S Graduate Committees). The Subcommittee acts on behalf of the College in curricular concerns. Forms A (minor changes to existing courses) are handled by the Associate Dean for Student Academic Affairs in consultation with the Subcommittee on Curriculum as necessary. Both the Subcommittee on Curriculum and the Associate Dean for Student Academic Affairs approve forms B (new courses). Forms C (degree/program changes) are handled in the same fashion, but brought to the entire A&S faculty when necessary. Forms D (new graduate degrees) are brought before the entire A&S Faculty after approval by the Subcommittee on Curriculum. Other types of programmatic changes (e.g., Core Curriculum, College admission/graduation requirements) may be brought to the Undergraduate Committee
for discussion/revision/recommendation on an as-needed basis. Members of the Undergraduate Committee are also called upon as necessary to assist in College selection committees related to undergraduate programs. Members serve as Departmental contacts when the College distributes information pertaining to undergraduate issues. The Committee assists in implementing administrative changes impacting undergraduate programs (e.g., automated degree audits, transfer articulation, and distance learning).

The Arts and Sciences Undergraduate Committee reviews requests from departments both within and outside the College for curricular degree changes that may impact one or more Arts and Sciences departments. The Committee also met with Kathleen Sena, Associate Registrar and staff from the Office of the Registrar to discuss implementation of Project Progress.

**College of Arts and Sciences Curriculum Sub-committee**

The Curriculum Sub-committee composed of Charlie Steen (Chair), Steve Huestis, Cliff Dahm, Brad Hall, Ed Fuge, approved 70 Form As, 30 Form Bs, and 11 Form Cs.

**College Grant Initiatives**

**New Mexico Collaborative for Excellence in Teacher Preparation**

UNM is a major partner in the New Mexico Collaborative for Excellence in Teacher Preparation (CETP). Funded by the National Science Foundation in 1997, CETP represents a major investment in the preparation of future K-12 teachers in New Mexico. Centered at New Mexico State University, the Collaborative fosters interactions among institutions of higher learning (UNM, NMSU, ENMU, WNMU, UNM-V, NMHU, NNMCC, Dine College) and their
surrounding school districts. In addition, partners include LANL, SNL, UCAN Rural Systemic Initiative, NM-AMP, NM CHE, NM MESA, NM Department of Education, and the New Mexico Partnership for Math and Science Education. The UNM CETP effort is centered in the College of Arts and Sciences, and is involved in all key components of the statewide collaborative, including

* Reform of pre-service teacher curricula in the science and math areas, including integration of classroom teaching with field experiences (involving Master Teachers from APS).
* Novice teacher support incorporating UNM faculty, Master Teachers, professional development opportunities, and material resource/loan programs.
* Recruitment/retention of pre-service teachers through scholarships.

Two of the four teams at UNM are located in the College:

Natural Science Curriculum (Tracy Cascadden, Department of Earth and Planetary Sciences)

Problem Posing in Math Curricula (Nancy Gonzales, Department of Mathematics and Statistics)

UNM/APS Teachers Institute

The University of New Mexico was awarded a planning grant for UNM/APS Teachers Institute. The proposed institute will be modelled after the highly successful Yale-New Haven Teachers Institute in New Haven, Connecticut. In the UNM/APS Teachers Institute, College of Arts and Sciences faculty will create seminars of interest to public school teachers. The teachers will apply and be screened by a panel composed of both UNM and APS representatives. During the seminars, the teachers will be colleagues, rather than students, and will be paid for their participation. The objectives of the seminars will be continuing education in key content areas for teachers and the development of new curriculum units to be used in the public schools.
and shared with other teachers. In collaboration with APS, we have applied for a grant to implement the institute: $300,000 to $500,000 over three years from the DeWitt Wallace-Reader's Digest Fund.

**Pursue Program**

The National Aeronautics and Space Administration (NASA) has funded the University of New Mexico (UNM) and its collaborating higher education institutions, i.e., Highland University of New Mexico (NMHU); Albuquerque Technical Vocational Institute (ATVI); and Southwestern Indian Polytechnic Institute (SIPI), to build upon their NASA research to enhance the quality of the Mathematics, Science, Engineering, and Technology (MSET) undergraduate education. The goal of the PURSUE program is to strengthen the MSET baccalaureate degree-producing capacity of the University of New Mexico and its collaborating higher education institutions by building upon previous NASA funding. The project focuses on integrating cutting-edge science and technology concepts and practices into relevant areas of the undergraduate curriculum, including into introductory-level courses and laboratories for majors and non-majors. The project also increases participation by faculty and students in projects that both foster collaborative inquiry, and that promote broad and significant improvements to undergraduate teaching and learning, especially of the techniques and methodologies associated with the conduct of research.

**Dean's List - College of Arts and Sciences Honor Roll**

The criteria for inclusion on the Dean's List are a semester GPA of 3.75 or higher while enrolled for 12 or more credit hours with letter grades, and a cumulative GPA for UNM
coursework of at least 3.25. In Fall 1997, 460 students achieved this honor; in Spring 1998 the number of students was 447. Students who met the criteria for inclusion on the Dean’s List received a letter of appreciation and congratulations signed by Dean Fischer.

**Human Subjects Committee**

The College of Arts and Sciences Institutional Review Board (IRB) is one of the three IRBs at the University of New Mexico empowered by the U.S. Department of Health and Human Services and UNM to approve and certify all research using human subjects conducted by, for, or with faculty and students; the Arts and Sciences IRB is responsible for all human research conducted under the auspices of the Colleges of Arts and Sciences, Education, Engineering, and Fine Arts, the School of Law, and the School of Architecture and Planning. The goal of the IRB is to promote and foster all types of human research while ensuring that subjects receive proper care and protection from research risk. Information regarding the board’s responsibilities and functions is provided through mailings to deans, department chairpersons, and faculty, and from presentations by the IRB chair to departmental chairpersons and faculty.

The Arts and Sciences IRB, consisting of Mike McKee (Chairperson, Economics), Fall 1997 and Spring 1998, Beatrice Vigil (Secretary, Arts and Sciences), Hank Jenkins-Smith (Political Science), David Dinwoodie (Anthropology), Diana Furno-Lamude (Communication and Journalism), Richard Harris (Psychology), Gary LaFree (ISR/Sociology), Patricia Boverie (COE), Loretta Serna (COE), and Lonnie Gunawardena (COE) reviewed a total of 242 proposals from the following units: American Studies (5), Anthropology (35), Biology (1), Communication/Journalism (12), Economics (3), History (1), Linguistics (5), Mathematics (1),
Political Science (6), Psychology (44), Sociology (14), Speech and Hearing Sciences (8), College of Education (88), and other institutions (19). The majority of proposals were either ruled to be exempt from IRB review or received expedited approval from individual board members within two weeks of submission. Minutes of meetings and records of the actions of the IRB are available in the Office of the Dean, College of Arts and Sciences.

Recent changes include the consolidation of the College of Education IRB with the College of Arts and Sciences IRB in November, 1997; the addition of three faculty members from College of Education to the IRB committee; Michael McKee resigned as Chair of the IRB in March, 1998; and in May, 1998 the A&S IRB was moved under the auspices of the Office of Research Administration.

Summer Session

The 1998 Summer session allocation to the College was only slightly more than that of 1997, as detailed in Table 12. Our support of unique summer programs - intensive language institutes, study abroad programs and field schools - continued.

Travel and Special College Funds

The College disbursed about $17,472 to faculty in the College for travel expenses to supplement the support provided by departments. It also distributed $11,392 to individual faculty to defray the costs of reprints of their scholarly work. In addition, the College provided $5,797 to departments to support honoraria for guest speakers. A summary of these distributions appears in Tables 13 and 14.
Research Semester

The A&S Research Semester Program permits faculty selected on a competitive basis to be relieved of formal teaching responsibilities for one semester in order to pursue research activities. Faculty proposals are evaluated according to the applicant’s prior research record, the merit of the proposed research, and the proposed projects benefit for graduate student education. The Research Semester Program was temporarily suspended during the Fall, 1997, semester due to budgetary constraints. It was reinstituted the following semester, during which W.H. Wills (Anthropology) and Enrique LaMadrid (Spanish and Portuguese) were selected to receive awards.

Arts and Sciences Women’s Caucus

Under the leadership of Beverly Burris (Sociology) and Jill Morford (Linguistics), the Caucus enjoyed an active and successful year. The well-attended monthly meetings featured a variety of topics of interest to A&S women, including the presidential search, student outcomes assessment, faculty salary compression, and the legislative session. Invited speakers included A&S Dean Michael Fischer, who discussed issues related to developing a college policy on dual relationships; and representatives Danice Picroux and Gail Beam, who shared their insights into the university’s financial status vis-a-vis the state legislature.

Development Efforts

The 1997-98 year proved to be an excellent one for fundraising. Gifts totaling $1,758,732 were received by the College. This is particularly impressive considering the fact that our 1996-97 total was $920,291. Six bequests totalling $426,000 helped boost our totals.
We can therefore assume that an annual base of support of over $1,000,000 is reasonable for the College and that in any given year the totals will be greater as a result of bequests or single, exceptionally large gifts.

Annual giving increased over 30% in 1997-98. Solicitation of annual gifts is now conducted by the UNM Foundation. Gifts from our bi-annual Inside Arts and Sciences publication totalled almost $7,000. Employing a targeted approach to College-based solicitation, A&S realized a $831,831 increase in total contributions in the 1997-98 AY. This strategy included a series of events which identified and recognized outstanding alumni, donors and prospects. One was hosted by Arts and Sciences alumni in the Phoenix area in March, and one was in celebration of a fabulous traveling anthropology/art exhibit, "Cuando Hablan Los Santos" which took place at the Fowler Museum in Los Angeles in May. We also held in October our first A&S homecoming celebration for alumni, their families and friends. This was attended by over 100 at the Maxwell Museum of Anthropology. Gifts to the Dean’s Priority fund rose from approximately $32,882 to over $53,450. The remainder of the increase consists of contributions made directly to the departments in the College.

In addition to development activities, the office continued trying to increase awareness of the College among communities outside the university by preparing press releases; clipping and organizing all articles mentioning the College in the local media; and writing and producing two issues of Inside Arts and Sciences that were distributed to over 24,000 households per issue. A new Arts and Sciences Dean’s Council, consisting of business and community leaders, was also being developed.
VIII. DEPARTMENTAL REPORTS

Detailed reports on activities in the twenty departments comprising the College of Arts and Sciences are forwarded along with this College report.
### TABLE 1

**CHAIRPERSONS AND INTERDEPARTMENTAL PROGRAM DIRECTORS, 1997-98**

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Chairperson</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AMERICAN STUDIES</strong></td>
<td>Vera Norwood</td>
</tr>
<tr>
<td><strong>ANTHROPOLOGY</strong></td>
<td>Marta Weigle</td>
</tr>
<tr>
<td></td>
<td>Jane Buikstra (Jan-May 98)</td>
</tr>
<tr>
<td><strong>BIOLOGY</strong></td>
<td>Terry Yates</td>
</tr>
<tr>
<td><strong>CHEMISTRY</strong></td>
<td>Fritz Allen</td>
</tr>
<tr>
<td><strong>COMMUNICATION/JOURNALISM</strong></td>
<td>Karen Foss</td>
</tr>
<tr>
<td><strong>EARTH &amp; PLANETARY SCIENCES</strong></td>
<td>Barry Kues</td>
</tr>
<tr>
<td><strong>ECONOMICS</strong></td>
<td>David Brookshire</td>
</tr>
<tr>
<td><strong>ENGLISH</strong></td>
<td>Scott Sanders</td>
</tr>
<tr>
<td><strong>FOREIGN LANG &amp; LITERATURE</strong></td>
<td>Walter Putnam</td>
</tr>
<tr>
<td><strong>GEOGRAPHY</strong></td>
<td>Paul Matthews</td>
</tr>
<tr>
<td><strong>HISTORY</strong></td>
<td>Richard Robbins</td>
</tr>
<tr>
<td><strong>LINGUISTICS</strong></td>
<td>Garland Bills</td>
</tr>
<tr>
<td><strong>MATHEMATICS &amp; STATISTICS</strong></td>
<td>Ronald Schrader</td>
</tr>
<tr>
<td><strong>PHILOSOPHY</strong></td>
<td>Fred Schueler</td>
</tr>
<tr>
<td><strong>PHYSICS &amp; ASTRONOMY</strong></td>
<td>John McIver</td>
</tr>
<tr>
<td><strong>POLITICAL SCIENCE</strong></td>
<td>Neil Mitchell</td>
</tr>
<tr>
<td><strong>PSYCHOLOGY</strong></td>
<td>Michael Dougher</td>
</tr>
<tr>
<td><strong>SOCIOLOGY</strong></td>
<td>Richard Coughlin</td>
</tr>
<tr>
<td><strong>SPANISH &amp; PORTUGUESE</strong></td>
<td>John Lipski</td>
</tr>
<tr>
<td><strong>SPEECH &amp; HEARING SCIENCES</strong></td>
<td>Linda Riensche</td>
</tr>
</tbody>
</table>
INTERDEPARTMENTAL PROGRAMS

ASIAN STUDIES (minor, major)
Jonathan Porter

COMPARATIVE LITERATURE (minor, major)
Diana Robin

ECONOMICS-PHILOSOPHY (major)
Russell Goodman

EUROPEAN STUDIES (minor, major)
Charles McClelland

ITALIAN STUDIES (minor)
Rachele Duke

MEDIEVAL STUDIES (minor)
Helen Damico

PEACE STUDIES (minor)
Ted Sturm

QUATERNARY STUDIES (minor)
Les McFadden

RUSSIAN STUDIES & EAST EUROPEAN STUDIES (minor, major)
Greg Gleason

BIOCHEMISTRY (major)
Jeffrey Griffith

CRIMINOLOGY (minor, major)
Paul Steele
Bert Useem

ENGLISH-PHILOSOPHY (major)
Barbara Hannan

LATIN AMERICAN STUDIES (Ph.D.)
Linda Hall

RELIGIOUS STUDIES (minor, major)
Andrew Burgess

SCIENCE, TECHNOLOGY & SOCIETY (minor)
Ron Reichel

WOMEN STUDIES (minor)
Shane Phelan

SOCIAL WELFARE (minor)
Tomas Atencio
Richard Coughlin
TABLE 2

STANDING & SPECIAL COMMITTEES
COLLEGE OF ARTS AND SCIENCES, 1997-98

A&S Graduate Committee

Tom Niemczyk, Chemistry, (Chair)
Gabriel Melendez, American Studies
Carole Nagengast, Anthropology
Cliff Dahm, Biology
Kenneth Frandsen, Communication/Journalism
Frank Pazzaglia, Earth & Planetary Sciences
Stuart Burness, Economics
Gary Harrison, English
Deborah Jenson, Foreign Lang & Lit
Lou Scuderi, Geography
Daniel Feller, History
Alan Hudson, Linguistics
Pedro Embid, Mathematics & Statistics
Aladdin Yaqub, Philosophy
Bernd Bassalleck, Physics & Astronomy
Wendy Hansen, Political Science
Ronald Yeo, Psychology
Beverly Burris, Sociology
Enrique Lamadrid, Spanish & Portuguese
Bopanna Ballachanda, Speech & Hearing Sciences

A&S Undergraduate Committee

Laura Crosseey, Arts and Sciences, (Chair)
Ruth Salvaggio, American Studies
Jeffery Froelich, Anthropology
Gordon Johnson, Biology
Lorraine Deck, Chemistry
Tom Jewell, Communication and Journalism
Steve Huestis, Earth & Planetary Sciences
Phil Ganderton, Economics
James Thorson, English
Monica Cyrino, Foreign Lang & Lit
Jerry Williams, Geography
TABLE 2 (continued)

Charlie Steen, History
Melissa Axelrod, Linguistics
Ronald Schrader, Mathematics & Statistics
John Taber, Philosophy
Daniel Finley, Physics & Astronomy
Ed Fuge, Political Science
Gordon Hodge, Psychology
Jane Hood, Sociology
Anthony Cardenas, Spanish & Portuguese
Elayne Kessler, Speech & Hearing Sciences

A&S Junior Faculty Promotion and Tenure Committee

Virginia Scharff, History (Chair)
Gabriel Melendez, American Studies
Diane Furno-Lamude, Communication & Journalism
Les McFadden, Earth & Planetary Sciences
Richard Santos, Economics
Carolyn Woodward, English
Diana Robin, Foreign Lang & Lit
Nancy Gonzales, Mathematics & Statistics
Russell Goodman, Philosophy
Sally Seidel, Physics & Astronomy
Joseph Stewart, Political Science
Steven Gangestad, Psychology

A&S Senior Faculty Promotion and Tenure Committee

Nebojsa Duric, Physics & Astronomy (Chair)
Louise Lamphere, Anthropology
Diane Marshall, Biology
Deborah Dunaway-Mariano, Chemistry
James Papike, Earth & Planetary Sciences
Gary Scharnhorst, English
Linda Hall, History
Benjamin Mann, Mathematics & Statistics
Hank Jenkins-Smith, Political Science
Robert Sutherland, Psychology
Beverly Burris, Sociology
Anthony Cardenas, Spanish & Portuguese
TABLE 2 (continued)

A&S Human Subjects Committee

Fall 1997

Mike McKee, Economics, Chair
Beatrice Vigil, A&S, Secretary
Gary LaFree, ISR/Sociology
Richard Harris, Psychology
Hank Jenkins-Smith, Political Science
Patricia Boverie, COE-TLT
Loretta Serna, COE-Ed Specialties
Diana Furno-Lamude, Comm/Journalism
David Dinwoodie, Anthropology

Spring 1998

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Lonnie Gunawardena, COE-EL/OL
TABLE 3

Changes in status of tenure-stream faculty in the College of Arts and Sciences: Decisions reached in AY 1996-97 to take effect in AY 1997-98.

Promotions to Full Professor

<table>
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Promotions to Associate Professor and Award of Tenure

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#### Positive Mid-Probationary Reviews

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#### Positive Third-Year Reviews

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<td>Egly, Robert</td>
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#### 1997-98 New Appointments

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26
TABLE 3

Changes in status of tenure-stream faculty in the College of Arts and Sciences: Decisions reached in AY 1996-97 to take effect in AY 1997-98.

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### TABLE 3 (continued)

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#### Resignations/Retirements (effective 1997-98)

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27
| Arroyo, Judith       | Psychology |
| McNamara, Patrick   | Sociology  |
| Ross, Laurence (D)  | Sociology  |
| Iribarren, Carmen   | Spanish & Portuguese |
### TABLE 4

**FTE BUDGETED FACULTY, 1997-98**

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Data Source: College of Arts and Sciences Instructional Budget, 1997-98
TABLE 5

NUMBER OF STUDENTS ENROLLED
COLLEGE OF ARTS AND SCIENCES

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<th>Year</th>
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Data Source: Arts and Sciences Registered Students Listing - 21 day report
TABLE 6  
DEGREES AWARDED  
COLLEGE OF ARTS AND SCIENCES

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(a) These figures do not include Master of Arts in Teaching and Master of Education in Science degrees.

Data Sources: Bachelors taken from A&S final graduation lists. Advanced degrees taken from Graduate Studies final graduation lists.
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Total (3) 1005 1369 1252 275 224 222 96 72 84
TABLE 7 (continued)

1
Includes Optical Science Ph.D.s

2
Includes both Spanish and Romance Language Ph.D.s.

3
Bachelor’s degrees granted with double majors are counted once in each department, so this total will not agree with Table 6.

* 
Includes summer, fall and spring graduates.

Data Sources: Bachelors from A&S final graduation lists. Advanced degrees from Graduate Studies final graduation lists.
### TABLE 8

**ACADEMIC PROBATIONS, SUSPENSIONS AND RELEASES**

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**Number of Students Enrolled in Arts and Sciences**

- Semester I, 1997-98: 4129
- Semester II, 1997-98: 4132
TABLE 9

DEGREES GRANTED WITH HONORS*

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Initiated into Phi Beta Kappa                  | 123   |
Initiated into Phi Kappa Phi                   | 39    |

*Requirements completed Summer 1997; Semester I, 1997-98; Semester II, 1997-98
### TABLE 10

**NEW RESEARCH AND TRAINING GRANTS, 1997-98**

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TABLE 11

BUDGETED GAs/TAs, RESEARCH AND PROJECT ASSISTANTS, 1997-98

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</tr>
<tr>
<td>Sociology</td>
<td>35</td>
<td>0</td>
</tr>
<tr>
<td>Spanish &amp; Portuguese</td>
<td>52</td>
<td>0</td>
</tr>
<tr>
<td>Speech &amp; Hearing Sciences (Com Dis)</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Women Studies</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>631</strong></td>
<td><strong>245</strong></td>
</tr>
</tbody>
</table>
**TABLE 12**

**SUMMER SESSION DATA, 1997 AND 1998**

<table>
<thead>
<tr>
<th>Department</th>
<th>Final 1997 Figures</th>
<th>Final 1998 Figures</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Allocation</td>
<td>%</td>
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<tr>
<td>American Studies</td>
<td>$14,085</td>
<td>1.48</td>
</tr>
<tr>
<td>Anthropology</td>
<td>50,371</td>
<td>5.28</td>
</tr>
<tr>
<td>Biology</td>
<td>38,555</td>
<td>4.04</td>
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<tr>
<td>Chemistry</td>
<td>58,116</td>
<td>6.09</td>
</tr>
<tr>
<td>Communication/Journalism</td>
<td>38,431</td>
<td>4.03</td>
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<td>Earth &amp; Plan Sciences</td>
<td>26,047</td>
<td>2.73</td>
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<tr>
<td>Economics</td>
<td>32,960</td>
<td>3.45</td>
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<td>English</td>
<td>88,395</td>
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<tr>
<td>Foreign Lang &amp; Lit</td>
<td>11,000</td>
<td>1.15</td>
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<td>Geography</td>
<td>10,785</td>
<td>1.13</td>
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<td>History</td>
<td>45,965</td>
<td>4.82</td>
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<tr>
<td>Linguistics</td>
<td>18,098</td>
<td>1.90</td>
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<tr>
<td>Mathematics &amp; Statistics</td>
<td>115,022</td>
<td>12.05</td>
</tr>
<tr>
<td>German</td>
<td>42,522</td>
<td>4.46</td>
</tr>
<tr>
<td>French</td>
<td>30,000</td>
<td>3.14</td>
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<tr>
<td>Philosophy</td>
<td>24,655</td>
<td>2.58</td>
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<tr>
<td>Physics &amp; Astronomy</td>
<td>17,300</td>
<td>1.81</td>
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<tr>
<td>Political Science</td>
<td>31,480</td>
<td>3.30</td>
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<tr>
<td>Psychology</td>
<td>51,580</td>
<td>5.40</td>
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<td>Sociology</td>
<td>40,175</td>
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<td>Spanish &amp; Portuguese</td>
<td>46,705</td>
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<tr>
<td>Speech &amp; Hearing Sci</td>
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<td>3.95</td>
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<td>Women Studies</td>
<td>13,317</td>
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<tr>
<td>Afri-American Studies</td>
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<td>0</td>
</tr>
<tr>
<td>International Programs</td>
<td>42,900</td>
<td>4.49</td>
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<tr>
<td>Contingency</td>
<td>990</td>
<td>0.10</td>
</tr>
<tr>
<td>Admin</td>
<td>27,096</td>
<td>2.84</td>
</tr>
</tbody>
</table>

**TOTAL**                             | $954,400            | 100.00             | $994,041           | 100.00             |
### TABLE 13

**A&S TRAVEL DISBURSEMENTS, 1997-98**

<table>
<thead>
<tr>
<th>Department</th>
<th>General/Departmental Allocations</th>
<th>Special Request Allocations</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Studies</td>
<td>$ 3,195.00</td>
<td>$ 390.50</td>
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<tr>
<td>Anthropology</td>
<td>10,650.00</td>
<td>400.00</td>
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<tr>
<td>Biology</td>
<td>15,975.00</td>
<td>1,131.50</td>
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<td>Chemistry</td>
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<td>8,520.00</td>
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<tr>
<td>Earth &amp; Planetary Sciences</td>
<td>5,325.00</td>
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<tr>
<td>Economics</td>
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<td>0</td>
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<td>English</td>
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</tr>
<tr>
<td>Foreign Lang &amp; Lit</td>
<td>5,325.00</td>
<td>3,062.50</td>
</tr>
<tr>
<td>Geography</td>
<td>2,000.00</td>
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</tr>
<tr>
<td>History</td>
<td>12,780.00</td>
<td>0</td>
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<tr>
<td>Linguistics</td>
<td>5,325.00</td>
<td>2,510.00</td>
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<tr>
<td>Mathematics &amp; Statistics</td>
<td>14,900.00</td>
<td>781.00</td>
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<tr>
<td>Philosophy</td>
<td>5,325.00</td>
<td>1,902.50</td>
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<tr>
<td>Physics &amp; Astronomy</td>
<td>15,440.00</td>
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<tr>
<td>Political Science</td>
<td>13,845.00</td>
<td>400.00</td>
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<tr>
<td>Psychology</td>
<td>11,610.00</td>
<td>1,435.65</td>
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<tr>
<td>Sociology</td>
<td>9,585.00</td>
<td>1,411.90</td>
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<tr>
<td>Spanish &amp; Portuguese</td>
<td>7,455.00</td>
<td>2,510.00</td>
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<tr>
<td>Speech &amp; Hearing Sciences</td>
<td>2,130.00</td>
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<tr>
<td>Women Studies</td>
<td>1,750.00</td>
<td>0</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$190,540.00</strong></td>
<td><strong>$ 17,471.55</strong></td>
</tr>
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</table>
### TABLE 14

**A&S DISBURSEMENTS OF SPECIAL COLLEGE FUNDS**
**1997-98**

<table>
<thead>
<tr>
<th>Department</th>
<th>Reprint Funds</th>
<th>Speakers’ Honoraria</th>
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<tbody>
<tr>
<td>Arts &amp; Sciences</td>
<td>$ 0.00</td>
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<tr>
<td>American Studies</td>
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<td>Chemistry</td>
<td>284.00</td>
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<td>Communication &amp; Journalism</td>
<td>69.99</td>
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<td>Earth &amp; Planetary Sciences</td>
<td>600.00</td>
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<td>Latin Amer Inst &amp; Sales</td>
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<td>Linguistics</td>
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<tr>
<td>Philosophy</td>
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<tr>
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<tr>
<td>Political Science</td>
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</tr>
<tr>
<td>Psychology</td>
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<td>Sigma Xi</td>
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<td>750.00</td>
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<tr>
<td>Sociology</td>
<td>101.20</td>
<td>400.00</td>
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<tr>
<td>Spanish &amp; Portuguese</td>
<td>541.68</td>
<td>500.00</td>
</tr>
<tr>
<td>Speech &amp; Hearing Sci (Com Dis)</td>
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<td>0.00</td>
</tr>
<tr>
<td>Women Studies</td>
<td>179.10</td>
<td>300.00</td>
</tr>
</tbody>
</table>

**TOTAL**                             **$11,392.38**                   **$ 5,797.23**
The American Studies faculty continued to operate as a committee of the whole in guiding the undergraduate and graduate programs. One faculty member received a positive code three review this year. Associate Professor Gabriel Melendez served as graduate advisor; Professor Ruth Salvaggio continued as undergraduate advisor.

A. Significant Developments

The department was deeply saddened by the passing of Professor Gerald Davis in October. Although Davis had only officially served on the faculty for about a year and a half, he had begun to make a significant contribution to the department and the university community in the study of the intersections of race and gender. He was an incredibly supportive colleague, mentor and friend and is deeply missed.

The faculty maintained a high level of professional activity. Associate Professor Gabriel Melendez published his monograph, So All Is Not Lost: The Poetics of Print in Nuevomexicano Communities, 1834-1958 with UNM Press and designed a new seminar, "The Ethnic
Press in America." Professor Vera Norwood published an essay on female malacologists in The Material Culture of Gender, The Gender of Material Culture, edited by Katherine Martinez and Kenneth Ames. Norwood also served as a faculty member for an NEH Conference for College Teachers, "Nature Writing in America," at Vassar College in July. Professor Ruth Salvaggio's essay, "Skin Deep: Lesbian Interventions in Language," appeared in Cross-Purposes: Lesbians, Feminists, and the Limits of Alliance, published by the Indiana University Press. Assistant Professor James Treat rejoined the faculty after a leave of absence and taught two new courses in Native American topics and a new course on American religions. He also published "The Indigenous Movement in the Americas: Reflections on Nationalism and Ethnicity" in First Nations-Pueblos Originarios and was selected to participate in the "Young Scholars in American Religion Program," at the Center for the study of Religion and American Culture, Indiana University. He received a positive code three review. Professor M. Jane Young collaborated with Professor Melendez and two graduate students on a new anthology of writings about the Southwest, which is under contract at the University of Utah Press. Professor Young also had numerous chapters and an edited book in press during this year. All of the faculty participated in relevant national organizations, most gave papers or commented on sessions, several served on national boards and editorial committees of academic journals in the field.

The undergraduate program continued to thrive under the guidance of Professor Salvaggio. The department conducted its
first outcomes assessment this year. On the whole, students are performing well in the introductory and capstone courses in the major. Twelve students graduated in American Studies, seven with honors. With the aid of funds from the College, the department sent one honors student, Jeffrey Tingley, to give a paper at a national conference on gay and lesbian studies. The department's place as a key service unit across campus was also recognized this year by the inclusion of four freshman-level seminars in American Studies in the new Core Curriculum.

We continued to attract many more qualified applicants for the graduate program than could be admitted. Four masters and two doctoral students completed the degree this year. Our masters candidates were competitive in admission to doctoral programs. For example, Brian Herrera was admitted to the doctoral program at Yale University. Patrick Pynes was one of six doctoral students campus-wide who was awarded a dissertation fellowship. A number of students gave papers at regional and national conferences and were competitive in receiving travel and research grants. In a tight job market, most doctoral students have struggled to find jobs, but two students, Shep Jenks and Patrick Pynes, were hired in permanent positions. Professor Melendez also designed the required new graduate outcomes assessment plan for the department, which will be implemented in 1998.

Finally, the department hosted a very successful joint meeting of the Rocky Mountain and California American Studies Associations. Organized around the theme of "Corridors and Open Spaces: Place,
Time and Texts," the conference drew presenters from across the country and featured a keynote speech by art critic Lucy Lippard.

B. Significant Plans and Recommendations for the Future

American Studies will gain a full-time Associate Professor with the hiring of Beth Bailey. Professor Bailey will be developing courses in cultural history, popular culture and gender studies. She and Professor Melendez will be working on including more media and computer-aided instruction in our curriculum. The department also hired Bazan Romero under the Minority Doctoral Student Program. He will begin teaching courses in race, class and ethnicity and environmental studies in fall 1998.

We will also replace Professor Davis with Eric Porter, a new assistant professor whose research fields are African American Studies and American music. He will be on a postdoctoral fellowship at Berkeley in 1998-99, but will join the faculty in 1999.

With the addition of these new faculty, the department will devote a large part of the coming year to curriculum revision. We will also be revising the ACS reading list required of all graduate students. We plan to involve graduate students in both projects. This year the department began inviting graduate students to attend some faculty meetings and we plan to continue that process in future.

We hope to be able to mount a search for Professor Biebel's still vacant position in fall 1999.

C. Appointments to Staff
Beth Bailey, effective August 1998
Eric Porter, effective August 1999
Bazan Romero, effective August 1998

D. Separations from Staff
Professor Jane Caputi, effective July 1998.
Professor Gerald Davis, deceased October 1997

E. Sponsored Research

Retired Professor Charles Biebel continued his multi-year grant from the Lilly Foundation, which is housed in the department.
Significant Developments during the Academic Year, 1997-98

The Department continued to focus on concerns raised in the external review report of January 12, 1997, mindful of that committee’s overall laudatory conclusion: “It is our general impression, that few departments in the nation have the combination of breadth of subfield expertise and depth of world-class scientist/scholar as does UNM ... [and] agree, that despite the failure to include UNM in the NRC ranking, that the Department of Anthropology ranks among the very best departments in the U.S.” Key (Advisory Council, Graduate, Undergraduate) and Standing (Computer Use, Instructional Resources, Space) committees worked to address programmatic and physical/fiscal needs, primarily hiring, departmental integration across subfields and with the Office of Contract Archeology and Maxwell Museum, undergraduate
instruction, laboratory instruction, and deficit reduction. Professor Jane Buikstra served as Acting Chair while Professor Marta Weigle was on sabbatical leave during the Spring semester (January 12-May 31, 1998) and expertly advanced all these discussions while conducting ordinary Department business.

Hiring matters continued as a paramount concern. The hiring plan submitted to the Dean in 1997 listed as priorities: (1) human biologist/geneticist (Long replacement, Biological Anthropology), (2) equally: replacements for Trinkaus (Biological Anthropology) and Ortiz-qua-(junior) ethnologist (Ethnology), and (3) cultural ecologist (Ethnology). A special priority was the establishment of an Alfonso Ortiz Native American position in Anthropology with no subfield specified and a range of related fields like history and sociology potentially relevant. We received permission to hire a junior human biologist and a junior ethnologist. Two candidates were brought to campus for the former position, which had been advertised and then cancelled the previous two years (alphabetical order): Anne C. Stone, Research Assistant, Anthropological Genetics Laboratory, University of Arizona (Lecture: "Social Structure and the Peopling of the New World: A View from an Illinois Bluff"), and Sarah Anne Tishkoff, NSF Sloan Postdoctoral Fellow, Department of Biology, Penn State University (Lecture: "Prospectives on Modern Human Origins from Molecular Genetic Variation"). Stone will join the faculty in January 1999. Thanks to funding from the Latin American Institute, three ethnology candidates were brought to campus (alphabetical order): Suzanne Oakdale, Visiting Assistant Professor, Williams College (Lecture: "Ritual and the Making of the Present among the Kayabi of Brazil"), Mark Rogers, Visiting Assistant Professor, University of Rochester (Lecture: "The Poetics of Savagery: Colonial Discourse and Postcolonial Politics in Andean Shamanism"), and Maureen Trudelle Schwarz, American Indian Studies Center, University of Washington (Lecture: "Newborns, Relocatees, and Adlaanii: A Brief Look at the Construction and Deconstruction of Navajo Persons"). Oakdale will join the faculty in August 1998.

Preparing a new hiring plan for submission to the Dean in May 1998 brought fruitful discussion that included consideration of better departmental integration with the Office of Contract Archeology. Criteria for nominating new positions were: (a) departmental integration, (b) recommendations of external review report, (c) ability to teach in undergraduate program, (d) long-range university and departmental integration, and (e) mentoring minorities. There was consensus ranking for the following four (in order of priority): (1) Native American scholar, (2) Paleoanthropologist, (3/4) Public Policy: Environmental Anthropologist and Cultural Resource Management. The latter two would form the core for a proposed postgraduate (MA) program that would further programmatic integration among the subfields, with the Office of Contract Archeology, Maxwell Museum of Anthropology, and the Office of the Medical Investigator, and across campus while addressing the growing national need for anthropology professionals well-versed in the intricacies of public policy and global issues such as immigration, migrant employment, medical
care, human rights and the environment.

Department integration remained an important concern. Informal discussions between Acting Chair Buikstra and interested faculty led to an ad hoc committee for exploring means to accomplish this. They presented a proposal for an integrative seminar series, which the faculty voted to pilot in 1998-99. The Graduate Committee directed by Associate Professor Carole Nagengast continued its effective work toward equitable assignments of Tas/GAs/RAs, degree requirements, awards, and the like across subfields. The spring UNM Graduate Anthropology Symposium again contributed to a good sense of anthropology as an integrated discipline. The Undergraduate Committee directed by Professor Jeffery Froehlich continued to review the five-subfield requirements, Outcomes Assessment, and scheduling matters. Of particular concern was the status of Anthropology 101, the department-wide introductory course. There was a favorable vote to establish discussion sections to enhance its effectiveness. Undergraduate Director Jeffery Froehlich and Department Administrator Mimi Stephens again successfully coordinated efforts to manage and improve enrollments.

The Advisory Council of subfield convenors addressed the teaching component of the salary merit points system and modified that document as well as other aspects of the tenure and promotion process. Standing committees continued to make progress in inventories, policies and procedures related to Computer Use, Instructional Media, and Space. Fiscal matters were very much at the forefront. As a result of excellent work by staff and faculty the budget deficit was retired a full year earlier than projected, at the end of this fiscal year. Special acknowledgment for this welcome outcome is due Department Administrator Mimi Stephens and Accountant Mary C. Rhodes.

In Spring 1998, Associate Professors Kim Hill and Magdalena Hurtado led a Human Evolutionary Ecology field school at their field station in the Mbaracayu Reserve, Paraguay. The 1998 Summer Field School in Archaeological Research was again headed by Associate Professor Wirt Wills at the James Young Ranch, UNM’s research property between Bandelier National Monument and the Pueblo of Cochiti. The 31st Annual Bioarcheological Field School, the third under the aegis of UNM, was led by Professor Jane Buikstra at the Center for American Archeology, Kampswhale, Illinois, in the lower Illinois River Valley.

Several Department members were honored during the academic year. Professor Keith Basso received the 1997 Victor Turner Prize for Ethnographic Writing for his book, Wisdom Sits in Places: Language and Landscape Among the Western Apache. Professor Hillard Kaplan was awarded an Andrew M. Mellon Foundation Fellowship Grant in Anthropological Demography. Assistant Professor Joseph Powell was given the Katherine Woodson Endowment Award from the College of Arts and Sciences.
Associate Professor Ann F. Ramenofsky and graduate students A. Steffen and R. Moots earned the Best Student Poster at the Annual Meeting of the Society for American Archaeology. Associate Professor Sylvia Rodriguez garnered two prizes for her book, *The Matachines Dance: Ritual Symbolism and Interethnic Relations in the Upper Rio Grande Valley*: the 1997 Chicago Folklore Prize (co-winner) and the 1997 Southwest Book Award.

**Significant Plans and Recommendations for the Near Future**

The Department has four main concerns (not in order of priority) for the coming year and near future: (1) Hiring, especially an Alfonso Ortiz Native American position; (2) Departmental integration; (3) Undergraduate instruction, particularly laboratory instruction and computers; and (4) Better integration with the Office of Contract Archeology and Maxwell Museum of Anthropology. Further planning will be needed to develop the Public Policy program most effectively. Matters of development must be coordinated and invigorated. Diversity among faculty and students remains a pressing issue.

**Appointments**

- **Faculty**

  Visiting Assistant Professor Joel D. Irish, an Arizona State University Ph.D. who joined the faculty in 1995-96, continued temporarily in the position vacated in June 1995 by Associate Professor Jeffrey Long in the Biological Anthropology subfield.

- **Staff**

  Mary C. Rhodes was hired as a 1.00 Accountant I (Grade 8, exempt) on July 7, 1997.
Separations

• Faculty
Professor Erik Trinkaus resigned on July 31, 1997.

• Staff
None.

Sabbatical and Other Leaves

Professor Marta Weigle was on sabbatical leave during the Spring 1998 semester. As recipient of a Mellon Foundation Fellowship, Professor Hillard Kaplan was bought out of his university commitments during the 1997-98 academic year. As recipients of National Science Foundation funding, Associate Professors Kim Hill and Magdalena Hurtado were bought out of their university commitments for the Fall 1997 semester. As recipient of the UNM Research Lectureship, Professor Louise Lamphere was bought out of her teaching commitments for the Fall 1997 semester.

Publications

There were neither Department nor staff publications during this time, but the faculty continued its good productivity. In the 1997 reporting period, sixteen different tenure-stream faculty members (of twenty-five; Hill and Hurtado were in Paraguay and did not report) produced one book, four edited volumes, and thirty-six book chapters/journal articles. Associate Professor Mari Lyn Salvador guest curated a major exhibit, “The Art of Being Kuna,” at UCLA’s Fowler Museum of Cultural History and directed four accompanying video programs.

The 1997 books and edited volumes follow:

Steven Feld and Keith H. Basso, eds., Senses of Place, School of American Research Press


Outside Professional Activities

During the 1997 reporting period, among twenty-five tenure-stream faculty members (no reports from Hill and Hurtado, who were in Paraguay), thirteen gave one or more meeting papers and/or posters, three participated in one or more international symposia, two delivered one or more keynote/plenary addresses, and six gave one or more invited lectures. Associate Professor Patricia Crown led a School of American Research Advanced Seminar, "Sex Roles and Gender Hierarchies in Middle-Range Societies: Engendering Southwestern Prehistory." Associate Professor Carole Nagengast organized an American Association for the Advancement of Science/American Anthropological Association Conference on Women and Human Rights in Washington, DC. No staff members were professionally active outside the University.

Other reported faculty professional activities (excluding editorial boards) include:

Basso: Consultant for White Mountain Apache Tribe, San Carlos Apache Tribe

Bawden: Consultation Committee, University of Trujillo Moche Valley Archeology Projects Museum

Buikstra: Section (H) Chair/Past-Chair, American Association for the Advancement of Science; Finance Committee, American Anthropological Association; Executive Board, American Board of Forensic Anthropologists; President of Board, Center for American Archaeology; Board member, Bioanthropology Foundation, Peru; member, National Research Council-Committee on Women in Science and Engineering

Crown: Member, Selection Committee for the Excellence in Ceramic Research Award, Society for American Archaeology

Field: Consultant for Esselen Nation of Costanoan Indians

Froehlich: Member, Primate Specialists Group, Species Survival Commission, IUCN

Kaplan: Consultant for development of program in demography, University of Cape Town; consultant for program development, National Institutes of Child Health and Human Development, National Institutes of Health

Lancaster: Board of Directors, Society for the Study of Social Biology; Board member, Publications Committee, member, Program Committee for Annual Meeting, Human Behavior and Evolution Society
Nagengast: Member, Committee on Human Rights and Ethics, American Association for the Advancement of Science; member, Committee for Human Rights, American Anthropological Association; member and consultant, Amnesty International Committee for International Development and its National Task Force on Women and Human Rights

Rodríguez: Consultant for Taos Valley Acequia Association, U.S. Forest Service, Las Mujeres del Tierra del Sol (radio project), and East Mountain Historical Society

Salvador: Consultant for Kuna Cultural Center Planning, Panama, and National Museum of the American Indian

Straus: President, Committee on Human Evolution and Paleocology, Chair, Working Group on Archeology of the Pleistocene-Holocene Transition, International Union for Quaternary Research (INQUA); elected member, Committee on the Upper Paleolithic, International Union of Prehistoric Sciences; member, Committee on History of Prehistory, UISPP

Outside Sponsored Research

K. R. Hill and M. Gurven, LSB Leakey Foundation: Food Sharing and Sedentism among the Ache of Paraguay, $2,000

K. R. Hill and G. McMillan, National Science Foundation: Elements of Ache Society, $11,065

K. R. Hill, The Nature Conservancy: Distribution of Food Resources in the Mbaracaya Reserve, Paraguay, $20,000

K. R. Hill and A. M. Hurtado, National Science Foundation: Ecological Studies of Ache Foragers, $20,038

A. M. Hurtado, W. T. Grant Foundation: Maternal and Child Health among Mexican Americans, $6,095

A. M. Hurtado, American Lung Association: Asthma Research Center Pilot Project, $6,397

H. Kaplan, University of Michigan: Mellon Research Grant, $27,400

L. G. Straus, National Geographic Society: El Miron Cave Phase III - The Rio Ason Drainage, $21,020

E. Trinkaus and W. Niewoehner, National Science Foundation: Functional Anatomy of Late Pleistocene and Recent Human Carpometacarpal and
Metacarpophalangeal Articulations, $5,396

Attachments

• Public Lectures

Journal of Anthropological Research Distinguished Lecture Series:

Sherry B. Ortner, Columbia University, "Ethnicity and/as Class in America: The Case of the Jews and Its Broader Implications," October 23, 1997

F. Clark Howell, University of California, Berkeley, "The Evolution of Genus Homo, from 1 Million to 30,000 Years Ago: Altered Perspectives and Recent Developments in Human Evolutionary Studies," April 9, 1998

Frieda D. Butler Memorial Lecture (Master of Arts student):

Marit Munson, "Sex and Gender in Black and White: Human Images from Mimbres Ceramics," November 12, 1997

Ruth Kennedy Memorial Lecture (Doctoral student):


• Conferences

UNM Graduate Anthropology Symposium, sponsored by the Anthropology Graduate Student Union, UNM Student Union Building, March 6-7, 1998:

Keynote Address: Prof. Linda Green, "The Simultaneity of Mutual Betrayal and Collective Dignity in Rural Guatemala"

Papers by: Tresa Thomas, Caroline Todd, Karen Stocker, Marta Henriksen, Sarah Horton, Amanda Daly, Bettina Behrens, Megan Rhoads, Shawn Penman, Elizabeth Ann Carson, Kevin O'Briant, Marcia Mikulak, Charles Clark, Bill Wagner, Belisa Gonzalez, Leslie Lopez, Vincent H. Stefan, Michelle Cristiani, Wes Niewoehner, Kazuyoshi Hirao, Cymene Howe, Joe Kinsella, Erik Wilker, Maria Firmino-Castillo, Deborah Boehm, Julia Meredith, Mariela Nunez-Janes, Philip Laverty, Marcel Harmon, David Kilby, Jack Young, Ariane Oberling Pinson

• Bachelor of Arts Degrees Conferred

Forty-five B.A. degrees were awarded in 1997-98. (Those graduating with honors are indicated by an asterisk.)
Seventeen B.S. degrees were awarded in 1997-98. (Those graduating with honors are indicated by an asterisk.)


Seventeen M.A. degrees were awarded in 1997-98. (Those graduating with distinction are indicated by an asterisk.)


Three M.S. degrees were awarded in 1997-98. (Those graduating with distinction are indicated by an asterisk.)

*Elizabeth Ann Carson, Steve Kut, Megan Rhoads

Seven Ph.D. degrees were awarded in 1997-98. (Those graduating with distinction are indicated by an asterisk.)

Michelle Chino, “The Determinants and Outcomes of Age at First Reproduction among a Cohort of American Indian Women” (Jane Lancaster, Chair)

Karen Kramer, “Variation in Children’s Work among Modern Maya Subsistence Agriculturalists” (James Boone/Hillard Kaplan, Co-Chairs)
*Arthur Martin, “Enchantment and Colonization: Modernity and Lifestyle Migrants in a New Mexico Town” (Sylvia Rodríguez, Chair)

Melissa Payne, “Valley of Faith: Historical Archaeology in the Upper Santa Fe River Basin” (James Boone, Chair)

Sharon Pochron, “Tests of Food Selection Models - Yellow Baboons (Papio Cynocephalus Cynocephalus), Ruaha National Park, Tanzania” (Jane Lancaster, Chair)

Richard Sosis, “The Collective Action Problem of Male Cooperative Labor on Ifaluk Atoll” (Kim Hill, Chair)

*William Troy Tucker, “Childlessness, Fertility of the Class-Mobile, and High Fertility of American Men” (Hillard Kaplan, Chair)

Letters of Academic Title

Affiliated Faculty

Joseph C. Winter, Part-time Professor of Anthropology; Director, Office of Contract Archeology (Archaeology subfield and faculty voting rights; no presumption of tenure)

David E. Stuart, Part-time Associate Professor of Anthropology; Associate Vice President for Academic Affairs/Evening and Weekend Degree Programs (no voting rights; no presumption of tenure)

Richard C. Chapman, Part-time Assistant Professor of Anthropology; Associate Director, Office of Contract Archeology (no voting rights; no presumption of tenure)

Patrick F. Hogan, Part-time Assistant Professor of Anthropology; Assistant Director, Office of Contract Archeology (no voting rights; no presumption of tenure)

Bruce B. Huckell, Research Assistant Professor of Anthropology; Senior Research Coordinator, Maxwell Museum of Anthropology (Archaeology subfield and faculty voting rights; no presumption of tenure)

Adjunct Faculty

Adjunct Professor: Richard Bauman, Ines Arenas de Hurtado, Erik Trincka


Adjunct Research Associate: Lisa W. Huckell

Visiting Scholar: Dinah Guimaraens
In calendar year 1997, the Journal of Anthropological Research managed to publish 5 issues (Vol. 52, No. 4 and Vol. 53, Nos 1-4), thereby catching up after many years of being behind in the publication of the winter issue. Volume 53 alone consists of 525 pp., with 19 articles and 56 book reviews - a large increase in the latter over earlier years, despite the fact that Vol. 53, No. 2, the Special Issue on Universal Human Rights Versus Cultural Relativity (edited by T. Turner of the University of Chicago and Carol Nagengast of UNM), contained no book reviews. Numerous copies of this special issue have been purchased separately, in several cases as class adoptions around the U.S.

During calendar year 1997, 51 manuscripts were received and reviewed (usually by 2-5 reviewers, in addition to the Editor). The manuscript acceptance rate is roughly 37%, although most manuscripts are only accepted after revision. (Exclusion of the 2 JAR Distinguished Lectures and the Special Issue's Introduction brings the acceptance rate down to 33%.)

Professors John Comaroff of the University of Chicago and Mary Moran of Colgate University were added to the body of Associate Editors and Professor Carol Nagengast was added to the Editorial Board here at UNM.

JAR continues its campaign to boost subscriptions, with full-page advertisements in American Anthropologist and Current Anthropology and formal representation at the Annual Meetings of the American Anthropological Association and Society For American Archaeology, as well as informal representation (by the Editor) at other meetings both in USA and in Europe. There are almost 1300 subscribers, about 300 of which are foreign. Among the more notable of this year's (1998) new subscribers is the Vatican's Pontifical Gregorian University.

The highly successful Journal of Anthropological Research Distinguished Lecturers for 1997 were Professor Sherry Ortner of Columbia University and Professor Luca Cavalli-Sforza of Stanford University. Both lectures have been published: Cavalli-Sforza's has stimulated considerable discussion: comments (including one by Professor Lord Renfrew of Cambridge University) and a reply by Cavalli-Sforza will be published in an upcoming issue. Professor F. Clark Howell of the University of California, Berkeley, gave the very well attended lecture this Spring. He and all the others have also presented specialized seminars and held office hours for graduate students and faculty. Next year's lecturers - both on the subject of race - will be C. Loring Brace of the University of Michigan (biological perspectives: Oct. 8-9:) and Yolanda Moses (President of City College of New York and of the American Anthropological Association - cultural perspectives).

The Spring 1998 and Summer 1998 issues (Vol. 54, No. 1,2) have been published. The Fall issue is currently (Aug. '98) being printed and the Winter issue (a special number on SW ceramic studies) is already prepared.
The JAR Staff (grossly underpaid) continues to consist of Margaret Colclough (Administrative Asst. III - *de facto* Business Manager), Mary Kay Day (On-call employee - Manuscript Specialist), Ariane Oberling Pinson (Part-time Student Assistant, in charge of book reviews and web page management) and Dr. Patricia Nietfeld (Contract Copy Editor). Professor Straus doubles as Editor (and *de facto* Publisher) and Book Review Editor for Archaeology and Paleoanthropology; Professor Emeritus P. K. Bock is Book Review Editor for Ethnology and Linguistics; Professor J. W. Froehlich is Book Review Editor for Physical and Biological Anthropology. The Editorial Board is rounded out with Professors L. Lamphere, R. Santley and C. Nagengast.

As of the end of June, JAR had revenues of $56,286.00 against $53,059 of A & S subvention for fiscal year 1998. The positive balance is in great part due to Margaret Colclough's diligent efforts in collecting copyright and reprint fees, as well as our drive to gain new subscriptions.

All books not reviewed are donated to the University of New Mexico's Clark Field (Anthropology) Library.

Over-billing problems with the UNM Post Office seem to have been resolved, but there have been problems with the bindery contracted by UNM Printing Services.

It should be noted that the amount of effort on the Editor's part *far exceeds* the one course release which JAR pays for from its profits. It should also be noted that JAR continues to have to pay for phone lines which until two years ago had been included among the Anthropology Department's free lines. *This cuts into our operating budget for such things as larger issues or advertising, and should be remedied as I have been requesting for two years.*

Lawrence G. Straus
Editor
ANNUAL REPORT OF
THE OFFICE OF CONTRACT ARCHEOLOGY
JULY 1, 1997 – JUNE 30, 1998

by
Joseph C. Winter, Director
Richard C. Chapman, Associate Director
and Patrick F. Hogan, Assistant Director

A. Review of Activities and Achievements

Fiscal Year 1997–1998 was a semi-successful year for the Office of Contract Archeology. There was a considerable amount of meaningful research carried out and we assisted many student employees, but we faced a serious financial challenge. Details of our research accomplishments, financial problems, goals, and staff changes are presented below.

1. Description of Research

Patrick Hogan served as principal investigator on a number of projects. After a hiatus of several months for renegotiation of the contracts, work on the MAPCO project resumed in January 1997 under the supervision of Hogan and Kenneth Brown (Project Administrator). Analyses of artifacts and samples from the 65 excavated sites were completed during the remainder of the year, and drafts of three volumes of the six volume report were submitted for agency review. Final reports were also completed for three other projects on which Hogan was the Principal Investigator: 1) The Boyd Land Exchange Project I: Archaeological Investigations at 13 Sites in West-Central New Mexico by Peggy A. Gerow and Patrick F. Hogan; 2) The Boyd Land Exchange Project II: Archaeological Investigations at 17 sites in West-Central New Mexico by Peggy A. Gerow and Janette M. Elyea; and 3) The Hawk-Rio Puerco Project: Excavations at Seven Sites in the Middle Rio Puerco Valley, New Mexico by Peggy A. Gerow.

Richard Chapman was the principal investigator of a number of projects completed in FY 97–98. Cycles of Closure: A Cultural Resources Inventory of Fort Wingate Depot Activity, New Mexico, edited by Jeanne A. Schutt and Richard C. Chapman (OCA/UNM Report No. 185-555), is the final monograph documenting the results of six years of archeological survey and excavation at the FWDA facility just east of Gallup, NM. The project entailed intensive survey of 20,816 acres and resulted in documentation of 759 prehistoric and historic site locations exhibiting 1,001 cultural/temporal components; a testing program targeting 32 sites, and a historic building inventory of 89 structures related to military construction at the beginning of WWII. Among the results of the survey was new insight gained into the regional trend of Anasazi out-migration from the southern periphery of the San Juan Basin at ca. 1150-1200 AD (at the time of the “Chacoan Collapse”) and subsequent resettlement strategies. Some hints at possible climatic causes of that collapse and resettlement were found.
during the testing program as evidence of massive flooding and arroyo cutting and filling events occurring during the late Pueblo II settlement in floodplain areas. The survey also provided an opportunity to conduct an intensive study of historic Navajo occupation in the region, and how the local Navajo economy and settlement changed through time as U.S. military usage of the Fort Wingate facility shifted emphasis from the 1860s through the 1940s. The project was sponsored by the U.S. Army Corps of Engineers, Albuquerque District to provide information facilitating transfer of the FWDA facility out of U.S. Army ownership.

*Fort Wingate Depot Activity Ethnographic Study* by Susan E. Perlman (OCA/UNM Report No. 185-477B) documents a parallel ethnographic study to the FWDA archeological project. Objectives of the study were to gather information concerning traditional Navajo and Zuni use of the area encompassed by the present fort boundaries. The ethnographic study entailed interviews and field visits with Navajo and Zuni consultants, and resulted in compiling an extensive list of Traditional Cultural Properties including trails, shrines, springs, collecting and hunting areas, fields, and the like. The published report is the "public" report—two separate compendia of information deemed privileged by the Navajo and Zuni were also prepared for use solely by those groups for future planning at the FWDA.

*Prehistoric Subsistence at El Cañoncito: Proposed Data Recovery at Three Sites along NM 117 and the Rio San José* by William H. Deleman and Richard C. Chapman (OCA/UNM Report No. 185-604) outlines a data recovery plan for three prehistoric sites near Grants, NM; one of which contains artifacts indicative of both Paleoindian and Archaic occupation. A series of research questions emphasizing the regional setting of the sites along probable game corridors, and use of the sites in hunting related contexts, are defined to guide the proposed excavation and analysis. The work is being done under contract with the Museum of New Mexico Office of Archaeological Studies, sponsored by the New Mexico State Highway and Transportation Department.

*A Presidio Community on the Rio Grande: Phase III Testing and Historical Research at San Elizario, Texas (Volumes 1 and 2)*, edited by Bradley J. Vierra, June-el Piper, and Richard C. Chapman (OCA/UNM Report No. 185-545) is the final report documenting results of a testing program in and around the historic Presidio community of San Elizario, Texas (located in the south valley of El Paso). Historical research themes addressed in the report include presidial community settlement evolution, culture group interactions among Native American, Hispanic and Anglo populations, and flooding and drought episodes. In addition to chapters documenting the archeological excavations, the final report contains definitive analyses of local earthenware ceramic production, imported Mexican Majolica ceramics, Euro-American artifacts, archeofaunal and archeobotanical assemblages, pollen, slag, lithic artifacts and radiocarbon dating results. The work was done under contract with the Lower Valley Water District, El Paso, and was sponsored by the Texas Water Development Board.

*Historical Documentation of Middle Rio Grande Flood Protection Projects: Corrales to San Marcial* by K. Lynn Berry and Karen Lewis (OCA/UNM Report No. 185-555) documents the results of fieldwork and historical research to provide
a historical overview of the Middle Rio Grande Conservancy District canal and levee system. The project was sponsored by the U.S. Army Corps of Engineers, Albuquerque District to facilitate compliance for rebuilding levee structures.

Under the general direction of Richard C. Chapman as principal investigator, cultural resource monitoring activities on the Fort Wingate Depot Activity near Gallup, New Mexico, continued in 1997 and 1998 for the U.S. Army Corps of Engineers, Albuquerque District. Monitoring activities involved inspection of areas associated with removal of unexploded ordnance, installation of telephone lines, and clearance of bore hole locations. Fieldwork for the monitoring was conducted at different times by Timothy McEnany and Byrd Bargman. This work has been documented as a series of letter reports, with appropriate site update or new site discovery information forwarded to ARMS; a small publication may be anticipated when the monitoring contract is finished sometime in 1999.

Excavation fieldwork for the New Mexico 117 project was completed in May, 1998 under the direction of William Doleman, with Richard Chapman acting as Principal Investigator. Three sites reflecting artifacts indicative of PaleoIndian through historic Pueblo and Anglo/Hispanic occupation were examined, all adjacent to the Rio San José as it flows through El Cañoncito, a box canyon at the eastern edge of the Grants Mulpais formation and Horace Mesa. Two of the sites were predominantly surface distributions of artifacts, but one site (LA 117906) exhibited a buried cultural soil containing artifacts reflecting early-mid Archaic occupation (Bajada and San Jose point fragments), and possibly late PaleoIndian use as well (snub-nosed end scraper fragments). The culturally modified soil was heavily bioturbated, but contained several thousand microflakes indicating tool manufacture/refurbishing, small burned bone fragments, and enough charcoal to permit radiocarbon dating, in addition to the tools themselves. A wide range of lithic source materials is represented, including obsidian. Research questions guiding the analysis focus upon the regional scale mobility and territorial range of the late PaleoIndian/early-mid Archaic populations, and the setting-specific use of the sites as hunting related encampments. The work is being done under contract with the Museum of New Mexico Office of Archaeological Studies, sponsored by the New Mexico State Highway and Transportation Department.

Excavation fieldwork for the New Mexico 22 project was begun in January 1998 and concluded in July with Richard Chapman serving as the OCA Principal Investigator. This project is a joint venture with the Museum of New Mexico Office of Archaeological Studies, involving excavation at seven sites along NM 22 between Peña Blanca and Cochiti Dam. OCA crews were responsible for excavation of three sites under the direction of Marie Brown and Jeanne Schutt (Project Directors), Byrd Bargman, Tim McEnany and John Mark Sheppard (Crew Chiefs), and all artifacts and samples are being processed through the OCA laboratory. OCA crew members also worked with MNM crews; local labor was recruited from Cochiti and Santo Domingo Pueblos. The NM 22 highway cuts across the first series of terraces overlooking the Rio Grande directly north and south of the confluence of the Santa Fe River and the Rio Grande, and all seven sites contained extensive Early Developmental (ca. AD 700-850) residential pithouse complexes—the first evidence of large residential sites dating to that era thus far discovered within the upper middle Rio Grande region. Rectangular pit rooms dating to the Coalition period (AD 1200-1300) were found at one site, and another site exhibited a historic Colonial phase structure overlying an Early Developmental pit house.
A survey of the Middle Rio Grande Conservancy District levee system from Belen to San Marcial, NM was conducted by William Doleman (Project Director) and Tim McEnany (Crew Chief) in August and September 1997, under contract with the U.S. Army Corps of Engineers, Albuquerque District. The survey was done to facilitate a levee rebuilding program. As part of the survey, GPS instrumentation data was collected for a series of fixed points, and along a series of linear routes which were subsequently post-processed using simultaneous locational data from two different base stations—the object being to assess variation in the accuracy of GPS instrumentation using “field” average readings for different periods of time vs. post-processed data. Results were compiled in a document by Peter Eschrman (OCA Systems Analyst); the survey results were documented in a letter report to the Corps of Engineers.

Another survey of the Isleta to Belen reach of the MRGCD levee system was conducted in January and February 1998 by Byrd Bargman (Project Director), with Richard Chapman serving as Principal Investigator. This survey, also conducted for the U.S. Army Corps of Engineers, Albuquerque District, resulted in updating information for one previously recorded prehistoric site, and will be used for compliance in levee reconstruction activities.

Initial sample selection for a program to analyze bulk soil samples from “old” data recovery projects at Abiquiu, Cochiti and Trinidad reservoirs was undertaken. This project is sponsored by the U.S. Army Corps of Engineers in an effort to literally reduce the bulk of unprocessed soil samples from 1960s and 1970s era excavation projects at the three reservoirs. Work thus far has involved a review of reports and curation records relating to the samples; initial selection of samples from Abiquiu reservoir excavations is underway. The project is directed by Kathy Pierce (OCA Laboratory Director) with Richard Chapman serving as Principal Investigator.

Joseph Winter served as principal investigator on a number of projects, including the Tomé Hill Phase II project at Tomé, New Mexico (Dan Scurlock, Project Administrator); test excavations at Galisteo Reservoir near Bajada Hill (Marie Brown, Project Director); test excavations at Santa Rosa Reservoir near Santa Rosa (Harding Polk and Marie Brown Project Directors); a survey at Alamogordo (Jeanne Schutt, Project Director); and excavations at five sites along Highway 44 (Jeanne Schutt, Project Director). Excavations at the NM Highway 44 sites were completed, and we hope to complete analyses and report in 2 years. In addition Winter continued the Huichol Research and Assistance Project, and his other tobacco-related research, described below under "Scholarly Accomplishments" and "Public Outreach". As for the NM 44 sites, the first phase of archaeological excavations at each concentrated on areas within the limits of the proposed construction activity. The second phase concentrated on areas between the construction zone and the fences bordering the right-of-way. All features within the construction zone and the larger fence-to-fence highway right-of-way were identified and excavated, except for one feature at LA 9193. Previous research at LA 9190 revealed a storage pit, a warming pit, remnants of two floors or work areas, post holes (possible ramadas or shelters), and a pit structure with a ventilator shaft extending outward from its north wall. The bedded sand that formed the northeast wall of the pit structure contained a lens of diffuse charcoal that appeared to predate its construction. This lens, which contained a concentration of lithic flakes, may represent the remains of an Archaic horizon. The 1996 highway survey recorded four stains and an artifact concentration. Examination of the site by OCA in 1997 discerned four additional stains for a total of nine possible...
features. Data recovery techniques at LA 9190 began with an extensive surface collection of prehistoric artifacts from at least 777 square meters of surface area; 38 artifacts were also point provenienced. Six 1 m by 1 m square test units and 21 auger tests were then excavated to define stratigraphy and identify potential cultural horizons. Mechanical blading removed at least 5200 square meters of overburden. Twelve cultural features were additionally excavated and recorded. They included prehistoric ash pits and roasting pits, as well as recent campfires.

Based on the previous research in 1970, the Naranjo Site is defined as a habitation site tentatively dating to the Archaic and Basketmaker III – Pueblo I periods. Our investigations located additional probable cooking features and also confirmed the mechanical disturbance in the central portion of the site.

LA 9193 consists of several pithouses or pitstructures and associated features apparently dating from the Basketmaker III to early Pueblo II period. Previous excavations in 1969 revealed six pitstructures, two burials, a masonry structure, and associated hearths and storage cisterns. The 1996 survey described two artifact concentrations and six ash stains in the western portion of the highway corridor. Examination of the site by OCA at the start of field work in 1997 found evidence of one additional unexcavated pithouse and two additional small stains in the eastern portion of the highway corridor and three additional stains in the western portion of the corridor.

Our 1997 investigations involved three principal tasks: a) surface collection and mapping, b) hand excavation of grid units and features, and c) trenching and surface stripping of extensive areas using heavy equipment. Excavated feature types include a pitstructure, five large storage pits, several smaller pits probably used for storage as well as other purposes, midden areas, a number of hearths, and a human burial. In addition to the pitstructures, at least 40 exterior features were probably associated with the Pueblo period occupation. A total of 18 features (mostly hearths) appear to have been associated with Archaic Period and/or Basketmaker II Period occupations. Flotation samples were collected from almost all of the features. Pollen samples were obtained from a number of features and other contexts.

At least six and possibly seven pithouses were excavated in 1969. Only three of the structures were still in existence in 1997. Two of the previously excavated structures were re-excavated in 1997-98 to obtain archaeomagnetic dates. A large ash stain initially believed to represent a second unexcavated pitstructure was found to be backfill from the 1969 excavations. One human burial encountered in the present project was found in the ventilator shaft of the new pitstructure (F27). It was excavated but not analyzed in either the field or lab, at the request of the governor of Zia Pueblo. On March 12, 1998 it was reburied well outside of the highway r-o-w, on Zia Pueblo lands, along with the two burials previously excavated in the 1960s.

LA 32698 - Previous research defined three proveniences and two ash stains with associated flaked stone and ceramic artifacts. The initial investigations dated the site to the Basketmaker III – Pueblo I period. Our 1997 data recovery techniques began with a surface collection of prehistoric artifacts. The next process involved the excavation of eleven test units and surface shovel scrapes of approximately 61 square meters to remove overburden. Shovel trenches were hand
excavated and 10 auger tests were conducted. Mechanical blading was also used removing at least 344 square meters of surface overburden to expose the prehistoric surface. Blading identified the tops of two pithouses. Two additional pithouses were later identified within the two other houses. We excavated and recorded the four pit structures and their associated features, along with one apparent ramada area, two shallow pits, one small roasting pit, two fire-cracked rock clusters, one cobble-lined hearth, one bell-shaped pit, and one trash midden.

The four pit structures were only partially excavated as only ¼ to ½ of them lie within the right-of-way. Two pit structures (Features 21 and 67) were found superimposed by two later pit structures (Features 6 and 20). In both situations, it appears that the structures were stacked almost directly atop of each other, nearly utilizing the same walls and, in one case, the same vent shaft and opening. The floors of the earlier occupations were buried below the floors of the upper structures by approximately 40 to 45 cm of cultural fill. The actual dates are not yet known for each structure; however, the ceramic assemblage indicates a short temporal span between occupations. A fifth structural feature — an apparent ramada, is represented by approximately 23 postholes, well-spaced, arranged in an arc surrounding one set of stacked pit structures. Based on the ceramic evidence, the site tentatively dates to the Pueblo I period (700–950 AD). The relationship of the structures and the cultural debris along with a possible historic rock masonry foundation, located to the west (outside the right-of-way), suggest continual use of this area over a long period. The presence of pit structures, a use area, a trash midden, small cooking features, and the myriad of artifact categories suggests a habitation site which was probably occupied year-round.

LA 116082 - Previous investigations described two stains and an artifact scatter consisting of flaked stone, a single sherd and a piece of fire-cracked rock. Preliminary investigations dated the site to the Pueblo III period. Our 1997/1998 data recovery tasks for this site were four fold: the surface collection of prehistoric artifacts via point proveniencing; the excavation of six 1 m by 1 m test units and 10 auger holes; the mechanical blading of approximately 290 square meters of recent overburden; and the excavation and recording of five features.

Two of the five features turned out to be prehistoric cultural features. One large hearth/ash pit (Feature 1) contained a very ashy sand with some charcoal flecking. The second pit (Feature 3) was a shallow ash pit filled with a light ash and sandy loam. A dense concentration of lithic debitage was associated with it. The other features were natural burn areas and recent fires. Based on the small ceramic assemblage, LA 116082 may have been occupied during the Pueblo III period (1200 and 1300 AD). It appears that the site was not used over an extensive period of time and may have served as a limited activity location where cooking and light tool manufacturing occurred. Further analysis of soil samples from the two cultural features may help inform us as to specific functions and uses of each feature.

LA 116083 - Previous investigations described two features in the eastern portion of the highway corridor and a lithic/fire-cracked rock concentration in the western portion of the corridor. Feature 1 was a small circular ash and charcoal stain that contained small fragments of fire-cracked rock and obsidian flakes. Feature 2 was also a small ash and charcoal stain
with a nearby mano fragment. This site was believed to represent the remains of a temporary camp(s) dated to the Pueblo IV period.

Our 1997/1998 data recovery plan began with the surface collection of prehistoric artifacts. Next, ten 1 m by 1 m test units and 22 auger holes were manually excavated. Mechanical blading removed roughly 2100 square meters of overburden. Sixteen features were excavated. Of the 16, five prehistoric ash pits were positively identified. Three possible hearths were also excavated. No artifacts were found directly associated with them. These possible hearths appear to be very informal. Other features appear to be natural root burns and debris from two large brush fires and three stains that are most likely the result of petroleum seeps during the construction of the present highway. Because of the obliteration of a large portion of the site by the earlier road, we can only speculate that the portion of the site within the right-of-way served as activity areas for cooking and trash deposit. Based on the ceramic evidence, LA 116083 tentatively dates to the Pueblo IV Period.

Other OCA Projects are listed in Table 1, which shows the status of all OCA projects, as of 6/30/98.

**TABLE 1  SUMMARY OF OCA ACTIVITIES 7/1/97 - 6/30/98**

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>SPONSOR</th>
<th>BRIEF DESCRIPTION</th>
<th>STATUS</th>
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<tr>
<td>185-372</td>
<td>Office of Military Affairs</td>
<td>Hawk Missile Excavations</td>
<td>Completed</td>
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<td>185-492</td>
<td>Bureau of Land Management, Albuquerque District</td>
<td>Boyd Data Recovery, Phase I</td>
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<td>185-511</td>
<td>Office of Archeological Studies, Museum of New Mexico</td>
<td>Data Recovery along NM 26 near Hatch</td>
<td>Final report in production</td>
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<td>185-517</td>
<td>New Mexico National Guard</td>
<td>Excavations at 3 Sites on Hawk Battalion Facility Near Bernalillo</td>
<td>Final report in preparation</td>
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<td>Bureau of Land Management, Albuquerque District</td>
<td>Boyd Land Exchange Data Recovery, Phase II</td>
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<td>185-525</td>
<td>U.S. Army Corps of Engineers, Albuquerque District</td>
<td>Fort Wingate Depot Activity Survey - 4817 Acres</td>
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<td>185-533</td>
<td>U.S. Army Corps of Engineers, Albuquerque District</td>
<td>Fort Wingate Depot Activity Testing</td>
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<td>185-537A</td>
<td>U.S. Army Corps of Engineers, Albuquerque District</td>
<td>Fort Wingate Additional Survey Extension</td>
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<td>185-543A</td>
<td>Navajo Nation</td>
<td>Data Recovery of 3 Sites in Church Rock Industrial Park</td>
<td>Final report in preparation</td>
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<td>185-545A</td>
<td>El Paso County Lower Valley Water District Authority</td>
<td>Phase III Archeological Testing at Socorro and San Elizario</td>
<td>Completed</td>
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<tr>
<td>185-547</td>
<td>Mid-America Pipeline Company</td>
<td>Data Recovery Field Work Phase - Four Corners Pipeline Loop project</td>
<td>Draft reports in preparation</td>
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<td></td>
<td></td>
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<td>185-549</td>
<td>El Paso County Lower Valley Water District Authority</td>
<td>Phase II/IIIB Data Recovery and Monitoring, Socorro, Texas</td>
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<td>185-561</td>
<td>U.S. Army Corps of Engineers, Albuquerque District</td>
<td>BMDO Monitoring, Ft. Wingate</td>
<td>Field work and reporting in progress</td>
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<td>185-571</td>
<td>Maestas and Associates</td>
<td>Taos Test Excavations</td>
<td>Completed</td>
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<td>185-572A</td>
<td>Valley Improvement Association</td>
<td>Tomé Hill Phase II Survey and other work</td>
<td>Final deliverables in preparation</td>
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<td>185-578</td>
<td>U.S. Army Corps of Engineers, Albuquerque District</td>
<td>Galisteo Test Excavations</td>
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</tr>
<tr>
<td>185-598</td>
<td>Museum of New Mexico, Laboratory of Anthropology</td>
<td>Highway 44 Data Recovery</td>
<td>Analysis in progress</td>
</tr>
<tr>
<td>185-601</td>
<td>U.S. Army Corps of Engineers, Albuquerque District</td>
<td>Alamogordo Survey</td>
<td>Completed</td>
</tr>
<tr>
<td>185-604</td>
<td>Office of Archeological Studies, Museum of New Mexico</td>
<td>Data Recovery Plan for 3 sites along NM 117</td>
<td>Completed</td>
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<tr>
<td>185-605</td>
<td>U.S. Army Corps of Engineers, Albuquerque District</td>
<td>Isleta to Belen Survey</td>
<td>Completed</td>
</tr>
<tr>
<td>185-606</td>
<td>U.S. Army Corps of Engineers, Albuquerque District</td>
<td>San Acacia to San Marcial Survey</td>
<td>Completed</td>
</tr>
<tr>
<td>185-611</td>
<td>U.S. Army Corps of Engineers, Albuquerque District</td>
<td>Processing Bulk Soil Samples</td>
<td>In progress</td>
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<tr>
<td>185-612</td>
<td>Camino Real Environmental Co.</td>
<td>Lea Co. Survey</td>
<td>Completed</td>
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<tr>
<td>185-613</td>
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<td>NM 117 Excavation</td>
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### Project Sponsorship

<table>
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<th>SPONSOR</th>
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<th>STATUS</th>
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<tr>
<td>185-615</td>
<td>U.S. Park Service</td>
<td>Data Quality Study Chaco Outlier Sites</td>
<td>Analysis in progress</td>
</tr>
<tr>
<td>185-618</td>
<td>Office of Archeological Studies, Museum of New Mexico</td>
<td>NM 22 Fieldwork</td>
<td>Completed</td>
</tr>
<tr>
<td>185-618A</td>
<td>Office of Archeological Studies, Museum of New Mexico</td>
<td>NM 22 Additional Work</td>
<td>Completed</td>
</tr>
<tr>
<td>185-618B</td>
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<td>NM 22 Additional Work</td>
<td>Completed</td>
</tr>
<tr>
<td>OCA-049</td>
<td>Central NM Coop.</td>
<td>Estancia Survey</td>
<td>Completed</td>
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<tr>
<td>OCA-050</td>
<td>State Engineer Office</td>
<td>Cochiti Survey</td>
<td>Completed</td>
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</table>

### 2. Financial Statement

Table 2 lists the direct costs contracted for in new projects and the new indirect costs represented by them, in FY 97-98. When compared with the previous 11 years (Table 3), it is obvious that FY 97-98 was lower than average. Also, we brought in less IDC than our general operating budget. While this is disappointing, it was not unexpected, since we have had several good years, and the amount of new projects and the IDC budgeted in them fluctuates over time, depending on how many potential contracts are available each year and the nature of the competition. A low year in FY 97-98 followed a fair year in FY 96-97, good years in FY 94-95 and FY 95-96, preceded by a low in FY 92-93, which was preceded by six good years from FY 86-87 to FY 91-92. The overall 12 year average is still quite good, and the university administration should realize that there will be occasional poor years, following a number of good years.

Another financial challenge is that we are still carrying a deficit in our general account, left over from the effects of UNMPact in FY 96-97 (Table 4). A way to handle all of these challenges is discussed in Section B.

### 3. Scholarly Accomplishments

OCA staff continued to make a number of scholarly accomplishments. Joseph C. Winter continued his research with Native American tobacco, and with the Huichol Indians of Mexico. With regard to the latter, he returned to the Huicholes for 2 weeks in May and June of 1997, to carry out part of the project. He will return in the spring of 1999, with one student, to continue it.
Table 2

<table>
<thead>
<tr>
<th>PROP. #</th>
<th>ACCOUNT #</th>
<th>AGENT</th>
<th>PROJECT</th>
<th>TOTAL AMOUNT</th>
<th>IDC AMOUNT</th>
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<td>185-603A</td>
<td>3-33117-</td>
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<td>$3,820.00</td>
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<td>185-606</td>
<td>3-49223-</td>
<td>Army Corps of Engineers, Albuquerque District</td>
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<td>$14,089.00</td>
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<td>Lab Analysis and Report NM 44</td>
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<td>$685,126.00</td>
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* We requested $378,684.95 in direct cost and $78,141.34 in IDC.
TABLE 3

12 YEAR REVENUE RECORD FOR OCA

<table>
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<tr>
<th>FY</th>
<th>TOTAL NEW CONTRACTS</th>
<th>IDC BUDGETED IN NEW CONTRACTS</th>
<th>OPERATING BUDGET</th>
<th>DIFFERENCE BETWEEN BUDGETED IDC AND YEARLY BUDGET</th>
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<tbody>
<tr>
<td>86-87</td>
<td>$1,333,621.00</td>
<td>$349,380.00</td>
<td>$66,716.00 *</td>
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<td>$275,696.00</td>
<td>$73,164.00 *</td>
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<td>$289,678.00</td>
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<td>$298,364.00</td>
<td>$100,175.00 *</td>
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<td>90-91</td>
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<td>$2,490,000.00</td>
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<td>$962,027.00</td>
<td>$122,484.00 *</td>
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<td>92-93</td>
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<td>$80,299.00</td>
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<td>97-98</td>
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<td>-$39,443.00</td>
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<td>TOTAL</td>
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<td>YEARLY AVERAGE</td>
<td>$1,966,616.98</td>
<td>$574,302.67</td>
<td>$137,472.92</td>
<td>$436,829.75</td>
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* Salary charges figured in

TABLE 4

SUMMARY OF YEAR END BALANCE IN ACCOUNT 1-18065 AND EFFECT OF UNMPACT

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<th>FY</th>
<th>YEAR END BALANCE ACCOUNT 1-18065</th>
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<tr>
<td>1993-1994</td>
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<tr>
<td>1994-1995</td>
<td>+$30,357.97</td>
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<td>1995-1996</td>
<td>+$30,879.39</td>
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<tr>
<td>1996-1997</td>
<td>-$48,394.56</td>
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<tr>
<td>1997-1998</td>
<td>-$49,729.92*</td>
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</table>

*Assuming that 6/30/98 FRS dated 7/24/98 is correct
Winter also presented a number of professional papers and presentations, at a variety of meetings. These included a presentation on the uses of Native American tobacco at a national U.S. Indian Health Care meeting in Bemidji, MN, in September 1997, a paper at the Native American Women and Cancer meeting in Tucson, AZ in January 1998, a presentation to the biology department graduate students and faculty at the University of Missouri in October 1997, three talks to the Native American employees of the Tennessee Valley Authority in November 1997, and a presentation to the Albuquerque Archaeological Society in May of 1998.

Richard Chapman's activities in FY 98 included:

- Chair of the UNM Board of Archaeologists for the 1997-1998 school year
- Chair "Archaic/Paleo Precursors of Sedentism" session at the 1998 Pecos Conference.
- Lecture "Archeological, Historical and Ethnological Survey at Fort Wingate, New Mexico" for the 1997 Nuclear Science Symposium/Medical Imaging Conference
- Lecture on the history of archeological research in the Cochiti area for the UNM Archaeology Field School/site tour of NM 22 excavations
- Lecture on "Issues concerning treatment of human burials" for the University of Chicago Archaeology Field School/site tour of NM 22 excavations
- NM 22 site tour for Navajo Nation Historic Preservation Department staff
- Lecture on history of archeological research in the Cochiti area for Pueblo of Cochiti officials and laborers

4. Public Outreach

Joseph C. Winter continued developing the Traditional Native American Tobacco Seed Bank and Education Program (TNAT), which collects, preserves, grows, and distributes sacred tobacco seeds to any Native American requesting them, as long as the resulting tobacco is used only for traditional purposes (i.e., ceremonies). TNAT also provides traditional tobacco leaf for ceremonies and offerings, such as to Native Americans in prisons who have lost access to traditional tobacco. As of 6/30/98, monthly leaf distribution programs had been set up at over 300 prisons, halfway houses, substance abuse treatment centers, AIDS counseling programs, and similar organizations in the U.S. and Canada, where Native Americans are in need of this sacred substance. Winter also serves as the outside sponsor for Native American self-help groups at three prisons in New Mexico.

Educational outreach activities this year on projects that Richard Chapman acted as Principal Investigator for included:

- Anthropology student volunteers on the NM 22 excavations
- Anthropology student volunteers in the OCA laboratory
- Hwerry Elementary student "shadow" program in the OCA laboratory

In addition, OCA undertook a mentor program for a Valley High School student (Chadette Pfaff) through the 1997-1998 school year. This entailed 4 hours a week of instruction covering a spectrum of archeological topics including discussion of theoretical issues, overviews of cultural evolution and overviews of prehistory; to hands-on lithic, ceramic and faunal
identification, laboratory processing and curation procedures, field procedures for survey, and excavation experience. Much of the instruction was done by Kathy Pierce (OCA Laboratory Director); but many of the OCA senior and junior staff participated in the program.

B. Plans, Problems, and Recommendations

Our major goal this coming year is to continue our efforts of integration with the rest of the Anthropology department. As discussed in the following recommendations made by an ad hoc departmental committee, we hope to do it by creating a Center For Public Policy that includes OCA. This would also help handle the years when our finances are low, since a Center would receive all of its IDC, not just the portion we currently receiving.

"The Anthropology Department has identified two positions - an Environmental Anthropologist and a Cultural Resource Management Specialist - as important for future hire. These positions form the core for a projected post-graduate program in Public Policy that will effectively address several significant issues relating to Departmental needs, to those of the wider discipline, and to anthropological practice. When accomplished these hires will effectively resolve the programmatic and intellectual integration of the Office of Contract Archeology with its parent department as strongly suggested by the recent Program Review and the Dean of Arts and Sciences. They also greatly further programmatic integration among the various departmental sub-fields and interaction among their faculty and students. In addition they address the impending intention of New Mexico State officials to require more stringent academic standards and licensing for anthropologists working in the field of Cultural Resource Management. Finally, they create a center for public policy studies in anthropology that responds directly to recent exhortations by our national organization that academic departments involve themselves more closely with the current social issues.

The proposed program in Public Policy warrants two positions because of its wide relevance to many areas of anthropological practice and its consequent broad attraction to students. The positions, while having different emphasis (one centered in cultural management, the other in environmental issues) strongly complement each other. Such issues are environmental law, ethnic community rights, water land and water disputes, cultural property preservation, NAGPRA repatriation, together with their public policy and legal implications, constitute a broad spectrum of topics of vital interest to many segments of modern multi-cultural society. Together they span the various sub-divisions of anthropology, requiring their teachers to possess a breadth of training and practice experience that cannot be reasonably expected of a single individual. While we realize that this plan may have to be implemented in stages, we strongly request that this process be given the highest priority."

C. Staff Appointments and Separations

See Table 5 attached.
### TABLE 5  
**OCA STAFF**


<table>
<thead>
<tr>
<th>EMPLOYEE</th>
<th>POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bargman, Byrd</td>
<td>Crew Chief</td>
</tr>
<tr>
<td>Brown, Kenneth</td>
<td>Project Administrator</td>
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<tr>
<td>Brown, Marie</td>
<td>Project Director</td>
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<tr>
<td>Chapman, Richard C.</td>
<td>Associate Director</td>
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<td>Doleman, William</td>
<td>Project Director</td>
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<td>Elyea, Janette</td>
<td>Project Director</td>
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<tr>
<td>Eschman, Peter</td>
<td>Computer Analyst</td>
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<tr>
<td>Gerow, Peggy</td>
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<tr>
<td>Hogan, Patrick</td>
<td>Assistant Director</td>
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<tr>
<td>Lasusky, Donna K.</td>
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<td>McEnany, Timothy</td>
<td>Crew Chief</td>
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<td>Schutt, Jeanne</td>
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<td>Stauber, Ronald</td>
<td>Cartographer</td>
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<td>Winter, Joseph</td>
<td>Director</td>
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#### OCA ON-CALL EMPLOYEE - FY 1997-1998

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<th>EMPLOYEE</th>
<th>POSITION</th>
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<td>Lewis, Jericho</td>
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<td>Amos, Liz</td>
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<td>Martin, Deborah</td>
<td>Historian</td>
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<td>Melton-Atzel, Megan</td>
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<td>Page, Margaret</td>
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<td>Daniel, Carolyn</td>
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<td>Donoho, Kathryn</td>
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### OCA STUDENT EMPLOYEES - FY 1997-1998

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<td>Wegman, Karl</td>
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### OCA TEMPORARY EMPLOYEES - FY 1997-1998

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<td>Eakin, Joanne</td>
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### OCA EMPLOYEES SEPERATED - FY 1997-1998

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<td>Arms, George</td>
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MAXWELL MUSEUM OF ANTHROPOLOGY

ANNUAL REPORT
[JULY 1st 1997-JUNE 30th 1998]

Garth Bawden
Director
A. GENERAL

Throughout the year the museum continued with the process of long-range planning commenced last year. This process has as its chief goals re-structure of the internal organization of the museum to ensure that it is better able to meet the financial, educational, and social challenges posed by changing times. The current structure basically reflects that of the midcentury when the museum first consolidated its mission as part of the educational and public roles of the University of New Mexico and is in some significant ways inadequate for its current and future responsibilities. This process is almost complete but several of its suggestions have already been implemented and others will follow in the coming year with the support of the Dean of the College of Arts and Sciences. Another component of this long-term planning was a comprehensive review of the Museum’s administrative and financial procedures, undertaken on request of the director, by the UNM internal audit department. While generally positive some valuable suggestions were made to assist future procedural planning. In addition the Museum National Reaccreditation process which involved an external review during the 1996-7 year was completed with the unconditional reaccreditation of the museum. Finally planning continued with Dr. Frank Hibben to create an endowment from his donation which will establish an anthropological research center with emphasis on Southwestern archaeology. This will augment the past gifts of his home and entire anthropological collection as another foundation for the anthropological scholarship at the University of New Mexico.

B. MUSEUM REVIEWS

The second phase of internal review, undertaken by a select group of senior museum personnel chaired by the director, continued its work throughout the year. The chief aim of this process is to assess the effectiveness of existing organization, staffing, and mission to address the changing challenges of the late 20th century. Such issues as meeting the academic mission of the university, identifying the museum’s constituencies (on and off campus) and how best to serve them, seeking strategies to maintain an adequate financial base in the context of New Mexico’s fluctuating economic circumstances, and addressing how the museum can best involve itself with the changing emphases of its parent discipline and its growing involvement in social issues, are all part of this ongoing process. When complete in the coming year the ensuing organizational and mission-based suggestions will be taken to the Dean of the college of Arts and Sciences for approval and implementation where deemed appropriate.

The recent external review concluded early in the year with the full reaccreditation of the Maxwell Museum of Anthropology by the American Association of Museums, the governing professional organization for museums in the US. This process involved a comprehensive internal review followed by the visit of three external reviewers with extensive experience in the functions of research museums connected to universities. Accreditation is only granted to approximately 750 institutions out of 10,000 applicants in the US and reflects the superior performance of these museums in carrying out their missions of collections management and use. In the Maxwell’s case, this related to its excellent curatorial procedures and its active research and educational programs.
The third review comprised a year-long assessment of the Maxwell’s business procedures brought near to completion by the end of the year. This included in-depth examination of departmental financial controls and personnel policies by the University of New Mexico’s internal audit department. This is the very first comprehensive audit of this kind ever conducted at the Maxwell Museum in over 65 years of existence. The review found that in general the museum’s policies and procedures were satisfactory but made several suggestions for improvement. Some of these are already in place, others such as a regular inventory of the collections will be implemented over the near future. In overall terms this review significantly aids the museum in applying effective management over its diverse internal departments and complements the continuing organizational review.

C. REORGANIZATION INITIATIVES

The Museum continued to upgrade its organizational structure during the current year even while awaiting completion of the comprehensive plan. The following initiatives represent ongoing processes commenced in the previous year or newly implemented ones.

1. Education Division
   The year commenced with the resignation due to poor health of the education supervisor. Under her successor the entire program is being reviewed and significantly restructured with the aim of achieving a streamlined and more effective operation no longer primarily dependent on the personal relationships of its participants. Working with the director the interim head of the division has implemented a new program schedule, eliminating those that show low popularity and upgrading the remainder. In addition the educational equipment and inventory of over 2000 items is in the process of being conducted and a data base created. We are determining the capability of the existing computer equipment to effectively serve the division’s needs with the help of a consultant. Finally, the program is continuing to study and implement a closer collaboration with other museum personnel, especially curators and public programs with a view to maximizing the limited museum educational resources.

2. Museum Stores
   The procedural restructure of the stores and surplus inventory reduction was completed at the end of this year. This 18 month process, carried out in close conjunction with the Internal audit department of UNM, achieved a comprehensive review of the financial controls and inventory management procedures of the stores. The new structure has now been implemented. In addition the San Felipe Store closed due to lack of public support. However, with the support of the Vice-Presidents of Business and Finance (McKinney) and of Institutional Advancement (Jones) a new outreach facility opened in which the Maxwell Museum partnered the University Art Museum in operating the downtown 5.1.6. Gallery and Store with joint exhibitions and a museum store operated by Maxwell personnel. Awaiting completion in the coming year is final reorganization of staff for the new situation at Campus store and the 5.1.6. Gallery.
3. Museum Development Committee

In order to address the need for the Maxwell Museum to meet all of its program funding needs (no funding is given by the university) the museum as an outgrowth of its ongoing planning process has created a development committee under the chairmanship of the Chief Curator. This committee which includes representatives from all areas of the museum act as a clearing house for fund raising initiatives and prioritizes these. Actual implementation is overseen by an administrative support coordinator who ensures that all necessary contacts and official steps are taken to further the projects.

D. SPECIFIC PROJECTS

These projects fall beyond the confines of planned re-organization but carry important implications for the museum and thus are highlighted.

1. Archaeology

Compliance with the Native American Grave Protection and Repatriation Act continued with the support of a Department of the Interior Grant. Emphasis is now on consultation with native groups and continued development of guidelines for repatriation with the help of the University of New Mexico Counsel's office. The first major repatriation project, of a large collection of skeletal remains from Pecos Pueblo, is now pending.

In other areas work continues on the organization, cataloguing, and storing of University of New Mexico field school collections from the Humming Bird Site and from Pottery Mound. Preliminary sorting of a large palaeolithic collection of African lithics collected by Dr. Frank Hibben is complete. These projects continue.

2. Hibben Research Center

Dr. Frank Hibben is continuing to work with the director on setting up a trust which will be the beneficiary of a large donation. This is directed toward the support of archaeological research and related programs. We realized the first significant stage of this ongoing process when Dr. Hibben donated $181,000 as a quasi-endowment in the University of New Mexico Foundation in December. The interest from this money is administered through the Maxwell Museum on behalf of archaeological research. Initial program support assisted the ongoing Pottery Mound Collection curation, and field research of the Galiana project in the State of Chihuahua, Mexico. We were, however, unsuccessful in our efforts to obtain a federal government match for a $3 million pledge by Dr. Hibben to fund construction of a building to house the research center. We will try again next year.

3. Publications

The Museum initiated a new process for distribution of its academic publications. The museum initiated an agreement with the UNM Press whereby the press will distribute the books published through the Maxwell's Anthropology Papers series. We hope that this will ensure much wider accessibility to the series and help sales.
E. FUTURE PLANS

Plans for the coming year center on completing the two-year process of internal planning that is nearing its end and implementing important initiatives resulting from it. This will mean closely working with the dean of the College of Arts and Sciences and possibly with other senior university officials to review the cohesive long-range plan that will be the product of this planning process. In addition some residual issues raised by the recent audit of Maxwell Museum policies and procedures still await resolution. Thus the following issues must be addressed:

1. Creation of a permanent development group in the Maxwell Museum.
2. Completion of museum store restructure.
3. Assessment of administrative structure and implementation of needed changes.
4. Seek secure funding for the Museum Accountant and remove this position from the store budgets.
5. Continue working with Dr. Hibben on expansion of his research endowment.
6. Plan and possibly commence inventory of the museum’s holdings.

F. OTHER SIGNIFICANT DEVELOPMENTS, PROJECTS & EVENTS

Museum and Outside Sponsored Research 1997-1998

a. Archaeology
- Preliminary investigations of the Rio Rancho Folsom Site, New Mexico, backed by museum funds and $5000 National Geographic Society Grant (B. Huckell).
- Collaborative work with Dr. Dennis Stanford, Smithsonian Institution, on palaeolithic material shared between the Institution and the Maxwell Museum, $500 Smithsonian Grant (B. Huckell and D. Stanford).
- Recovery of botanical remains from Boca Negra Cave, Arizona, and Artificial Leg Site, Arizona, for analysis at the Maxwell Museum (B. Huckell, L. Huckell, E. Brunneman).
- Excavation of sites in Chevelon Canyon, Arizona in collaboration with Arizona State Museum (B. Huckell, C. Adams) and UNM Department of Anthropology.
- Survey of small West Mesa, Albuquerque, Folsom site (B.Huckell).


- The Ilo Project: Ongoing multi-disciplinary project in Southern Peru funded by Southern Peru Copper Corporation and Programa Contisuyu, Peru, $400,000 to date (G. Bawden).

- Funding of the 1998 Summer Field season of the Galiana Archaeological Project in Chihuahua, Mexico from the new Hibben Research Endowment, $3,000 (R. Leonard, G. Bawden).

- Continuation of curation of the Pottery Mound collections (Anthropology Department Field School) funded by Hibben Research Endowment, $2500 (B.Dorr, B. Huckell)

- 24 Outside researchers using their institutional funding to study the Maxwell archaeological collections (B. Dorr - curator)

b. Bioarchaeology

- Project: Biological Variation in Early Human Remains from South America: Implications for the Peopling of the New World. Funded by UNM RAC Grant of $2870 and Fundacao de Amparo a Perquisa do Estado de Sao Paulo, Brazil, $3983. (J. Powell).

- Bioarchaeology of the Historic Human Remains from Site LA 67310, the Gobernador Site, Santa Fe County. Funded by Laboratory of Anthropology Grant No. 99-29503, $1400. (J. Powell).

- Student Grants for attending national Forensic and Physical Anthropology meetings and for research trips: A.Carson (AAPA Annual Meetings AGSU-$50; AAPA Annual Meetings: Anthropology Dept.,-$50), E.Ozolins (AAPA Annual Meetings: AGSU-$50, Nevada State Museum for PalaeoIndian research: SRAC-$320, Universidade de Sao Paulo for research on palaeoIndian remains: SRAC-$180, Sigma Xi-$700)

- 52 Forensic Anthropological cases in conjunction with the Office of the Medical Investigator. Funded by Maxwell Museum Forensic Anthropology Program (Powell and Staff) and OMI (R. Zumwalt and Staff).

C. NAGPRA (Native American Graves Preservation and Repatriation Act)
- Continuing the Dialogue, Department of Interior (National Park Service) Grant, $127,000 for 1997-1999 NAGPRA Compliance (G. Bawden, B. Dorr)
- NAGPRA Bioarchaeological research consultancy for Office of Archaeological Services, Laboratory of Anthropology and Museum of New Mexico (J. Powell)

**Temporary Exhibitions.**

July-December 1997 The Magnificent Failure: The Story of the Western Homestead Era.

July- December 1997. Eyedazzlers. Exhibition of Navajo Textile in collaboration with the UNM Art Museum


July 1997-June 1998. Ingrained Images: Carvings in Wood from Easter Island


April 1998. Reflexiones del Corazon


Also the Maxwell Museum’s travelling exhibition “Cuando Hablan Los Santos” has been displayed at the Eidelgeorg Museum in Indianapolis and the Museum of Anthropology at New Mexico State University, Las Cruces and smaller displays were mounted in the San Felipe Gallery until its closure in December 1997. Since March of 1998 the Maxwell Museum has participated in the University of New Mexico’s Gallery 5.1.6. in downtown Albuquerque with two small exhibits - of pottery and painting.

**G. STAFF CHANGES**

**Appointments**
Jennifer Osterling, Office Assistant. 07.28.97
Judi Davis, Accountant. 07.28.97
H. STAFF PROFESSIONAL ACTIVITIES AND PUBLICATIONS

Garth Bawden (Director and Professor)


John Martin Campbell (Director Emeritus and Research Professor)


Ann Carson (Graduate Student Osteological Assistant)


Brenda Dorr (Curator of Archaeology)


2. Organized Meetings for Native American Tribal Representatives from Southwest/Plains regions and New Mexican museums at the University of New Mexico to discuss cultural affiliation of NAGPRA-related materials. July 21-23rd 1997 and August 11-13 1997.

Peter Harrison (Adjunct Associate Research Professor)


2. Appointed as Research Associate in the American Section of the University of Pennsylvania Museum, April 1998

Lisa Huckell (Associate in Paleoethnobotany)


Bruce B. Huckell (Senior Research Coordinator, Research Assistant Professor)


Dorothy Larson (Collections Data Manager)


Joseph F. Powell (Curator of Human Osteology, Assistant Professor)


Mari Lyn Salvador (Chief Curator, Associate Professor)


Vincent H. Stefan (Graduate Student Osteological Assistant)


ANNUAL REPORT
of the
DEPARTMENT of BIOLOGY

FY 1997–98
Annual Report
by:

Terry L. Yates, Chair
Department of Biology
The University of New Mexico
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THE UNIVERSITY OF NEW MEXICO

DEPARTMENT OF BIOLOGY

FY 1997-98

EXECUTIVE SUMMARY

The Department experienced a successful but volatile year. The number of FTE teaching faculty decreased from 34 the previous year to 29 with the retirement of Drs. Oswald Baca, John Trujillo, Paul Kerkof, William Johnson and Earl Bourne, the untimely death of Tokio Kogoma, and the resignation of Scott Carroll in May of 1998. Drs. Paul Lewis and Larry Li joined our faculty during 1997. The Department also hired Drs. Thomas Turner, Andreas Wagner, Richard Cripps, and the University's only MacArthur Fellow, Eric Charnov, who was hired at the Distinguished Professor level. These individuals will join us in FY98-99. The department also experienced increased enrollment, increased extramural funding, continued research productivity, expanded success in development and enhancement of our core facilities. The department finished the year first in the college in number of outside grant dollars and had 23% of the majors in the College of Arts and Sciences.

The number of undergraduate majors in the Department of Biology continued to spiral upwards, now approaching 1,200. Response by the department has been to continue our efforts to re-engineer undergraduate education by expanding opportunities for biology students in the research arena, thus, further integrating formal instruction with hands-on experience. During the past year, major outside funding continued for programs that involve integration of students into research. Dr. Don Natvig and a number of associate investigators on the main campus and in the medical school were successful at continuing funding for a new MBRS grant that involves numerous minority undergraduate and graduate students in research. Funding for this program was acquired from the National Institutes of Health (NIH). Drs. Donald Natvig, Mary Anne Nelson, Margaret Werner-Washburne and Robert D. Miller previously received a three-year NSF award called the Neurospora Genome Project, which primarily supports undergraduates. These projects, along with the previously awarded Howard Hughes Medical Research grant awarded to Dr. Kathryn Vogel, programs associated with the Museum of Southwestern Biology, the Sevilleta LTER, and numerous student additions to other existing research grants, all serve to engage our undergraduate students in biological research early in their education. Biology successfully implemented a new program of outcomes assessment including an exit survey of graduating seniors. It is clear that our efforts are having a positive effect on undergraduate education, especially in retention, and our graduation rate continues to rise. It should also be noted that it is the research productivity of our exceptional faculty that continues to make these experiences for undergraduates possible. It should also be understood that these successful activities add substantially to faculty workloads, but are not translated as part of the workload formula at higher university and state levels. Ways need to be explored to take better advantage of these new teaching activities in our state funding formula.
Outside funding for programs in Biology also maintained an upward trajectory during the past academic year. The total number of grant dollars has increased by 86% during the past three years, with actual expenditures this past year totaling $6,627,080 (compared to $3,569,699 in FY 1994) from outside sources alone. The staff needed to process this increased workload unfortunately has remained constant.

Major new funding was received in almost all areas of the department from outside grants and contracts and from private donations. Of particular note was a bequest from the Grove Estate to support needy graduate students. When the balance has cleared probate, the endowment will exceed $500,000. Among our new outside projects was a grant from NASA to Dr. Clifford Dahm and the Hydrogeoecology group for $700,000 to study ecosystem restoration in the middle Rio Grande basin. The National Long-term Ecological Research Network national office received by Dr. Gosz last year continued to develop with an additional 900k funding and the department's reputation as an international center for the study of emerging viruses was enhanced with significant new funding (to Dr. Terry Yates and medical school collaborators, Drs. Fred Koster and Brian Hjelle). Research efforts in ecology continued to be well funded and not only included continued support for the Sevilleta LTER Program, but substantial funding in community ecology of desert rodents (Dr. James Brown), heat-shock proteins (Dr. Gretchen Hofmann), lizard ecology (Dr. Howard Snell), and ecological complexity (Dr. James Brown). Research support also remained strong in cell and molecular biology for work on Schistosomes (Dr. Eric Loker), Immunology (Dr. Robert Miller), Neurospora genetics (Dr. Donald Natvig), fungal sexual development (Dr. Mary Anne Nelson), proteoglycans (Dr. Kathryn Vogel), and gene regulation (Dr. Margaret Werner-Washburne), to name but a few. Outside support in systematics and evolution continued to be well supported, including sustained support for research on protozoan parasites (Dr. Donald Duszynski), seed bank post-germination traits (Dr. Ann Evans), symmetry (Dr. Randy Thornhill), and climate change and coevolution (Dr. Terry Yates).

Products resulting from these research activities were also numerous. During the past year biology faculty authored, edited or contributed 3 books, 16 chapters in books or major synthetic reviews, 60 articles in scholarly journals and published 2 book reviews. In addition, these faculty authored 20 popular articles or reports and more than 90 abstracts, most of which involved scholarly presentations at a national or international meeting. Invited seminars and plenary presentations were given by these same scientists at approximately 50 additional institutions during this same time period.

Three departmental core facilities—The Sevilleta Field Station, The Museum of Southwestern Biology (MSB), and the Molecular Biology facility—experienced major new developments during the year beyond the unprecedented productivity all experienced through normal research and teaching activities.

The MSB continued to play a central role in major research programs involving projects in the Rio Grande Bosque, the San Juan River, emerging infections, global climate change, and flora and fauna worldwide. The MSB signed an important Memorandum of Understanding (MOU) with The Charles Darwin Research Station in the Galápagos Islands of Ecuador, making it the official U.S. repository for research specimens from that station. It accessioned 58,926 specimens to its research collections and loaned 19,770 specimens to other researchers. In addition, numerous undergraduates and graduate students conducted research projects in MSB divisions, more than 700 hundred professionals and
others visited the collections, and a large number of UNM classes borrowed specimens for instruction. During FY97-98, 50 publications involving MSB faculty and staff appeared in print, and papers acknowledging the use of MSB specimens appeared at an average rate of one every three days.

The Molecular Biology Facility experienced increasingly heavy usage during the year as well. The facility supported the research and teaching activities of more than 10 different laboratories, which collectively ran more than 11,000 sequencing reactions. During this same period, more than 50 students, postdocs and staff used the facility with or on behalf of 19 faculty. More than 13 research papers were published in refereed journals based on molecular data produced here during FY97-98.

INTRODUCTION

The Department of Biology experienced another remarkable year with increased productivity in research, new landmarks and success in teaching, outstanding productivity in extramural support, increased community and professional service including major increases in grades K through 12 support. The past fiscal year saw high levels of productivity by all sections of the department and major increases in outside funding (Appendix A), core facility development (Appendices B, C, D), research productivity (Appendix D), and graduate and undergraduate education (Appendix D). The department had an exceptional year and FY 1999-2000 promises to be even better.

The Biology Department currently employees more than 480 individuals if the student payroll is included, has more than 130 graduate students, more than 100 adjunct faculty, 74 staff, and approximately 1,200 undergraduate majors. The department again led the college in number of outside grants. Despite these numbers as of June 30, 1998, the department only employed 29 FTE faculty. These individuals, however, along with the departments exceptional staff and students, managed another incredible year, the details of which are provided below. This narrative, however, provides only the highlights of the diverse and numerous accomplishments achieved and the reader is referred to the appendices for more details.

DEVELOPMENTS & ACHIEVEMENTS

GRADUATE PROGRAM—Degrees Awarded (1997–98)
The graduate program, like the undergraduate program, continued to expand during the previous year. We received 180 applications (compared to 81 in 1990) for our graduate program, but were able to accept only 20 (11%) into our program. At the same time, the department awarded 13 graduate degrees to the following students:

Master Degrees.
- Thomas Ehlers—Dr. K.G. Vogel
- Benjamin Hanelt—Dr. E.S. Loker
- Andrew Kerkhoff—Dr. B.T. Milne
- Jacqueline Miralles-Salazar—Dr. E.S. Loker
- Brett Pickering—Dr. D.W. Duszynski
Celina Stumpp—Dr. J.T. Trujillo (non-thesis)

Doctoral Degrees.

James Baldwin—Dr. D.O. Natvig
Keka Choudhury—Dr. L.L. Barton
David Gray—Dr. A. Kodric-Brown
Timothy Haarman—Dr. J.R. Gosz
John Morrice—Dr. C.N. Dahm
Kenneth Sylvester—Dr. D.O. Natvig
Patrick Zwartjes—Dr. J.D. Ligon

GRADUATE STUDENT AWARDS & ACCOMPLISHMENTS

Honors & Awards. Biology graduate students received numerous awards and honors during the past year (Appendix D.I.5.). DAWN KAUFMAN received the following honors: Excellence in Graduate Research Award, Sigma Xi, The University of New Mexico Chapter; Full Member (elected), Sigma Xi Scientific Research Society; H. Wayne Springfield Fellowship in Plant Ecology, Department of Biology, The University of New Mexico. ELISHEVA CROWELL received the Springfield Fellowship Award (Summer 1997). KELLY HOWE won the David Perkins Award for 1997, which supported her attendance at the 19th Fungal Genetics Conference in Asilomar CA. Kelly also won first place for Graduate Student Oral Presentations at the Sixth Annual Research Day of UNM's Department of Biology. MARK JORDAN won a Fulbright Fellowship PRA Fellowship from the Organization of American States.

Service on Committees. Graduate students served the department on the following BGSA committees during FY97–98: BGSA co-Presidents (Ethan Decker and Kelly Howe), BGSA Treasurer (Kelli Sapp), SRAC (Amy Ditto, Jesse Hamilton, Drew Kerkhoff, Pascale Leonard and Jennifer Parody), GRAC (Claire Carpenter, Christy Fellows, Josh Leffler, Pascale Leonard, Damien Scott), GPSA (Pascale Leonard, Amy Powell), New Student Representative (Miranda Dendy), T.A.s (Kim Heckscher), Seminars (Paul Andrews), Space (Jennifer Parody), Publications (Josh Leffler), Research Day (Matthew Crawford), Darkroom (Pascale Leonard), Recycling (Morgan Ernest, Diana Northup, Phillip Tonne), T-Shirts (Scott Burt), Computer Pod (Chris Frazier), Biology Graduate Policy (Chris Frazier), Graduate Student Selection (Dawn Kaufman).

Outside Funding. JENNIFER PARODY received a total of $19,000 from the U.S.G.S.; N.M. Dept. of Game & Fish. DAWN KAUFMAN received a total of $2,500 from the Graduate and Professional Student Association, SRAC Travel Award, UNM; Seventh International Theriological Congress, Acapulco, Mexico; Biology Graduate Student Association, GRAC Travel and Research Award, UNM; H. Wayne Springfield Fellowship in Plant Ecology, Department of Biology, UNM. ARLENE HEILMAN received a total of $675 from New Mexico Cactus and Succulent Society Research Award; Department of Biology SRAC, UNM; GRAC, UNM. Details are provided in Appendix D.I.5.

Professional Accomplishments. In addition to sharing numerous accomplishments with their major professors, our graduate students were again highly productive on their own. During CY 1997 our
students published an additional 13 scholarly papers in refereed journals and gave 31 presentations at meetings. Three of our students received national awards for their publications. Details are provided in Appendix D.I.5.

GRADUATE PROGRAM REVIEW

During the Spring Semester of 1995, the department underwent an outside review of our graduate program. The outside review committee's full report is included in 1995 annual report. The committee was highly complimentary of the department and rated almost all aspects of our graduate program as nationally competitive. The areas recognized as being most in need of improvement and progress made during the year include:

1) Faculty salary support, especially for associate and full professors; progress was made at many levels thanks to support from the Dean and Provost. It is understood, however, that multiple years of consecutive increases will be required to put us on parity with our peers.

2) Faculty were over-burdened; still a problem, especially with recent retirements and resignations.

3) Lack of space; progress being made. More needed soon in the form of renovation funds and new molecular laboratories.

4) Limited staff support; No new staff FTEs were added in FY 97.

5) Lack of a strategic plan. The department developed a strategic plan at a retreat at the field station during the fall semester of 1995. Major items of this plan are summarized in Appendix P of the FY95–96 annual report.

UNDERGRADUATE PROGRAM

Enrollment in biology courses and the number of declared majors (almost 1,200 now) continued to increase during the past year and the ratio of students to FTE faculty soared to 41 to 1. Departmental efforts to re-engineer undergraduate education increased in success as more than one third of our graduating seniors reported having had research experiences as undergraduates. Four major externally funded programs again served to integrate our undergraduates into the mainstream of biological sciences. Thanks to a Research Improvement in Minority Institutions grant from NSF, support from Howard Hughes Medical Institute, a UMEB (Undergraduate Mentorships in Environmental Biology) grant from NSF, and an MBRS grant from the NIH, large numbers of undergraduates have been introduced to basic research as part of the educational experience at UNM. In addition to these specific programs, many additional undergraduates were actively involved in research projects in the department through support from dozens of regularly funded research projects that were active in the department. Many more gained research experiences through the department's core facilities such as the MSB and the Molecular Biology Facility.

See Appendix M for results of surveying 1997–98 graduating seniors.
FACULTY

Scholarly Activities. During the 1997 calendar year biology faculty authored 81 scholarly works (including three books) and presented more than 90 papers at scientific meetings. Invited talks were also given at 45 institutions by our faculty, who served as editors for nine scientific journals during 1997.

Sponsored Research. Departmental success at obtaining outside funding continued during the past fiscal year with FY97–98 funds increasing by 35%. The department registered $6,627,080 in outside grant support for FY97–98 as of September 1998 and had more than $24,000,000 in current outside research support.

Faculty Honors. Dr. Gretchen Hofmann was given the Bartholomew Award from the Society of Integrative Biology, a Distinguished Young Investigator award. Dr. Bruce Milne was the recipient of the Dean’s Research Semester Award (Spring 1997) and the Regents’ Lecturer Award (1995–98).

CORE FACILITIES, PROGRAMS & AFFILIATES

See reports in Appendices B and K.

FINANCIAL CONTRIBUTIONS

The department owns a variety of restricted and unrestricted accounts at the UNM Foundation. We also have established several endowments there. All did well during the past fiscal year. In addition to many generous donations made directly to the department and through the Biological Society of New Mexico, Biology was notified that it was named as the recipient of an endowment of more than $500,000 to support needy graduate students from the Estate of Alvin R. and Caroline G. Grove.

PERSONNEL

Faculty. Retired: Drs. Oswald Baca, Earl Bourne, William Johnson, Paul Kerkof and John Trujillo. Deceased: Dr. Tokio Kogoma. Resigned: Dr. Scott Carroll. Hired: Drs. Eric Charnov (MacArthur Fellow, hired as Distinguished Professor) Richard Cripps, Paul Lewis, Bai-Lian (Larry) Li, Thomas Turner and Andreas Wagner. Only Drs. Lewis and Li were present during FY 97.

Staff. See Appendix F for staff hires and terminations.

Adjunct Faculty. A complete list of Biology adjunct faculty is provided in Appendix G.

Museum Associates. A list of MSB associates is provided at the end of each Division’s report in Appendix B.
CURRICULA

A complete list of Biology course offerings for FY 97–98, along with a summary of student credit hours, is provided in Appendix H.

SPECIAL EVENTS

Research Day. The department held its seventh annual research day on April 17, 1998; see Appendix L. The day-long event focused on undergraduate and graduate research being conducted at UNM and was attended by hundreds of students and faculty. Biology students presented 12 oral papers and 22 posters. This year’s featured speaker was Dr. David M. Hillis, Alfred W. Roark Centennial Professor in Natural Sciences, Department of Zoology, University of Texas at Austin. His keynote address was “Reconstructing the History of Life.”

Departmental Seminar Series. The primary seminar series for the department again featured an outstanding group of scientists. A complete listing of invited seminars for last year is provided in Appendix I. The department also hosted numerous other more specialized series in cell/molecular biology, ecology, botany and systematics.

AFFIRMATIVE ACTION

It is the policy of the Department of Biology to provide equal opportunity in all personnel actions, institutionally-sponsored education, training, tuition assistance, social and recreational programs and advancement, without regard to race, color, religion, national origin, sex, handicap, age, weight or veteran’s status.

Hiring procedures for Biology Department faculty and staff are conducted within Affirmative Action guidelines with respect to advertising, search committees, interviewing and selection. Student employee, work-study and other job opportunities are advertised on campus and within the department.

Job descriptions are periodically reviewed and revised for accuracy in relation to actual functions and duties. Employees are also encouraged to upgrade their skills through participation in university-sponsored seminars and training programs.

CONCLUSIONS

The Department of Biology has long been a dynamic and productive unit. Last year, however, was remarkable even by Biology standards. Despite the turmoil created by changes in FTE faculty, increasing enrollment, and increasing research expenditures, the department experienced its best year ever. The available data suggest this trajectory can be maintained provided careful attention is paid to all levels in the enterprise by the department and the upper administration. First, the loss of faculty this past year was essentially unavoidable and offer new opportunities in certain cases. The ability of our remaining faculty to carry the load in the short-term depends on a rapid replacement of faculty FTEs. Attempts
are underway already to fill these positions at a rate of two per year. That should be increased to three per year.

Second, continued productivity in the teaching arena requires not only the additional faculty mentioned above, but recognition that modern education goes far beyond the formal lecture setting. These less traditional forms of teaching must be factored into the workload formula and encouraged. Competitive training programs in Biology must be supported with equipment and materials and supplies. This includes support for the “field” laboratory and the new high-technology laboratory. We also must address the summer school program and obtain new funding to relieve some of the pressure from our regular semester efforts.

Faculty and staff salaries are still very much an issue. Progress was made last year and that progress has helped morale; however, we are still a long way from where we need to be in this regard. It is far more expensive to replace good faculty and staff than to support those we already have.

Finally, research productivity has been exceptional and reflects the maturation of the department as a whole and the critical masses being achieved in specific areas. Traditional strengths such as the evolution and ecology program and the Museum of Southwestern Biology continue to develop and several new strengths have emerged. These include such groups as the fungal genomic program, the hydrogeocology program, the cell molecular program, and the computational and bioinformatics programs. The fact that all of these continue to work together is even a greater valued-added advantage. This success, however, requires constant infrastructural support. Additional support staff are desperately needed and a modernization and re-engineering of the University’s business programs is desperately needed. Space and renovation funds must be obtained soon, especially in the form of molecular laboratories. With this support the UNM Biology program will continue to lead the nation in this discipline.
APPENDICES

FY 1997–98
ANNUAL REPORT
DEPARTMENT OF BIOLOGY
APPENDIX A

ACTIVE

CONTRACTS

& GRANTS,

as of Sept. 1998
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<td>$2,360.00</td>
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<td>MILNE,B</td>
<td>VERIFICATION AND CALIBRATION OF KABX DERIVED PREC $5,192.00</td>
<td>$5,192.00</td>
<td>11/1/97</td>
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<td>3-42469</td>
<td>MILNE,B</td>
<td>REU SUPPLEMENT TO THE SEVILETTA LTER (LTER II: BIOM $64,200.00</td>
<td>$64,200.00</td>
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<td>3-46361</td>
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<td>ESTIMATION OR ECOSYSTEM ATTRIBUTES AT THE LANDSC $39,962.00</td>
<td>$39,962.00</td>
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<td>3-56080</td>
<td>MILNE/RESTRE</td>
<td>LINKING VEGETATION SUCCESSION WITH SLOPE FAILUR:FR $8,111.79</td>
<td>$8,111.79</td>
<td>8/27/97</td>
<td>6/30/99</td>
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<td>3-10921</td>
<td>MOLLES,M</td>
<td>FRAGMENTATION AND RESTORATION OF THE MIDDLE RIO $12,038.00</td>
<td>$12,038.00</td>
<td>4/1/98</td>
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<td>12/30/97</td>
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<td>RIVER BAR VEGETATION MONITORING IN THE MIDDLE RIO $9,970.00</td>
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<td>VEGETATION MAPPING AT BIG BEND NATIONAL PARL AND $150,000.00</td>
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<td>FIELD TESTING &amp; PRODUCTION OF THE WETLANDS IDENTIF</td>
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<td>ECOL. SITE ASSESS. - HABITAT MGE. PLAN</td>
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<td>$3,160.00</td>
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<td>1-17502</td>
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<td>COST SHARE FOR 3-44331 FROM ASSOC PROVOST THE RIMI</td>
<td>$166,221.78</td>
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<td>3-44331</td>
<td>NATVIG,D</td>
<td>RIMI: NEUROSPORA GENOME PROJECT AT UNM. COST-SHARE</td>
<td>$366,542.00</td>
<td>$444,400.00</td>
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<td>NATVIG,D</td>
<td>REPRODUCTIVE GENETICS OF NEUROSPORA TETRASPERMA</td>
<td>$158,701.00</td>
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<td>1-18074</td>
<td>NATVIG,D-A&amp;S</td>
<td>A&amp;S PI ACCOUNT BALANCE AS OF 10/31/94 FRS PER D WEEK</td>
<td>$2,657.59</td>
<td>$0.00</td>
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<td>1-17011</td>
<td>NELSON,M</td>
<td>ANALYSIS OF GENE EXPRESSION IN SEXUAL TISSUE OF FISH</td>
<td>$3,000.00</td>
<td>$3,000.00</td>
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<td>$3,160.00</td>
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<td>3-24691</td>
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<td>MOLECULAR ANALYSIS OF SEXUAL DEVELOPMENT IN NEUROSPORA</td>
<td>$537,798.00</td>
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<td>PARMENTER,R</td>
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<td>1-18679</td>
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<td>SEVILLETA FIELD STATION-MAPS TO 0-17059</td>
<td>$480,000.00</td>
<td>$0.00</td>
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<td>3-25971</td>
<td>PARMENTER,R</td>
<td>SUPPLEMENT TO SEVILLETA</td>
<td>$5,000.00</td>
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<td>9/9/99</td>
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<td>3-29421</td>
<td>PARMENTER,R</td>
<td>CAREER ENHANCEMENT/TRAINING ENVIRONMENTAL BIOL</td>
<td>$245,000.00</td>
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<td>3-42001</td>
<td>PARMENTER,R</td>
<td>SCIENTIFIC RESEARCH EXPERIENCES FOR MINORITY UNDERS</td>
<td>$40,000.00</td>
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<td>3-44971</td>
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<td>PARMENTER,R</td>
<td>CAPULIN VOLCANO NAT. MON.: LISTED AND CATEGORY SP</td>
<td>$12,372.00</td>
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<td>3-49181</td>
<td>POLECHLA,P</td>
<td>ECOLOGY OF THE RIVER OTTER AND OTHER WETLAND FUR</td>
<td>$20,000.00</td>
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<td>ROOT,M</td>
<td>NMOS=NM ORNITHOLOGICAL SOCIETY</td>
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<td>3-56160</td>
<td>SAENZ,G</td>
<td>REPRODUCTIVE &amp; POPULATION GENETICS OF NEUROSPORA</td>
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<td>SMITH,F</td>
<td>ECOSYSTEM RESPONSE TO INCREASED URBANIZATION IN E</td>
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<td>3-23432</td>
<td>SNELL,H</td>
<td>DUNES SAGEBRUSH LIZARD, EFFECT OF SHINNERY OAK RE H</td>
<td>$154,667.00</td>
<td>$31,000.00</td>
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<td>0-11422</td>
<td>SNYDER,A</td>
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<td>$56.00</td>
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<td>3-24761</td>
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<td>$447,687.00</td>
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<td>NSF/SLOAN FDN FELLOWSHIP: EVOL OF HOST-PARASIRE AS</td>
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<td>I-17537</td>
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<td>3-42471</td>
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<td>NUTRIENT RETENTION IN RIO GRANDE CONTINUUM (100%)</td>
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<td>INFLUENCE OF LIVESTOCK GRAZING AND GEOLOGIC SETTI</td>
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<td>AMD. #4 - INFORMAL SC. EDU. SUPPL. TO STREAM/GROUND</td>
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<td>VALETT,M/DA</td>
<td>NITROGEN UPTAKE RETENTION AND CYCLING IN STREAM</td>
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<td>3-15454</td>
<td>VOGEL,K</td>
<td>PROTEOGLYCAN STRUCTURE, METABOLISM AND ROLE IN T</td>
<td>$741,127.00</td>
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<td>VOGEL,K</td>
<td>UNDERGRADUATE CURRICULUM EDUCATION INITIATIVE</td>
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<td>3-33271</td>
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<td>WERNER,M</td>
<td>GENE REGULATION IN STARVATION-INDUCED YEAST (NOT</td>
<td>$339,765.00</td>
<td>$114,762.00</td>
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<td>3-13678</td>
<td>WERNER,M</td>
<td>REU COMPONENT: GENE-REGULATION IN STARVATION-IN</td>
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<td>3-21111</td>
<td>WERNER,M</td>
<td>ADMIENDMENT #3: PYI YEAR 4 BASE ($25,000) &amp; YR.3 MATCH</td>
<td>$337,917.00</td>
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<td>3-21112</td>
<td>WERNER,M</td>
<td>SUPPLEMENT TO THE ROLE OF GENE REGULATION IN STATI</td>
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<td>COMPITER ANIMATION OF CELL BIOLOGY</td>
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<td>3-10591</td>
<td>WERNER-WAS</td>
<td>WERNER-WASHBURRE BUDGET FOR PAMELA PADILLA: $156</td>
<td>$2,360.00</td>
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<td>1-23215</td>
<td>WERNER/FROS</td>
<td>OLIGO 1000 DNA SYNTHESIZER-MAPS TO 0-17491</td>
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<td>1-23440</td>
<td>WHITE,C</td>
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<td>WHITE,C</td>
<td>ECOLGY OF FIRE IN SEMI-ARID GRASSLANDS: RESPONSES</td>
<td>$17,160.00</td>
<td>$17,160.00</td>
<td>7/21/97</td>
<td>7/31/99</td>
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<tr>
<td>1-17541</td>
<td>YATES,T</td>
<td>COST SHARE ON 3-47179</td>
<td>$52,560.30</td>
<td></td>
<td>11/18/97</td>
<td>7/31/98</td>
</tr>
<tr>
<td>1-23419</td>
<td>YATES,T</td>
<td>MSB=MUSEUM SW BIOLOGY (REPLACES 0-11372; 9-00528) OL</td>
<td>$4,881.89</td>
<td>$0.00</td>
<td>2/17/93</td>
<td>6/30/99</td>
</tr>
<tr>
<td>1-23431</td>
<td>YATES,T</td>
<td>ELECTROPHORESIS LAB (REPLACES 0-11403; 9-00534) OLD 1-</td>
<td>($14.68)</td>
<td>$0.00</td>
<td>2/17/93</td>
<td>6/30/99</td>
</tr>
<tr>
<td>1-24277</td>
<td>YATES,T</td>
<td>BIO-PRESIDENTIAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-24518</td>
<td>YATES,T</td>
<td>(C. CRAWFORD) RIPARIAN PROGRAM ON MIDDLE RIO GRAN</td>
<td></td>
<td></td>
<td></td>
<td>6/30/99</td>
</tr>
<tr>
<td>3-29451</td>
<td>YATES,T</td>
<td>COOP AGREEMT:(15% IDC) RESPONSE OF SW MT MAMMAL</td>
<td>$264,000.00</td>
<td>$17,500.00</td>
<td>9/2/93</td>
<td>9/30/98</td>
</tr>
<tr>
<td>Account ID</td>
<td>Account PI</td>
<td>Account Title</td>
<td>Grant Total</td>
<td>Current Year</td>
<td>Begin Date</td>
<td>End Date</td>
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<tr>
<td>------------</td>
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<td>------------</td>
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</tr>
<tr>
<td>3-32351</td>
<td>YATES,T</td>
<td>INTERNATL WORKSHOP (MEXICO):COLLABORATIVE LONG-</td>
<td>$27,180.00</td>
<td></td>
<td>4/1/96</td>
<td>3/31/98</td>
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<tr>
<td>3-32891</td>
<td>YATES,T</td>
<td>RELOCATION &amp; COMPACTORIZATION OF MSB</td>
<td>$313,200.00</td>
<td></td>
<td>8/15/96</td>
<td>7/31/99</td>
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<tr>
<td>3-42431</td>
<td>YATES,T</td>
<td>BIOGEOGRAPHY &amp; SYSTEMATIC RELATIONSHIPS OF S.A. M</td>
<td>$20,750.00</td>
<td></td>
<td>10/15/96</td>
<td>3/31/98</td>
</tr>
<tr>
<td>3-47191</td>
<td>YATES,T</td>
<td>HANTAVIRUS INFECTIONS: ECOLOGY, IMMUNITY &amp; TREAT</td>
<td>$723,995.00</td>
<td>$360,420.00</td>
<td>8/15/96</td>
<td>7/31/98</td>
</tr>
<tr>
<td>3-47391</td>
<td>YATES,T</td>
<td>LONGITUDINAL STUDIES OF HANTAVIRUS IN RODENT POPU</td>
<td>$280,813.96</td>
<td>$109,820.00</td>
<td>9/30/96</td>
<td>5/14/99</td>
</tr>
<tr>
<td>3-47401</td>
<td>YATES,T</td>
<td>LONGITUDINAL STUDIES OF RODENT RESEVOIRS OF HANTA</td>
<td>$379,744.00</td>
<td>$190,755.00</td>
<td>9/30/96</td>
<td>9/29/98</td>
</tr>
<tr>
<td>3-48121</td>
<td>YATES,T</td>
<td>REPLACEMENT AND CONSOLIDATION OF RESEARCH AND R</td>
<td>$960,000.00</td>
<td></td>
<td>3/15/97</td>
<td>5/31/99</td>
</tr>
<tr>
<td>3-48851</td>
<td>YATES,T</td>
<td>BIOL. DIVERSITY OF NM STATE TRUST LAND</td>
<td>$10,000.00</td>
<td>$10,000.00</td>
<td>2/18/97</td>
<td>6/30/98</td>
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<tr>
<td>3-90334</td>
<td>YATES,T</td>
<td>CRAWFORD RIO GRANDE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total For All Grants: $24,439,107.95  
Total For Current Year Grants: $6,627,079.92
APPENDIX B

ANNUAL REPORTS:
MUSEUM OF SOUTHWESTERN BIOLOGY
&
U.S. GEOLOGICAL SURVEY
Fiscal Year 1997-98 was extremely successful for the Museum of Southwestern Biology. Collection use continues to increase and is a powerful indicator of the importance of the MSB holdings. During this period 58,926 specimens were added to the collections representing an increase of nearly 20,000 over last year. A total of 19,770 specimens were sent on loan to researchers around the world. Faculty, staff, and associates generated 51 publications during the year, which is equivalent to about one publication per week. The Faculty and staff continue to be highly visible in delivering scholarly papers at local, regional, national and international conferences. The MSB collections also attracted 728 visitors many of whom used the collections for research. A number of courses use the MSB collections in their curricula highlighting the educational importance of the collections. In addition to the use of specimens for educational purposes the MSB serves as a major resource for training undergraduate and graduate students in natural history collection management and systematics. The faculty and staff continue to be tremendously successful in obtaining grants with funding in the millions of dollars, as detailed in the divisional reports. One of the important research highlights of the year was the signing of the Cooperative Research Agreement with the Charles Darwin Field Station in Galapagos Islands. In addition to facilitating research cooperation it designates the MSB as the sister collection for the Galapagos biota. A number of other highly visible and important research projects continue to be centered in the MSB including Hanta Virus Research (Divisions of Mammals and Biological Materials), Rio Grande Bosque Research (Division of Arthropods), San Juan River Drift Research (Division of Fishes), Flora of the Sandias and New Mexico Rare Plant Technical Council Webpage (Herbarium). Other important projects too numerous to list here are detailed in each divisional report. The Museum of Southwestern Biology is continuing its upward trajectory in research output, education, and service. It is clearly established as one of the major natural history museums in the United States and is rapidly achieving status as one of the most active natural history museums in North America.
1. DIVISION HIGHLIGHTS.

The focus of this year’s museum activity was the acquisition of the hardware and software necessary for electronic cataloging of the museum’s collections. Funds provided by the department and the Sevilleta LTER program allowed the purchase of a new Dell PC Computer with the capacity to run BIOTA, a relational database designed specifically for entomological database management. In the late spring and early summer, we designed cataloging protocols specific to our collection and developed the necessary supporting documentation. By summer’s end, over 1,000 records had been entered into our database.

In other news, we received a generous gift from Ervin F. Daily. His donation included 75 books and 650 papers in taxonomy, biological control, and ecology from his personal library. Many of the books and keys are rare and out-of-print; the acquisition greatly enhanced our library.

2. TABLE OF COLLECTION USE. Fill in the blanks with the correct statistics. Collection growth should be the number of cataloged specimens added to the division. Loans (outgoing) should include the number of loans and the number of lots or specimens separated by a “/”. Loans (incoming) same format as for Loans (outgoing). # Of Visitors should include the number of researchers and general public separated by a “/”.

<table>
<thead>
<tr>
<th>Collection Growth</th>
<th>Outgoing</th>
<th>Incoming</th>
<th>N/A</th>
<th>N/A</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>36,000</td>
<td>3/155</td>
<td>0</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

N/A – due to lack of regular staff, records are estimates and there were no official visitors to the collections.

3. COURSES USING THE COLLECTIONS.

BIOL 402/502 Insect Biology, Scott Carroll. Loan of specimens to students for training and presentations.

4. COLLECTION MANAGEMENT.

The Museum TAs developed a protocol for incorporating specimens into BIOTA, a relational electronic database. To date, over 1,000 records have been created. In addition, TAs expanded the collection into new drawers, labeled specimens within series, updated synonymies and incorporated recent acquisitions into the collection.

5. AWARDS, GRANTS, AND CONTRACTS.

GRANTS SUBMITTED, FACULTY


GRANTS RECEIVED AND IN FORCE FROM PREVIOUS YEARS

Recovery from fire of experimentally and naturally flooded riparian forest sites at Bosque del Apache National Wildlife Refuge, San Antonio, New Mexico. C. S. Crawford and M. C. Molles, Jr., USFWS 1996-97, $54,998 —

Habitat requirements of Bell's Vireo: a landscape analysis of southwest populations. J. M. Parody, USGS 1997-1998, $10,000

Habitat requirements of Bell’s Vireo. J. M. Parody, NM Department of Game and Fish, Share with Wildlife 1997-1998, $9,000; $3,000 approved for 1999-2000

Application to NSF for collections of LTER specimens – $10,000 approved for new cabinets and drawers.

CONTRACTS

Renewals for arthropod ecological studies at Bandelier National Monument and Jornada LTER —

New contracts for arthropod ecological studies at Los Alamos National Laboratory and Sevilleta LTER

6. PUBLICATIONS.

A. Publications by Museum staff, students and Associates.

BOOKS


JOURNAL ARTICLES


ARTICLES IN EDITED VOLUME


B. Publications and reports based on museum specimens by researchers excluding Museum staff, students and Associates.

7. ACTIVITIES IN LEARNED SOCIETIES.

A. Invited or plenary talks.


B. Contributed talks or posters.


C. Attendance at professional meetings.

As above.

D. Service as editor or on editorial board of a journal.

Manuel Molles Associate editor of the Journal of the North American Benthological Society

E. Service as officer of professional society or organization.

Manuel Molles, Trustee for the Nature Conservancy of New Mexico,

8. OTHER PROFESSIONAL ACTIVITIES. List alphabetically under each category.

A. Seminar or colloquium presentations.


Molles, M.C., Jr. Essential stream ecology, Flathead Lake Biological Station, Polson, MT, oral presentation, June 1998

B. Presentations in a scholarly capacity at hearings, workshops, legislative committees, etc.

None.
C. Presentation to general audience in a scholarly capacity.

Sandra Brantley: “Sex, silk, and poison,” an invited talk at the New Mexico Museum of Natural History and Science as a feature of the traveling Smithsonian exhibition on spiders, April 1998.


Dick Fagerlund and Sandra Brantley: presentation to staff of the UNM ChildCare Center on insect biology, pest control, and public health; May 29, 1998


D. Service in a scholarly capacity as a member of a local, state, regional or national committee, panel etc.


Scott Carroll – Animal Behavior Society Student Research Award Committee

E. Journal referee.

Scott Carroll – Behavioral Ecology, 1 paper
  Ecology, 2 papers

Richard Fagerlund – Coleopterist's Bulletin, 1 paper
  Proceedings of the Entomological Society of Washington, 1 paper
  Journal of the Lepidopterists' Society, 1 paper

Manuel Molles – Hydrological Processes, 1 paper
  Regulated Rivers, 1 paper
  Journal of the North American Benthological Society, 6 papers

Jennifer Parody – Ecology, 1 paper

9. SERVICE.

A. Symposia, workshops, conferences, etc. sponsored, organized, held etc.

Scott Carroll – Session on evolutionary genetics and behavior, International Society for Behavioral Ecology, Canberra, Australia.

A. Public Service.

None.

B. Volunteer Training, Rio Grande Nature Center

Sandra Brantley – Several visits to Albuquerque public schools to talk about insects and biodiversity

Jennifer Parody – Participant and Small Group Facilitator for Second Assembly for Regional Water Planning of the Middle Rio Grande.
Founder and voting member of the Southwest Biodiversity Initiative

10. ADVANCED STUDY, HONORS, AWARDS, FELLOWSHIPS, ETC.

None.

11. DONATIONS AND GIFTS RECEIVED.

Jenella Loye and Scott Carroll, John Endler's collection of 1200-2500 lepidopteran specimens (1 museum case with 12 drawers), mounted siphonapteran specimens, publications on homopteran taxonomy, and several filing cabinets.

Sandra Brantley, books

Dick Fagerlund, books

12. CURRENT STAFF. List faculty, staff, students and volunteers.

Manuel Molles, Ph.D., Professor, Curator. Riparian ecology
Cliff Crawford, Ph.D., Emeritus Professor, Emeritus Curator. Riparian ecology, desert ecology
Scott Carroll, Ph.D., Asst. Professor, Associate Curator. Insect behavior and evolution **
David Lightfoot, Ph.D., Research Associate, Associate Curator. Arthropod ecology, grasshopper systematics, desert ecology
Robert Parmenter, Ph.D., Program Director Sevilleta LTER, Associate Curator. Desert ecology
Jenella Loye, Ph.D., Research Assistant Professor, Associate Curator. Ectoparasites of birds **
Sandra Brantley, Ph.D., Post-doctoral Associate, Sevilleta LTER. Arthropod communities
Carla Morita, Ph.D. student, Museum Teaching Assistant, Summer 1998. Plant biology

13. MUSEUM ASSOCIATES.

Richard Fagerlund, UNM staff, Environmental Services. NM arthropods, particularly beetle taxonomy.
MUSEUM OF SOUTHWESTERN BIOLOGY
FISCAL YEAR 1997-1998
DIVISION OF FISHES

DIVISION HIGHLIGHTS.

Thomas F. Turner hired as Curator of Fishes and Assistant Professor of Biology in February 1998

The MSB Division of Fishes currently has 40,539 catalogued lots of fishes, a total of 2,034,500 specimens. Fishes, as well as their eggs and larvae, are mainly acquired from the ongoing projects of Associate Curator, Steven P. Platania. These projects are: fish community structure studies of the Pecos River, Hybognathus amarus or the Rio Grande silvery minnow population monitoring, habitat studies of the Chama River fishes, and population monitoring and drift studies of the Ptychocheilus lucius and Xyrauchen texanus of the San Juan River.

2. TABLE OF COLLECTION USE.

<table>
<thead>
<tr>
<th>Collection Growth</th>
<th>Cataloged Lots</th>
<th>Loans</th>
<th>Use in Teaching</th>
<th>Use in Research</th>
<th>Collection Loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>11,505</td>
<td>35/2782</td>
<td>8/4343</td>
<td>13</td>
<td>30</td>
<td>4</td>
</tr>
</tbody>
</table>

3. COURSES USING THE COLLECTIONS.

FALL 1997 ICHTHYOLOGY: 30 students, 92 research specimens used; collection manager set up loans and teaching collection fishes for labs; helped TA with lab set up and field equipment acquisition. M. Molles & A. Kodric-Brown, Professors

SPRING 1998 GENERAL VERTEBRATE ZOOLOGY. 40 students; teaching collection specimens used; collection manager helped TA with lab set up and understanding fish phylogenies (all classes of fishes). H. L. Snell, Professor

4. COLLECTION MANAGEMENT.

We continue to catalogue specimens using Paradox 4.1 for Windows95. All queries, reports, jar labels and loan invoices are generated with this program. As of 30 June 1998, Collection Manager position is funded halftime by UNM Arts & Sciences

5. AWARDS, GRANTS, AND CONTRACTS.

A. Steven P. Platania  Cooperative Agreement for San Juan River Recovery Implementation Program Seven Year Research Plan (No.2-FC-40-12140) Total amount to date: $539,527.00 U.S. Bureau of Reclamation

B. Steven P. Platania  San Juan River Larval Fishes Processing (No.97-516.64) Total amount to date: $20,000 New Mexico Dept. Game & Fish

6. PUBLICATIONS.

A. Publications by Museum staff, students and associates.


### B. Publications and reports based on museum specimens by researchers excluding Museum staff, students and associates.


### 7. ACTIVITIES IN LEARNED SOCIETIES.

#### A. Invited or plenary talks.

None.

#### B. Contributed talks or posters.

**45th Annual Meeting of the Southwestern Association of Naturalists, April 10 to 1, 1998, in Albuquerque**

W. Howard Brandenburg. *Ptychocheilus lucius* reproduction and larval fish drift in the San Juan River, upper Colorado River Basin.


#### C. Attendance at professional meetings.

**45th Annual Meeting of the Southwestern Association of Naturalists, April 10 to 1, 1998, in Albuquerque**

- W. Howard Brandenburg
- Jason E. Davis
- Robert K. Dudley
- Steven P. Platania
D. Service as editor or on editorial board of a journal.

Steven P. Platania  Copeia 1997/98
Steven P. Platania  Southwestern Association of Naturalists, 1997/98

E. Service as officer of professional society or organization.

Steven P. Platania  Board of Governors, American Society of Ichthyologists and Herpetologists (ASIH)
Alexandra M. Snyder  Chair, ASIH Subcommittee on Curatorial Supplies and Practices

8. OTHER PROFESSIONAL ACTIVITIES.

A. Seminar or colloquium presentations.

University of New Mexico
Robert K. Dudley and Steven P. Platania. Materials that imitate the physical properties of semi-buoyant cyprinid eggs. Invited symposium given to faculty and graduate students in Department of Mechanical Engineering. 12 December 1997 sponsored by Charles R. Truman, Ph. D.

B. Presentations in a scholarly capacity at hearings, workshops, legislative committees, etc.

Robert K. Dudley  1997/98  Army Corps of Engineers, New Mexico
Steven P. Platania  1997/98  Rio Grande silvery minnow Recovery Team

C. Presentation to general audience in a scholarly capacity.

Steven P. Platania  1997/98  Rio Grande silvery minnow Recovery Team

D. Service in a scholarly capacity as a member of a local, state, regional or national committee, panel etc.

Steven P. Platania  1997/98  Rio Grande silvery minnow Recovery Team
Steven P. Platania  1997/98  San Juan River Research Team
Steven P. Platania  1997/98  Pecos River Research Team

E. Journal referee. List journals and number of papers refereed by each division member in alphabetical order.

Steven P. Platania  Copeia, 2 papers
Steven P. Platania  Southwestern Naturalists, 1 paper

9. SERVICE.

A. Symposia, workshops, conferences, etc. sponsored, organized, held etc.

Robert K. Dudley  Co-chair, Concurrent Session 4A. Fishes II. 45th Annual Meeting, Southwestern Association of Naturalists
Steven P. Platania  Co-chair, Concurrent Session 1C. Fishes I. 45th Annual Meeting, Southwestern Association of Naturalists

B. Public Service.

Robert K. Dudley  Review and editorial assistance with Rio Grande silvery minnow Recovery Plan
Steven P. Platania  
Public meetings on water use and ichthyofaunal ecology, media coverage of New Mexico rivers and endangered species issues.

Alexandra M. Snyder  
Database Manager, ASIH Supplies and Practices Subcommittee. As Chair of ASIH Subcommittee, respond to questions on curation of natural history collections. Respond to questions from public on fishes and aquatic habitat.

10. ADVANCED STUDY, HONORS, AWARDS, FELLOWSHIPS, ETC.

Ashley P. Cramer Intern, Summer 1998 Division of Entomology Smithsonian Institution, Museum of Natural History

11. DONATIONS AND GIFTS RECEIVED.

<table>
<thead>
<tr>
<th>Accession No.</th>
<th>Source</th>
<th>Number of lots (specimens)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997-IX:5</td>
<td>Albuquerque BioPark and Aquarium</td>
<td>1 ( 1)</td>
</tr>
<tr>
<td>1997-X:14</td>
<td>Southern Illinois University</td>
<td>4 ( 50)</td>
</tr>
<tr>
<td>1997-XII:4</td>
<td>New Mexico Game and Fish</td>
<td>34 (3,644)</td>
</tr>
<tr>
<td>1998-I:7</td>
<td>Ross Radmussen, TVA retired</td>
<td>67 ( 616)</td>
</tr>
</tbody>
</table>

12. CURRENT STAFF.

Curator of Fishes  
Associate Curator and Project PI:  
Thomas F. Turner  
Steven P. Platania

Collection Manager and San Juan River Research Assistant:  
Alexandra M. Snyder

Identification Services and Field Work  
Curatorial Assistants:
W. Howard Brandenburg  
Ashley P. Cramer
Jason E. Davis  
W. Scott Knapp
John P. Larson  
Mark A. Jordan
Joshua R. Walters

13. MUSEUM ASSOCIATES.

Brooks M. Burr, Professor of Zoology, Southern Illinois University  
Astrid Kodric-Brown, Professor of Biology, University of New Mexico  
David L. Propst, Ph.D. Endangered Species Program, New Mexico Dept. Game and Fish
1. DIVISION HIGHLIGHTS.

61,181 catalogued specimens from mostly New Mexico and other southwestern U.S. states

37,979 records, or over half of the total herp records, have been transferred from Excel into Biota, Version 1.2 by Mark A. Jordan, graduate student. Four core tables in Biota function to produce query results and simple printouts of these results. Label, invoice and other output will be developed in the future when assistance is available. An Epson color printer (wide carriage) has been purchased for the Division. It is capable of printing maps, including distribution maps and other useful Biota output for these records.

Lealand J. S. Pierce contracted by the Division to develop a system whereby the BIOTA database can download the latitude and longitude of the museum specimen localities to another program, such that the localities can be plotted onto any digitized USGS topographic maps, scales ranging from 1:250,000 to 1:24,000.

2. TABLE OF COLLECTION USE.

<table>
<thead>
<tr>
<th>Collector Curios</th>
<th>Cont. (100)</th>
<th>ry of味ring</th>
<th># of alive</th>
<th># of dead</th>
<th># of Publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>407</td>
<td>20/1628</td>
<td>0</td>
<td>11</td>
<td>30</td>
<td>16</td>
</tr>
</tbody>
</table>

3. COURSES USING THE COLLECTIONS.

SPRING 1998 GENERAL VERTEBRATE ZOOLOGY: 35 students, teaching collection specimens used; Fish Collection Manager assisted TA in lab set up and break down. J.S. Altenbach, Professor

FALL 1997 GENERAL VERTEBRATE ZOOLOGY: 35 students, teaching collection specimens used; Fish Collection Manager assisted TA lab preparations and herp phylogenies. H.L. Snell, Professor

4. COLLECTION MANAGEMENT.

Purchase of PowerMac, Epson Stylus Color 1520 printer, and Biota software for cataloging efforts.

5. AWARDS, GRANTS, AND CONTRACTS.

James N. Stuart  Natural history aspects of the Big Bend slider, \textit{Trachemys gaigeae}, in New Mexico. New Mexico Dept. Game and Fish, Share With Wildlife Program $6,500.00

Campbell, M.L., J.B.M. Miyashiro, and J.N. Stuart. Rio Grande Valley State Park mammal monitoring study. City of Albuquerque Open Space Division $14,000.00

6. PUBLICATIONS.

A. Publications by Museum staff, students and associates.


B. Publications and reports based on museum specimens by researchers excluding Museum staff, students and associates.

None.

7. ACTIVITIES IN LEARNED SOCIETIES.

A. Invited or plenary talks.

None.

2
B. Contributed talks or posters.


C. Attendance at professional meetings.

45th Annual Meeting of the Southwestern Association of Naturalists, 9-12 April 1998 Albuquerque

William G. Degenhardt
Mark A. Jordan
James N. Stuart

D. Service as editor or on editorial board of a journal.

None.

E. Service as officer of professional society or organization.


8. OTHER PROFESSIONAL ACTIVITIES.

A. Seminar or colloquium presentations.


B. Presentations in a scholarly capacity at hearings, workshops, legislative committees, etc.

None.

C. Presentation to general audience in a scholarly capacity.


D. Service in a scholarly capacity as a member of a local, state, regional or national committee, panel etc.
Stuart, J. N. 1998. New Mexico field verifier for the North American Reporting Center for Amphibian Malformation (NARCAM)

E. Journal referee. List journals and number of papers refereed by each division member in alphabetical order.

9. SERVICE.

A. Symposia, workshops, conferences, etc. sponsored, organized, held etc.

Jordan, M. A. 1998. Poster judge for the 7th Annual Research Day, Department of Biology, University of New Mexico, 17 April

B. Public Service.

The MSB Division of Amphibians and Reptiles answers a variety of questions from the public regarding herp identifications, distribution and care. This fiscal year, a total of 25 hours was spent answering 30 calls on the telephone and 2 hours answering 3 letters with questions from non research sources. The Division responded to two requests for tours by non research groups.

10. ADVANCED STUDY, HONORS, AWARDS, FELLOWSHIPS, ETC.

Jordan, M. A. Fulbright Fellowship, 1997

Jordan, M. A. Organization of American States, PRA Fellowship 1997

11. DONATIONS AND GIFTS RECEIVED.

A total of 25 accessions were received as donations to the collection (approx. 300 specimens from C.W. Painter, New Mexico Dept. Game and Fish, J.N. Stuart, National Biological Service, and various miscellaneous sources).

12. CURRENT STAFF. List faculty, staff, students and volunteers.

Howard L. Snell, Curator
William G. Degenhardt, Curator Emeritus
Marco A. Altamirano, Curatorial Assistant
Leland J. S. Pierce, Research Assistant and Mapping

Graduate Students:
Marco A. Altamirano
Jennifer Brown
Steve Earsom
Mark A. Jordan
Don S. Sias

Undergraduate Curatorial Assistant:
Terri L. Koontz

Curatorial Assistance:
A.M. Snyder, Division of Fishes, MSB
12. MUSEUM ASSOCIATES.

Curatorial Associates:
Charles W. Painter, New Mexico Department of Game and Fish, Santa Fe NM
James N. Stuart, USGS National Biological Service, Albuquerque NM
Norman J. Scott, Jr., USGS National Biological Service, San Simeon CA

Research Associates:
Roger Conant, University of New Mexico Albuquerque NM
Lee A. Fitzgerald, Texas A & M University, College Station TX
Randy D. Jennings, Western New Mexico University, Silver City NM
1. DIVISION HIGHLIGHTS.

The vascular plant holdings of the herbarium now exceed 92,500 specimens. Work continues on computerizing the collection holdings and approximately 27,000 specimens are in FileMaker Pro 4.0 (~29%).

2. TABLE OF COLLECTION USE.

<table>
<thead>
<tr>
<th>Collection</th>
<th>Frequency</th>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,289</td>
<td></td>
<td>12/1048</td>
</tr>
<tr>
<td></td>
<td>34/1587</td>
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<td>227/49</td>
</tr>
<tr>
<td></td>
<td>91</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

3. COURSES USING THE COLLECTIONS.

BIOL 463L Flora of New Mexico (48 students) specimens, facilities and staff participation
BIOL 360L General Botany/Lab (~30 students) specimens from teaching collection are used
BIOL 461 Introduction to Tropical Biology (18 students) facilities, staff participation
BIOL 474 Plant Anatomy/Lab (15 students) staff participation, specimens and fruits from teaching collection

4. COLLECTION MANAGEMENT.

Work continues in data entering and approximately 27,000 specimens are in the computer database. Efforts are under way to update the nomenclature as specimens are entered in the database. The Asteraceae and Cactaceae have been completely entered. In addition, the Threatened and Endangered species are being entered in the database. Purchase of two Dell Computer Corporation Personal Computers for data entry and the collection manager's office. A Hewlett Packard DeskJet was purchased for the collection manager's office. To insure the long-term preservation of the collections, efforts are almost complete in replacing worn and acidic genus folders for the entire collection. Last October, all of the stereo dissecting scopes were adjusted and cleaned.

5. AWARDS, GRANTS, AND CONTRACTS.

Students:


Faculty:


Lowrey, Timothy K. & Tonne, Phil. Vegetation survey of highway 156, Quay County, NM. Taschek Environmental Consulting. Contract.

6. PUBLICATIONS.

A. Publications by Museum staff, students and Associates.

Newsletters:


Books:


Reports:


Lowrey, T.K. Rare Plant Survey of State Route 36 Catron County. For NM Dept. of Transportation. Nov. 1997.

Journal Articles:

Web Publications:
Barlow-Irick, Patricia. Status Reports for the New Mexico Rare Plant Technical Council. Reports for: Brachystigma wrightii, Cirsium grahamii, Cirsium inornatum, Cirsium vinaceum, Cirsium wrightii, Eryngium sparganophyllum, Gnaphalium pringeli, Wyethia arizonica, Wyethia scabra

Barlow-Irick, Patricia and T.K. Lowrey. 1997. New Mexico Rare Plants Discussion group (NMRarePlants-L@mail.unm.edu)

Barlow-Irick, Patricia. Carlsbad Caverns National Park Floristic Survey Project.


Carter, Jack. Status Reports for the New Mexico Rare Plant Technical Council. Reports for: Apacheria chiricahuensis, Brickellia chenopodina, Brickellia lemmontii, Brickellia simplex, Clematis bigelovii, Crataegus erythropa, Crataegus wootontana, Ephedra coryi
Eriogonum leptocladon var. papillunculi
Mimosa grahamii
Ostrya knowltonii
Ribes mescalerium
Rosa stellata
Rosa stellata ssp. mirifica
Rubus exrubicundus

Knight, Paul. Status Reports for the New Mexico Rare Plant Technical Council. Reports for:
Astragalus cobrensis var. maguirei
Astragalus gracilis
Astragalus hallii var. fallax
Astragalus iodopetalus
Astragalus mollissimus var. mathewesii
Astragalus mountanalis var. cottamii
Astragalus mountanalis var. mountanalis
Astragalus oocasycis
Astragalus puniceus
Astragalus shortianus
Astragalus waterfallii

Lowrey, Timothy K. Status Reports for the New Mexico Rare Plant Technical Council. Reports for:
Artemisia pygmaea
Cacalia decomposita
Erigeron gilensis
Grindelia acutifolia
Grindelia arizonica
Grindelia havardii
Hedeoma apiculata
Hedeoma pulcherrima
Hieracium fendleri var. mogollense
Hieracium pringlei
Porophyllum ruderale spp. Macrocephalum
Verbesina longifolia
Verbesina rothrockii
Zaluzania grayana

Mygatt, Jane. Status Reports for the New Mexico Rare Plant Technical Council. Reports for:
Cucurbita texana
Lilium philadelphicum var. andicum
Lobelia fenestralis

Mygatt, Jane. Plant Taxonomists Online (PTO). International e-mail directory of more than 750 plant
taxonomists throughout the world, available on the UNM Gopher and the UNM Herbarium homepage (URL:
http://biology.unm.edu/~herb/HerbLinks.html#section3
Mygatt, Jane. Herbaria Online (HOL). International e-mail directory of more than 100 herbaria throughout
the world, available on the UNM Gopher and the UNM Herbarium homepage (URL:
http://biology.unm.edu/~herb/HerbLinks.html#section3
Mygatt, Jane. Collection Managers Online (CMO). International e-mail directory of more than 215 collection
managers throughout the world, available on the UNM Gopher and the UNM Herbarium homepage (URL:
http://biology.unm.edu/~herb/HerbLinks.html#section3

Sivinskl, Robert. Status Reports for the New Mexico Rare Plant Technical Council. Reports for:
Bulbostylis schaffneri
Calochortus gunnisonii var. perpulcher
Carex bigelovii  
Carex geophila  
Carex gravida  
Carex heteroneura  
Carex praegracilis  
Carex scirpoidea  
Carex ultra  
Carex xerantica  
Castilleja chromosa  
Castilleja haydenii  
Castilleja lanata  
Castilleja laxa  
Castilleja linariifolia  
Castilleja lineata  
Castilleja occidentalis  
Castilleja organorum  
Castilleja ornata  
Castilleja patriotica  
Cerastium texanum  
Drymaria effusa var. depressa  
Drymaria glandulosa  
Eriogonum scabrellum  
Hedyotis angulata  
Mentzelia perennis  
Mentzelia springeri  
Oxalis albicans var. pilosa  
Oxalis caerulea  
Oxalis pilosa  
Pedicularis angustissima  
Pedicularis parryi ssp. mogollonica  
Philadelphus argenteus  
Philadelphus argyrocalyx  
Philadelphus itchcockianus  
Philadelphus madrensis  
Philadelphus mearnsii  
Philadelphus occidentalis  
Philadelphus serpyllifolius  
Philadelphus wootonii  
Podistera eastwoodiae  
Polygonatum cobrense  
Potentilla subviscosa  
Sisyrinchium arizonicum  
Woodsia cochisensis

Tonne, Phil. Status Reports for the New Mexico Rare Plant Technical Council. Reports for: Erigeron bistiensis

B. Publications and reports based on museum specimens by researchers excluding Museum staff, students and Associates.

7. ACTIVITIES IN LEARNED SOCIETIES.

A. Invited or plenary talks.

None.
B. Contributed talks or posters.


C. Attendance at professional meetings.


D. Service as editor or on editorial board of a journal.

E. Service as officer of professional society or organization.

Lowrey, Timothy K. Chair, Systematic Collections Committee, American Society of Plant Taxonomists.

Lowrey, Timothy K. Member, Electronic Publications Committee, American Society of Plant Taxonomists.

Lowrey, Timothy K. Member, Internet Communications Committee, American Society of Plant Taxonomists.

8. OTHER PROFESSIONAL ACTIVITIES.

A. Seminar or colloquium presentations.


B. Presentations in a scholarly capacity at hearings, workshops, legislative committees, etc.

None.

C. Presentation to general audience in a scholarly capacity.


D. Service in a scholarly capacity as a member of a local, state, regional or national committee, panel etc.

Barlow-Irick, Patricia. The New Mexico Rare Plant Technical Advisory. Secretary.

Bleakly, David. The New Mexico Rare Plant Technical Advisory. Member.
Carter, Jack L. The New Mexico Rare Plant Technical Advisory. Member.

Knight, Paul J. The New Mexico Rare Plant Technical Advisory. Member.


Lowrey, Timothy K. The New Mexico Rare Plant Technical Advisory. Member.

Mygatt, Jane. The New Mexico Rare Plant Technical Advisory. Member.

Lowrey, Timothy K. The New Mexico Rare Plant Technical Advisory. Member.

Sivinski, Robert C. The New Mexico Rare Plant Technical Advisory. President.


Tonne, Phil. The New Mexico Rare Plant Technical Advisory. Member.

E. Journal referee. List journals and number of papers refereed by each division member in alphabetical order.

Lowrey, Timothy K. Systematic Botany (2)

Lowrey, Timothy K. Brittonia (1)

Lowrey, Timothy K. American Journal of Botany (1)

Lowrey, Timothy K. Phytologia (2)

Lowrey, Timothy K. Plant Systematics and Evolution (1)

Lowrey, Timothy K. Sida (1)

Sivinski, Robert C. Regional Reviewer and Taxon Reviewer for FNA.

Sivinski, Robert C. Technical Editor for New Mexico Naturalist’s Notes.

9. SERVICE.

A. Symposia, workshops, conferences, etc. sponsored, organized, held etc.


Public Service.

Barlow-Irick, Patricia. List manager for NMRAREPLANTS-L, an online discussion group for rare plants.

Barlow-Irick, Patricia. Carlsbad Caverns National Park Floristic Survey

Lowrey, Timothy K. Department Committees:
Salary
Staff Advisory
Greenhouse
Chair, Ichthyologist Search Committee
Associate Chair of Biology

7
Director, Museum of Southwestern Biology

University Committees:
Academic Freedom and Tenure Committee
Library Committee
Centennial Science Library Advisory Committee

Mygatt, Jane. List manager for PTO, HOL and CMO. Online directories for plant taxonomists, herbaria and collection managers of natural history collections.

Mygatt, Jane. Departmental Committees:
Greenhouse committee
Research Day Committee.

10. ADVANCED STUDY, HONORS, AWARDS, FELLOWSHIPS, ETC.


11. DONATIONS AND GIFTS RECEIVED.

16 Jul 97. 9 specimens from Bob Sivinski
15 Jul 97. 18 specimens from Bill Hevron
21 Aug 97. 11 specimens from Bob Sivinski
29 Sep 97. Miscellaneous specimens from Alaska from Bob Dickerman
29 Sep 97. One Helianthus paradoxus specimen from Marcia Radke
07 Oct 97. 5 specimens from Bill Dunmire, Curatorial Associate
07 Oct 97. 63 specimens from Bob Sivinski
24 Oct 97. One specimen of Draba from Richard Worthington
10 Nov 97. 119 specimens from Richard Worthington
15 Dec 97. Several specimens of Larrea from David Lightfoot
02 Jan 98. 50 sheets on exchange from Duke University
07 Jan 98. ~259 specimens from Bob Sivinski
20 Jan 98. ~43 specimens from Bob Dickerman, Baja California collections
30 Jan 98. 65 specimens from Bill Hevron
27 Feb 98. 3 oak specimens from NMC, Rich Spellenberg
07 Apr 98. 4 specimens of Asteraceae from CANB, Australia
12 May 98. 25 specimens from NMC, deaccessioned NMC specimens to UNM
19 May 98. 13 Atriplex specimens on exchange from BRY
26 May 98. 57 specimens from U of New South Wales
03 Jun 98. 34 specimens from MSB mammals, Turner ranch plants
03 Jun 98. 16 specimens of Carex from Bob Sivinski

12. CURRENT STAFF. List faculty, staff, students and volunteers.
Timothy K. Lowrey, Curator and MSB Director
Jane Mygatt, Collection manager

Graduate students:
Patricia Barlow-Irick
Christopher Frazier
Phil Tonne
Steven Yanoff
Undergraduate student workers:
Jennifer Agosta
Megan Jones
Cheryl Saavedra

13. MUSEUM ASSOCIATES.

Curatorial Associates:
David L. Bleakly, M.S. Botanical Consultant. NM floristics.
William Dunmire, M.S. Nature Conservancy (retired); Author, Ethnobotany of the Southwest.
Robert DeWitt Ivey, M.S. APS (retired); Botanical Author, NM floristics.
Karen Lightfoot, M.S. Botanist, Forestry & Resources Conservation Division.
Robert C. Sivinski, M.S. Botanist, Forestry & Resources Conservation Division.

Research Associates:
Jack L. Carter, Ph.D. Professor of Biology, The Colorado College,
David C. Deardorff, Ph.D. Biologist, NM State Lands Office.
William Hevron, M.S. Botanical Consultant. NM floristics.
Charles Keller, Ph.D. Director, Institute of Astrophysics, Los Alamos Scientific Labs.
Paul Knight, M.S. Botanical Consultant for Marron and Associates. NM floristics, T&E species.
Louise Lewis. Ph.D., Department of Biology, UNM.
Paul O. Lewis, Ph.D., Department of Biology, UNM.
Esteban Muldavin, Ph.D. Ecologist, New Mexico Natural Heritage Program.
1. DIVISION HIGHLIGHTS

Among the non-New Mexico specimens catalogued were 46 from Alaska received from the University of Alaska Museum and 67 from Texas - most of both series collected and or prepared by RWD.

An epizootic of as yet unverified etiology, occurred among Red-shafted Flickers in January 1997, at mid-elevation (6000-8000 feet) on the east slope of the Sandia Mountains. 60 plus posted carcasses were available for examination at the Museum at one time. Among these were three populations separated by color.

A single large and dark bird was the second New Mexico specimen of Colaptes auratus cafer from the Pacific Northwest, about 2/3rds of the rest were the medium-olive-brown backed population of the central Rocky Mountains which should be called C. a. fanesens, and the remaining birds were distinctly paler, and less richly colored. It was postulated that these represented an unrecognized southern Rocky Mountain population. This was confirmed when a molting adult (i.e., a locally nesting bird) found 14 October was received from Santa Fe. This was fully as pale as the mid-winter series. It must now be determined whether a name available from the mountains of Chihuahua may be used for this population, or whether it must receive a new name.

2. TABLE OF COLLECTION USE.

```
<table>
<thead>
<tr>
<th>Collection</th>
<th>Growth</th>
<th>Loan</th>
<th>Report</th>
<th>Patron</th>
<th>Use of Data Requests</th>
<th>No of Publications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>543</td>
<td>20</td>
<td>0</td>
<td>17</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>
```

3. COURSES USING THE COLLECTIONS.

Biol. 110
Biol. 386
Biol. 379

4. COLLECTION MANAGEMENT.

We are current with cataloging and computerization of incoming material. The database is undergoing revision for data entry standardization and is being regularly backed-up.

5. AWARDS, GRANTS, AND CONTRACTS.

6. PUBLICATIONS.


7. ACTIVITIES IN LEARNED SOCIETIES.

Hagelin, J.C. Female Mate Choice in Two Congeners of New World Quail. North American Ornithological Congress, St. Louis, MO.

Hagelin, J.C. Female Mate Choice in Gambel's and Scaled Quail: the International Society for Behavioral Ecology. Asilomar, CA.

Dickerman, R.W. Attended the annual meeting of the American Ornithologists' Union in Minneapolis, Minnesota in August, 1997.

8. OTHER PROFESSIONAL ACTIVITIES.

None.

9. DONATIONS AND GIFTS RECEIVED.

None.

10. CURRENT STAFF.

Dr. J. David Ligon, Curator of Ornithology
Ms. Julie Hagelin, Graduate Student and Curatorial Assistant
Ms. Jennifer Hill, Graduate Student and Curatorial Assistant
Mr. Timothy Parker, Graduate Student
11. MUSEUM ASSOCIATES.

Dr. Robert W. Dickerman, Curatorial Associate and Co-Curator
Dr. John P. Hubbard, Curatorial Associate
Ms. Nancy Cox, Research Associate
MUSEUM OF SOUTHWESTERN BIOLOGY
UNM DEPARTMENT OF BIOLOGY
FISCAL YEAR 1997-1998
DIVISION of MAMMALS

1. DIVISION HIGHLIGHTS.

The projects driving this activity included the Hantavirus research (and other, related emerging viruses projects), the Long-term Ecological Research Project at the Sevilleta (Mike Friggens managed two 4 person field crews) emerging virus work in Sulawesi, Guinea, Chile, and the New Mexico Bat Project. Several major grants were awarded (see Grants and Awards below), and the number of grant-funded staff increased. Of note the Very Large Mouse Array (VLMA) was designed and constructed as the world’s largest (40 acre) rodent proof enclosure for a National Institute of Health funded project to study rodent/virus interactions in a closed natural system. The MSB Division of Mammals Web Site was rebuilt and NSDI Compliant Metadata for the Catalogue Database was compiled and constructed (T. Sanchez-Brown). The database management system was rebuilt in MS Access for Windows 97. Progress was made in integration of the UNM collections with that of the USGS. A Research Experiences for Undergraduates supplement was awarded to W. Gannon to assist with this. Several students were hired to help plan and execute integration prior to moving to new facility. A NASA sponsored summer program for high school students was also sponsored.

Current and planned research within the Division:

As curator and directing the progress of the division, Dr. Yates' research program is multi-disciplinary in nature but has been focused primarily on systematics and biological diversity. Much of his most recent work has been centered within questions involving the mammalian diversity, in particular centered on systematics and ecology of South American rodents and in emerging viruses globally. As a co-PI with the LTER project, his research group on the Sevilleta is focusing on climate and productivity driven controls on mammalian populations and the degree to which fluctuations in population density affect levels of infection by Hantavirus. Additional support for the latter research has been awarded to his program by the CDC. A separate grant from the National Biological Service to examine the effects of climate change on small mammal populations on mountain tops has allowed the addition of an altitudinal component to this research.

2. TABLE OF COLLECTION USE.

<table>
<thead>
<tr>
<th>Collection Growth</th>
<th>Accessions</th>
<th>Specimens Complete</th>
<th>Ortho Singing</th>
<th>Vortex Reading</th>
<th>DNA Requests</th>
<th>Publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>5000</td>
<td>127</td>
<td>84/2350</td>
<td>16/745</td>
<td>194/230</td>
<td>617</td>
<td>6</td>
</tr>
</tbody>
</table>

Special Summary of the Hantavirus Project: 1 July 1997 to 30 June 1998

The primary goal of the program is to determine the distribution and dynamics of populations of rodents and other small mammals that are confirmed or potential vectors or reservoirs of hantaviral diseases. In support of the primary goal, the Department of Biology of the University of New Mexico (UNMDB) and the Centers for Disease Control and Prevention (CDC) have collaborated in a study to monitor rodent populations and the Sin Nombre virus (SNV) infection since August of 1994. This cooperation is to result in research that builds upon the ecological information developed at the established study sites, and support concurrent or parallel studies in other geographical areas where HPS occurs or may occur in the future, thereby offering the opportunity to observe vertebrate populations under differing ecological regimes. Additional objectives in support of the goal are to 1) assess the levels of SNV infection in wild rodent populations over time, 2) determine the affects of rodent density on SNV prevalence, and 3) determine the affects of climate on rodent density.

Monthly sampling has continued to be conducted at our established monitoring sites within New Mexico: A desert grassland site at the Sevilleta National Wildlife Refuge (NWR), 20 miles north of Socorro; and a Pinon/Juniper woodland site at Placitas, 15 miles north of Albuquerque as well as at two ancillary monitoring areas. To date we have logged approximately 206,060 total trap nights at these sites; during this period, we have trapped over 16,175 mammals from 28 different species. Ecological research undertaken in conjunction with the mammal trapping has enabled an effective assessment of absolute population numbers at each of the sites, thereby allowing the data gathered for the present study to be analyzed and correlated with data previously and currently being collected from other established sites. All data collected thus far has been analyzed. Over the course of the past six
months, densities of some species have increased by as much as 20/ha. and species that had gone locally extinct have since re-colonized our sites. Dramatic events such as these show the necessity of long-term monitoring programs. Correlating these events with climatic patterns may give us the information we need to predict future outbreaks of HPS. All rodent mortalities from the course of the study have been identified, characterized, and archived in the Division of Mammals of the Museum of Southwestern Biology. Specimens resulting from this study have been assigned unique tracking numbers and are easily accessible using the MSB’s computerized data base management system. Molecular studies currently are underway characterizing some of the more problematic taxa that are potential host species of viruses. All blood and oral swab samples from animals captured during this study have been routinely submitted to CDC for further analysis. Sero-positive animals have been reported at all sites during the period of our study, however, even though rodent populations are at or beyond their highest levels of the study period, only 3 sero-positive rodents have been captured recently on the Longitudinal Study sites. Current results and data from this project have resulted in 12 presentations at national and international meetings in the past year.

3. COURSES USING THE COLLECTIONS. List the courses including: course number, approximate number of students enrolled, type of use (specimens, facilities, staff participation, etc.).

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 121:</td>
<td>Principles of biology</td>
</tr>
<tr>
<td>Biology 122:</td>
<td>Principles of biology</td>
</tr>
<tr>
<td>Biology 386:</td>
<td>General vertebrate zoology</td>
</tr>
<tr>
<td>Biology 402/502:</td>
<td>Adv Vertebrate Biology</td>
</tr>
<tr>
<td>Biology 489:</td>
<td>Mammalogy</td>
</tr>
<tr>
<td>Biology 554:</td>
<td>Advanced Mammalogy</td>
</tr>
<tr>
<td>Art 412:</td>
<td>Museum management</td>
</tr>
<tr>
<td>Anthro 449:</td>
<td>Paleontology</td>
</tr>
</tbody>
</table>

The following courses used the collection extensively as part of their course work:

- Biology 489: Mammalogy - 23 students (1998)
- Biology 502: Advanced vertebrate biology - 15 students
- Biology 502: Topics in Chromosomal Evolution - 6 students
- Biology 651: Advanced Field Biology - 3 students
- Biology 512: Population Biology - 14 students
- Biology 554: Mammalian Ecology and Behavior - 14 students

4. COLLECTION MANAGEMENT.
The Division has been running its 90,000 specimen database on a combination of FoxPro and Excel and then converted to Microsoft Access. Recently however, we contracted with Oliver Johnson who completely re-wrote the management system. The Access program has now set the stage to expand to web site posting or network information transfers between divisions of the MSB or among mammal collections at other institutions.

We have been preparing for a merger with the USGS Biological Resources Division collections. As a part of this we have done some trial mergers of specimens and are preparing to write a grant to the National Science Foundation to fund the full merger. As a part of the merger we have converged on types of cases (white Delta Designs), developed a placement map to put the cases in the new collection area.

For details on the New Museum facility and the progress of the USGS-BRD portion of the MSB, please refer to the Directors' Report and the Division report provided by the BRD (respectively) elsewhere in this document.

5. AWARDS, GRANTS, AND CONTRACTS. List grants applied for and received. Include PI(s), grant title, agency, duration, and award amount. List alphabetically by PI. Please categorize under the following headings: Students, Faculty, Post-docs, Associates.
Students:
M. Scott Burt: Graduate research allocations (GRAC) and travel grant, department of Biology, UNM, spring 1996, $400 Morphological and genetic variation in the subspecies of Thomomys bottae in New Mexico, Student research allocations (SRAC), UNM summer 1996, $650
GRAC funding, $350.00; SRAC funding, $500.00; VPGF award, $150.00

J. Salazar Bravo: Funded research to Ecuador NSF dissertation improvement grant - $20,000

Post-Docs:
Jerry W. Dragoo: $20,000 to examine the genetics and speciation questions with foxes (Genus Vulpes) in New Mexico. Cost-share project with the US Fish and Wildlife Service and the New Mexico Department of Fish and Game. 1997-1999.

$5000 to analyze Mountain Lion scats from sheep kills using DNA fingerprints. New Mexico Department of Game and Fish; with Eric Rominger.

Jennifer K Frey:


William L. Gannon:
Awarded: 1997. National Geospatial Data Clearinghouse of State Biodiversity Laws and Policies and the Systematics, Ecology, and Life History of Mammals of the Southwest. The purpose of this project is to adapt the existing data collections of CWL and MSB to the draft National Biological Information Infrastructure (NBII) standards for biological data which are in accordance with the Federal Geographic Data Committee (FGDC)-endorsed Content Standards for Digital Geospatial Metadata. $90,000.

Bat Survey 1998: Bat Conservation International; survey of five NM - BLM Lands
Bat Survey 1998: New Mexico Depart of Game and Fish, Share with Wildlife Program,
Bat Survey 1998: US Fish and Wildlife Service (supplement to 3-42063; $11,733),
Bat Survey 1997: Bureau of Land Management, Farmington
Bat Survey 1997: New Mexico Department Game and Fish, Share with Wildlife Program,
Bat Survey 1997: Bureau of Land Management, Socorro,

Paul Polechla:

Research Technologist, Museum of Southwestern Biology, "Ecology of the River Otter and other Wetland Furbearers of the Upper Rio Grande" is a $20,000 Challenge Cost Share Agreement with the Bureau of Land Management (U.S. Department of Interior), U.S. Forest Service (U.S. Department of Agriculture), New Mexico Game and Fish Department, Office of War Chief, Pueblo de Taos, and the Regents of the University of New Mexico. The purpose of the grant is to determine the relative abundance of river otters (Lontra canadensis), mink (Mustela vison), raccoon (Procyon lotor), ringtail (Bassariscus astutus), muskrat (Ondatra zibethicus), and beaver (Castor canadensis). In addition the aquatic and riparian habitat will be analyzed. Other aquatic and riparian wildlife will be surveyed incidental to other activities

Luis Ruedas:
The Field Museum of Natural History, $950 Collections Use Grant. Accepted for February 1998.

Faculty:
Terry L. Yates:
Current and Pending Support
The Sevilleta LTER, Cycle II (co-PI with Bruce Milne); National Science Foundation, Division of Environmental Biology, 1 Oct 1994 - 30 Sept 2000, $3,800,000.
Hantavirus Infections: Ecology, Immunity, and Treatment (co-PI with Fred Koster); Department of Health and Human Services, 1 Apr 1996 - 31 Mar 2000, $2,038,472.
Replacement and consolidation of research and research training facilities of the Department of Biology, University of New Mexico. NSF. $960,000. Start Date 03/15/97.
Biological Diversity of New Mexico State Trust Land. PI. New Mexico Land Office, 16 Dec 1996 - 30 June 1999, $10,000.
Replacement and consolidation of research training facilities of the Department of Biology, University of New Mexico. PI. National Science Foundation, 15 Mar 1997 - 31 March 1998, $960,000.
Ecology of Hantavirus Enzootics: Immune Interventions. (co-investigator with Brian Hjelle); Department of Health and Human Services, 1 Aug 1997- 30 Jul 2002, $1,350,000.

6. PUBLICATIONS. Categorize under the following headings: Books, Journal articles, Reports. List the entries alphabetically by author with the relevant museum personnel in bold if a multi-authored publication. (* This is a detailed list of the total number provided in No. 2.)

Journals:

Newsletters:


7. ACTIVITIES IN LEARNED SOCIETIES.
A. Invited or plenary talks.

Gannon, W. L. Workshop on the operation of the AnaBat bat detector system (with Chris Corben and Mike O’Farrell), 1998. Attended by 26 participants from across the US. Held in Ft. Collins, Utah.


B. Contributed talks or posters; Papers presented at meetings; International, National, & Regional Activities - PRESENTATIONS: Presenter is first author unless in bold.


Friggens, M. L. Presented two naturalist seminars for grade schoolers at the Sevilleta Field Station. The kids were participants in the NM Museum of Natural History summer program. Member of the American Birding Association and volunteered in annual Hawkwatch on Sandia Crest. October 1997.


Gannon, W. L. Echolocation and bat detectors. Bat workshop for teachers, 11 October as a workshop of the the 26th Annual North American Bat Research Symposium, Tucson, AZ, October 1997


Yates, T.L., Dunnum J.L. Cheek, J.E., Frey, B.K., Lamke, K.K., Parmeuter, C.A., Polechla, P.J., Ruedas, L.A., Tinnin, D.S. “The Very Large Mouse Array” (a closed system for wild rodent study) and GIS modeling: recently initiated research and research prospects at the University of New Mexico. 11 April, 1998. Southwestern Association of Naturalists Annual Conference.


D. Service as editor or on editorial board of a journal.

Gannon: Editorial Committee - Series Editor, Publications of the Museum of Southwestern Biology
Yates. Managing Editor, Publications of the Museum of Southwestern Biology
Review Editor, American Society of Mammalogists, Journal of Mammalogy

E. Activities— service as officer of professional organization

Burt:
Member of Web committee, ASM
Organizing Committee, Southwestern Naturalists, April 1998

Gannon:
Chair, Systematic Collections Committee (American Soc. of Mammalogists), 1996 - present
member, Systematic Collections Committee (American Soc. of Mammalogists), 1992 - 1998
member, International Regulations Committee (Amer Soc. of Mammalogists), 1996 - present
member, Information Retrieval Committee, (American Soc of Mammalogists), 1988 - present
Society for the Preservation of Natural History Collections - member
Member, Main Campus Animal Care and Use Committee, UNM, 1990 - present
Organizing Committee, Southwestern Naturalists, April 1998

Ruedas:
International Relations Committee, American Society of Mammalogists
Committee for the Conservation of Land Mammals, American Society of Mammalogists
Program Committee, American Society of Mammalogists
Ad hoc Web subcommittee of the Information Retrieval Committee (ASM)
Organizing Committee (Co-chairman), Joint American Society of Mammalogists — European Mammal Society — Spanish Society of Mammalogy Meeting; June 1998, Santiago de Compostela, Spain.
Organizing Committee, Southwestern Naturalists, April 1998

Yates:
Trustee, Southwestern Association of Naturalists, 1992 - present.
Trustee, American Society of Mammalogists, 1996 - present.
Research Assistant, Department of Wildlife and Fisheries Sciences, Texas A & M University, January 1973-May 1975.

Global Environmental Facility - World Bank - Biodiversity Subcommittee.
Latin American Biodiversity Committee - Smithsonian Institution.
Bio Task Force on Environmental Biology, The NSF.
Research Needs Committee - Ecological Society of America.
International Relations Committee, Chair, ASM.
Coordinating Committee for Latin American Exchanges Land use Committee
International Policy Committee
Grants Committee Latin American Institute
Academic Freedom and Tenure Committee
8. OTHER PROFESSIONAL ACTIVITIES. List alphabetically under each category.

A. Seminar or colloquium presentations.
   None.

B. Presentations in a scholarly capacity at hearings, workshops, legislative committees, etc.
   None.

C. Presentation to general audience in a scholarly capacity.
   None.

D. Service in a scholarly capacity as a member of a local, state, regional or national committee, panel etc.
   None.

E. Journal referee. List journals and number of papers refereed by each division member in alphabetical order.

Gannon:
   Journal of Mammalogy
   Bat Research News
   Southwestern Naturalist

Ruedas:
   Fieldiana (Zoology), New Series
   Journal of Mammalogy
   Proceedings of the Biological Society of Washington

9. SERVICE.

A. Symposia, workshops, conferences, etc. sponsored, organized, held etc. [with other meeting presentations]
   None.

B. Public Service.

Gannon
   President, Near North Valley/Old Indian School Neighborhood Association, elected 1995-1998. 3,000 member neighborhood association in Northwest Albuquerque, NM.
   Judge, Regional Science Fair, 1988-present

Yates
   Recognized, Outstanding Administrative Performance, National Science Foundation
   Recipient, Robert L. Packard Outstanding Educator Award, 1995, Southwestern Association of Naturalists.
Elected Trustee, Southwestern Association of Naturalists.
Chair, Main Campus Animal Care and Use Committee, UNM
Chair, Department of Biology, University of New Mexico - 1 Aug 1995- 31 July 1999.

10. ADVANCED STUDY, HONORS, AWARDS, FELLOWSHIPS, ETC. List alphabetically under each division member.

11. DONATIONS AND GIFTS RECEIVED. List source and type (e.g., specimens, money, equipment, books, etc.)

Ca. 500 rodent specimens from Dr. Troy Best, Auburn University

12. CURRENT STAFF. List faculty, staff, students and volunteers.
Terry L. Yates  Students:
   Current graduate students:
   Burt, M. Scott (for Ph.D.)
   Dunnum, Jon (for Masters)
   Garcia, Andres (for Ph. D.)
   Perry, Travis W. (for Ph.D.)
   Racz, Gabor R. (for Ph.D.)
   Salazar Bravo, Jorge (for Ph.D.)
   Sanchez-Brown, Timothy

   Current Postdoctoral Associates:
   Dragoo, Jerry W.
   Frey, Jennifer K.
   Gannon, William L. (Collections Manager, staff)
   Polechla, Paul
   Ruedas, Luis A.

13. MUSEUM ASSOCIATES AND STAFF.

Curatorial Staff, Division of Mammals  Professional Staff
Terry L. Yates - Director 86-92; Curator of Mammals, 1978-present; Birds, 89-94
James S. Findley - Curator Emeritus; Director 74-85; Curator of Mammals, 1956-1977
William L. Gannon - Collections Mgr, 1986-98; Birds 89-94; Biol Mat,1990- ; Senior Coll. Mgr, 1998-

Students and Seasonal Staff
Anne Brown  RGZ, volunteer, (1994- present)
M. Scott Burt  Grad Asst Curator 1997-present; Bat Crew 1997-98
Polly Campbell  Volunteer, Bat Crew 1998
Peggy Case  (RGZ volunteer) 1995-present

Curatorial Associates:
   James H. Brown  UNM Department of Biology
   Richard B. Forbes  Department of Biology, Portland State University,

Research Associates:
   J. Scott Altenbach  UNM Department of Biology
   Sydney Anderson  American Museum of Natural History, New York
   Robert J. Baker  The Museum, Texas Tech University, Lubbock, TX
   Troy L. Best  Department of Biology, Auburn University
Joseph A. Cook  
Scott L. Gardner  
Sarah B. George  
Gary L. Graham  
David J. Hafner  
Bruce J. Hayward  
Edward J. Heske  
R. Dewitt Ivey  
Clyde Jones  
Dwight W. Moore  
Robert Parmenter  
James L. Patton  
Richard A. Smartt  

Natural History Museum, University of Alaska, Fairbanks  
Dept. Nematology, Curator, University Nebraska.  
Director, Utah State Museum.  
Bat Conservation International  
New Mexico Museum Nat. History  
Department of Biology, Western New Mexico University  
Illinois Biological Survey  
Retired. Active in Botany, mammals  
The Museum Texas Tech University  
Emporia State University  
Department Biology, LTER coordinator  
Museum of Vertebrate Zoology, University of California  
New Mexico Museum of Natural History.
1. DIVISION HIGHLIGHTS.

The entire MSB cryogenic collection has been computerized thanks to Gabor Racz and Matthew Garcia. Cheryl Parmenter was out of the field mostly this year and concentrated on her data management duties for the Hantavirus project. Cheryl also oversaw workstudy staff and an REU student, Carrie Gutierrez. The seven cryogenic freezers were ducted by plenums to removed the large amount of heat that the freezers generate, thus fewer repairs were needed to the freezers and the collection was safer. A air conditioning unit was installed specifically to assist in the cooling of the room. A door was found between this room (159) and the adjoining room (157) so that the genetics lab was moved to 157 to combine functions and equipment with those of the division. Because of this move a major cleanup was conducted and space was used much more effectively.

In the coming year Gannon and Parmenter will be preparing a Procedure Manual for the division, the current web page is being reworked (thanks to Timothy Sanchez-Brown) and NSF funding is being sought by Gannon and Yates to secure permanent staff to this extremely valuable collection.

2. TABLE OF COLLECTION USE.

Fill in the blanks with the correct statistics. Collection growth should be the number of cataloged specimens added to the division. Loans (outgoing) should include the number of loans and the number of lots or specimens separated by a "|". Loans (incoming) same format as for Loans (outgoing). # of Visitors should include the number of researchers and general public separated by a "|".

<table>
<thead>
<tr>
<th>Collection Growth</th>
<th>Loans Outgoing</th>
<th>Loans Incoming</th>
<th># of Visitors</th>
<th>Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>9,000</td>
<td>63/11,780</td>
<td>2/200</td>
<td>178</td>
<td>see mammals</td>
</tr>
</tbody>
</table>

3. COURSES USING THE COLLECTIONS.

Biology 489, Biology 405, Biology 502, Biology 554, Systematics

4. COLLECTION MANAGEMENT.

One new PC computer and high speed printer was purchased and installed for the computerization of the collection and for data management of the large hantavirus database. The nunc tube Locator system was improved and the NK system was incorporated into the underdevelopment MSB database management system. ALL TUBES IN THE COLLECTION WERE ENTERED AND ARE ON-LINE. That tremendous task, approximately 200,000 tubes, was completed by Spring, 1997 with the efforts of Matt Garcia and Howe Davis. During the rest of 1997 consolidation of tubes to save freezer space was begun. Future plans include finishing up several other management programs for the tissue collection and linking tables of the NK numbers with the other databases containing voucher specimens (mammals mostly). New freezers are on order because of dangerous overcrowding currently. These freezers include a liquid nitrogen freezer that requires no cooling compressors.

5. AWARDS, GRANTS, AND CONTRACTS.

[THIS SECTION COVERED BY MSB-MAMMALS]

6. PUBLICATIONS.

[THIS SECTION COVERED BY MSB-MAMMALS]

7. ACTIVITIES IN LEARNED SOCIETIES.

[THIS SECTION COVERED BY MSB-MAMMALS]
8. OTHER PROFESSIONAL ACTIVITIES.

A. Seminar or colloquium presentations.
   None.

B. Presentations in a scholarly capacity at hearings, workshops, legislative committees, etc.
   None.

C. Presentation to general audience in a scholarly capacity.
   None.

D. Service in a scholarly capacity as a member of a local, state, regional or national committee, panel etc.
   None.

E. Journal referee. List journals and number of papers refereed by each division member in alphabetical order.
   None.

9. SERVICE.

[THIS SECTION COVERED BY MSB-MAMMALS]

10. ADVANCED STUDY, HONORS, AWARDS, FELLOWSHIPS, ETC.

[THIS SECTION COVERED BY MSB-MAMMALS]

11. DONATIONS AND GIFTS RECEIVED.

[THIS SECTION COVERED BY MSB-MAMMALS]

12. CURRENT STAFF.

Dr. Terry L. Yates, Curator, Division of Biological Materials
Dr. William L. Gannon, Collections Manager, Division of Biological Materials
Cheryl Parmeuter, Division Data Manager and Safety Officer (Room 159)
Dr. Jerry Dragoo, Genetics Projects Coordinator and Safety Officer (Room 157)
Gabor Racz - Ph.D. student and Collection Support
Matt Garcia - Divisional Technician (1997-1998)
Carrie Gutierrez - REU Collections Improvement (1998-1999)

13. MUSEUM ASSOCIATES.

No Associates are currently recognized under this division. See the MSB-Mammals division or Terry Yates information for associates that are also associated with this division.
MUSEUM OF SOUTHWESTERN BIOLOGY  
UNM DEPARTMENT OF BIOLOGY  
FISCAL YEAR 1997-1998  
DIVISION: U.S. GEOLOGICAL SURVEY

1. DIVISION HIGHLIGHTS.

Staff of the Arid Lands Field Station of the Midcontinent Ecological Science Center in Albuquerque had a busy year during FY97-98, both in the field and in the museum. This year saw the continuation of studies of bats in the Jemez Mountains, funded by Los Alamos National Laboratory, although at a somewhat lower level. Several presentations were given on this work and a presentation at the North American bat meeting generated considerable favorable comment. This was the second year of our work on roosting bats in historic structures on National Park lands. The first-year report was particularly well-received by the National Park Service. This year we are making additional comparisons among roosting sites used by reproductive and non-reproductive females at several sites. Final reports were issued to the U.S. Fish and Wildlife Service on small mammal work conducted during the previous three years on mammals in riparian habitats in the middle Rio Grande valley; Petrified Forest National Park on baseline surveys for small mammals; and to U.S. Fish and Wildlife Service on a GIS database on New Mexico plant species of concern (a cooperative project with the New Mexico Natural Heritage Program). Personnel at the Field Station had a particularly successful year in terms of published products. The most noteworthy publication was Ramotnik's contribution, "A conservation assessment of the Sacramento Mountain salamander," a compendium of all available information on this unique southwestern salamander. Staff provided technical support to Department of Interior agencies, and continued research on a variety of natural resources topics. The Station was successful in obtaining funding for a variety of projects including: status reviews of the Arizona water shrew and Mexican long-tongued bat, continued studies of the Sacramento Mountain salamander, curatorial upgrade of the U. S. Geological Survey collections in the MSB, and studies of bat ecology in New Mexico. The most significant museum activity was the acquisition of new monies to provide curatorial upgrades of the USGS collections. Other noteworthy museum activities were associated with improving and revising specific museum procedures as well as developing written policies and procedures to improve the efficiency of the museum operations in the Divisions of Birds and Mammals. In particular this includes activities associated with integrated pest management and specimen processing.

2. TABLE OF COLLECTION USE.

<table>
<thead>
<tr>
<th>Collection Growth</th>
<th># Loans (outgoing)</th>
<th># Loans (incoming)</th>
<th># Visitors</th>
<th># Data Requests</th>
<th># of Publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>182 catalogued*</td>
<td>2/27</td>
<td>2/72</td>
<td>see MSB</td>
<td>20</td>
<td>13</td>
</tr>
</tbody>
</table>

* plus 19/755 accessioned

3. COURSES USING THE COLLECTIONS.

Conservation Biology 25 students staff participation/lecture

4. COLLECTION MANAGEMENT.

- Obtained multi-year funding for curatorial upgrades of the USGS collections allowing new hires of museum personnel and purchases of museum supplies;
- Developed written protocols to replace gaskets for selected UNM mammal cases and trained staff to replace gaskets (28% cases completed);
- Inventoried and reorganized the contents of several prep lab freezers and developed an inventory system to improve the tracking of specimens and data;
- Modified bird and mammal skeletal cleaning procedures to improve the quality of the specimens, and (re)trained staff;
- Reorganized the two dermestid bugging facilities (indoor and outdoor) to improve the efficiency of the operation and quality of the final product, and (re)trained staff;
- Established written procedures for using freezers as a preventative pest control method for bird and mammal skins and set up a protocol to regularly monitor freezer temperatures using dataloggers;
- Developed protocol to document the condition of large mammal skeletons during the cleaning (cooking) process;
- Established written policies for the disposal of biohazardous wastes in the Divisions of Mammals and Birds;
- Continued work with MSB colleagues on developing guidelines and written protocols for integration of the mammal collections;

5. AWARDS, GRANTS, AND CONTRACTS.

Faculty:

Habitat use of bats in and near Jewel Cave National Monument, Black Hills, South Dakota, Michael A. Bogan, Principal Investigator. USGS NRPP Competitive Grants Program, $60K, FY95-97.


Biological survey for mammals at Petrified Forest National Park. Michael A. Bogan, Principal Investigator. Southwest Parks and Monument Association Competitive Grants Program. $7.5K, FY96-97.

Status and reproductive biology of gypsum scalebroom (Lepidospartum burgessii). Michael A. Bogan and Juanita Ladyman, Co-principal Investigators. USGS Species at Risk Competitive Grants Program. $57K, FY97.

Interactions between bat maternity roosts and historic park structures. Michael A. Bogan, Principal Investigator. Reimbursable agreement, National Park Service NRPP funds, $46.5K, FY97-98.


New Mexico plant species of concern: development of a database for the geographic information system of the Ecological Services Office, USFWS. Michael A. Bogan and Patricia Mehlhop, Co-principal Investigators. USGS Species at Risk Competitive Grants Program. $37.5K, FY96-97.


Impacts of global climate change on Chihuahuan Desert vegetation. Laura Huenneke, New Mexico State University, Principal Investigator. $450K, FY92-98.


Curatorial upgrade of the U. S. Geological Survey biological collections at the University of New Mexico. Cindy A. Ramotnik, Principal Investigator. USGS, Midcontinent Ecological Science Center, Internal competition for redirected funds. $75K, FY98-02.
Post-doctoral Affiliates:

Response of southwestern montane mammal communities to global change, Jennifer Frey, Principal Investigator. USGS, $263K, FY94-98.

6. PUBLICATIONS.

A. Publications by Museum staff, students and associates.

Book Chapters:


Journals:


Reports:


Websites:


B. Publications and reports based on museum specimens by researchers excluding Museum staff, students and associates. N/A

7. ACTIVITIES IN LEARNED SOCIETIES.

A. Invited or plenary talks.

B. Contributed talks or posters.


C. Attendance at professional meetings.


Cryan: 27th North American Symposium on Bat Research.

Ramotnik: Southwestern Association of Naturalists, Society for the Preservation of Natural History Collections, Jemez Mountains Symposium on Biological Research.

Valdez: Southwestern Association of Naturalists, 27th North American Symposium on Bat Research

D. Service as editor or on editorial board of a journal.

Bogan: Editorial Board, Occasional Publications and Special Publications, Museum of Southwestern Biology, University of New Mexico.

Ramotnik: Associate Editor, Collection Forum.

E. Service as officer of professional society or organization.

Bogan: Colorado Bat Society: Regional representative; American Society of Mammalogists: Scientific Collections Committee; American Society of Mammalogists: Animal Care & Use Committee

Ramotnik: Society for the Preservation of Natural History Collections: Conservation Committee (Resources Subcommittee); Membership Committee; and Publication Committee.

8. OTHER PROFESSIONAL ACTIVITIES.

A. Seminar or colloquium presentations.

Bogan: Biological research in the US Geological Survey. UNM Conservation Biology Class, D. Ligon.

B. Presentations in a scholarly capacity at hearings, workshops, legislative committees, etc.

Bogan: Natural history of bats in New Mexico. Bats and abandoned mines workshop, Bat Conservation International and Bureau of Land Management, Socorro.
C. Presentation to general audience in a scholarly capacity. N/A

D. Service in a scholarly capacity as a member of a local, state, regional or national committee, panel etc.

None.

E. Journal referee.

Bogan: Great Basin Naturalist (2); Southwestern Naturalist (3); Journal of Mammalogy (3)

Ramotnik: Collection Forum (1).

9. SERVICE.

A. Symposia, workshops, conferences, etc. sponsored, organized, held etc.

Bogan: Co-Chair (with Yates) of 1998 annual meeting of Southwestern Association of Naturalists

B. Public Service. N/A

10. ADVANCED STUDY, HONORS, AWARDS, FELLOWSHIPS, ETC.

None.

11. DONATIONS AND GIFTS RECEIVED.

Grand Teton National Park: specimens
Colorado Natural Heritage Program: specimens
U.S. Fish & Wildlife Service, South Dakota: specimens
San Andres National Wildlife Refuge: specimens
Navajo Natural Heritage Program: specimens
Wyoming Department of Game & Fish: specimens
Mesa Verde National Park: specimens
Dinosaur National Monument: specimens

12. CURRENT STAFF.

Michael A. Bogan — Project Leader
Gerald Joe Candelaria — Museum Technician
Cristina Chavez — Museum Technician
Paul M. Cryan — Biological Science Technician
Amy Ditto — Biological Science Technician
Tanya Dewey — Biological Science Technician
Keith Geluso — Biological Science Technician
Carrie Pippin — Museum Technician
Cindy A. Ramotnik — Collections Manager
J.C. Richardson — Office Manager
Jim N. Stuart — Wildlife Biologist
Ernest W. Valdez — Wildlife Biologist

13. MUSEUM ASSOCIATES.

Robert B. Finley
APPENDIX C

ANNUAL REPORT:
LONG-TERM
ECOLOGICAL
RESEARCH
PROGRAM
1. The Sevilleta LTER Program

The Sevilleta Long-Term Ecological Research Program (LTER) was initiated in October, 1988, and has focused on a suite of ecological hypotheses concerning climate dynamics and the responses of organisms in a biome transition zone in central New Mexico. The Sevilleta LTER research region straddles several major biomes of the Southwest, and the large geographic scale of the Sevilleta region is important for studies that range from genetics and physiology at the organismal level, to the dynamics of biome transition zones. The region is strongly influenced by the El Niño Southern Oscillation (ENSO), with major fluctuations in precipitation on semi-decadal time scales. To date, 100 LTER research papers have been published or are in press.

A. Climate/Meteorology. (Doug Moore)

Climate/meteorological efforts during the past year have focused on maintaining and upgrading the current meteorological network with particular emphasis on installation of soil moisture Time Domain Reflectometry (TDR) instrumentation. There has also been increased effort to directly measure evapotranspiration using Bowen Ratio and Eddy Correlation techniques. Both the soil moisture monitoring and water flux measurements are important in the water balance modeling effort.

Database management continues to be a major part of the meteorological effort and considerable time has been spent making meteorological and climatological information available on the Network. This includes both raw data as well as daily, monthly and annual summaries. This information can be accessed via the Sevilleta - Climate Meteorology Home page at the following URL:
http://sevilleta.unm.edu/meteor/clim-met-home.html

An on-going project is to perform more complete evaluation of the effects of El Niño Southern Oscillation (ENSO) on New Mexico and how that relates to the Sevilleta in particular using GIS spatial analysis techniques available in Arcview 3.0. This involves using an array of High Confidence (HCN) weather stations in and around New Mexico with long-term precipitation and temperature records.

Data management continues to require significant effort in obtaining and archiving of lightning strike location data. There is currently an effort to compare the effectiveness of this data to predict precipitation inputs as compared to that from Nexrad Doppler radar data.

B. Vegetation: Productivity, Populations, and Ecotone Studies. (Bruce Milne, Kimberly Taugher, James Gosz, Debra Coffin)

Overview. During the past year we have completed a large vegetation mapping effort in cooperation with the New Mexico Natural Heritage Program. We also installed 10 new permanent plant transects in our existing
mammal web study sites in an effort to describe the extant vegetation communities, observe changes in composition and diversity over time and provide floral data to accompany our rodent datasets. We are also now studying the changes in floral richness and diversity as well as potential disturbance mechanisms concomitant with the reintroduction of a small population of Gunnison's prairie dog at the Sevilleta National Wildlife Refuge. Data for the vast majority of plant studies at the LTER have been entered, quality checked, analyzed and archived. Analysis of all vegetation transects for 1996 can be found on our web page at: http://www.sevilleta.unm.edu/plant-home.html

Data for our water balance modeling project are analyzed, and are currently being used to build experimental models. Archival for these data are scheduled for the upcoming month.

Water balance model. (Bruce Milne and Scott Martens).

Based on the renewal proposal, the Sevilleta continued to implement a spatially explicit water balance model for the site. We contracted with Dr. Scott Martens to adapt his model, SPLASH, to the Sevilleta. SPLASH couples atmosphere, vegetation, and surface-subsurface hydrology in a distributed, or spatially-explicit, context as a grid of cells. Temporal resolution varies from one second to one day depending on the process simulated. Time steps are adjusted adaptively depending on the fastest water flux to enable efficient computation. This also allows simulation of high-frequency, but important, precipitation or runoff events.

SPLASH includes a microclimate simulator that extrapolates meteorological data (temperature, humidity, precipitation) in space using elevational lapse functions developed previously for the Sevilleta. Solar radiation input, as modified by topography, is also simulated for each cell. Transpiration is estimated using a Penman-Monteith approach. Compartments of water included in the model are canopy storage, snowpack, surface water, unsaturated soil water, and saturated soil water. The fluxes of water modeled are precipitation (rain and snow), canopy throughfall, snowmelt (using an energy balance approach), lateral surface flows (using Manning’s equation), infiltration (using Green-Ampt infiltration approach), exfiltration, lateral subsurface flow (using Darcy’s law), deep seepage, transpiration, and evaporation from soil and canopy surfaces (using an energy balance approach). Recently completed maps of LAI, plant height, and plant cover will be used in conjunction with two years of monthly plant cover measurements to create monthly resolution plant cover maps for the Sevilleta.

The model was originally designed and used as part of the Sierra Nevada Ecosystem Project at UC Davis where it was applied to forested watershed on the west slope of the Sierra Nevada in California. SPLASH is used for the Canopy Crane site in southern Washington. Eventually, Sevilleta simulations will include carbon and nitrogen cycling modules, e.g., production, decomposition, mineralization, etc., as required for application at the Canopy Crane site. Validation is limited to testing output from components of the model at specific points where pertinent data have been collected, e.g., automated time domain reflectrometry (TDR) measurements of soil moisture, remotely sensed surface temperature measurements made in June 1997 by J. C. Richie from ARS. (http://algodones.unm.edu/waterbal/waterbal.html)

Development of the Sevilleta Vegetation Map. (Bruce Milne, Esteban Muldavin, Greg Shore)

A preliminary vegetation map with nominal 2 ha resolution has been created for the Sevilleta. The map includes 30 vegetation classes derived from an unsupervised classification of 12 Thematic Mapper images collected in three seasons over a four year period. Plant composition, height, and cover were measured at three or more ground points for each class. Leaf area index for the five plant guilds used in the JOR studies were derived for each cover class. The maps provide a valuable resource for the water balance model and serve as general habitat maps for many other studies. Soon, Esteban Muldavin of the New Mexico Heritage Program, will complete a plant classification at the association level from which the 30 classes will be combined, thereby enabling direct comparison with other mapping efforts in the state, i.e., The Gray Ranch.
Melrose Missile Range, White Sands National Monument, Cannon Air Force Base. See data in:
(http://algodones.unm.edu/~bmilne/vegmap/veg.maps.html)

Plant population studies of important grass species. (Debra Coffin).

Because of the importance of black grama and creosotebush in Chihuahuan desert ecosystems, and of blue
grama in Great Plains grasslands, our plant population studies are focusing on these three species. In 1996,
we initiated a seed production study of blue and black grama at 5 sites differing in dominant species (blue
grama, blue grama/black grama, black grama, black grama/creosotebush, creosotebush). We plan to collect
seeds of these species again in 1997 and 1998 to coincide with the predicted El Niño event. We also
collected soil samples for seed bank analyses at these same sites in November (1995) after a severe drought,
and again in November and April (1996) after average rainfall conditions. More blue grama seeds were
stored in the soil than black grama for all dates, and blue grama was one of the few grasses with seeds in the
soil following the drought. In 1996, we conducted a watering experiment to determine if differences in the
temporal and spatial distribution of resource use by blue grama, black grama, and creosotebush could
account for codominance of these species at the Sevilleta (Coffin 1997a). Blue grama acquired water at
cooler temperatures than black grama, and creosotebush acquired water over a broader range of depths than
the grasses. Analyses using the ECOTONE model with this information suggest that these differences in
resource use are important to patterns in species dominance. The model also predicted that black grama will
increase in dominance under increased temperatures expected with elevated CO2 in the future. Effects of
grazing on the availability of soil water under canopies of blue grama compared to black grama are being
evaluated with the SOILWAT model (Hochstrasser and Coffin 1997). We are currently conducting an
experiment of leaf water potential to further investigate differences in species responses. We are also using
the SOILWAT model to evaluate the important environmental constraints on seedling establishment of blue
and black grama. We will continue our field and modeling analyses in order to better understand the
processes controlling species dominance at these sites.

Climate variability and pinyon pine demography. (Julio Betancourt, USGS-Desert Laboratory; Tom
Swetnam, Laboratory of Tree-Ring Research, University of Arizona; and Jerry Gottfried, USDA-Forest
Service, Tempe, AZ.)

Dendrochronological methods were used to determine the ages (births and deaths) of 850 seedlings, and
more than 2000 living and dead trees in the Sierra de los Pinos back to late 1500s. The inclusion of dead
trees in our analysis permits reconstruction of dynamic age structures after 1850. Ancillary data collected at
each of our five plots (four 1/2 ha and one 11 ha plot) include diameter at root crown, tree height, and
 canopy dimensions for all pinyons and junipers in the plots. We also sampled soils under living and dead
pinyons of known age to evaluate the stability of soil pH, phosphorous, carbon, and nitrogen content 50-100
years after the trees died.

Recruitment episodes are strongly episodic, with major events represented at two or more of the plots in
1630-1670, 1710-1730, 1770-1790, and 1900-1920. Based on the seedling and sapling data, there also
appears to be a pulse in recruitment since 1976. The period from 1942-1956 accounts for most of the
mortality evident in the vast number of dead trees across the Sierra de los Pinos. This event eliminated most
trees established before 1850, shifted the age distribution to younger trees, and decreased the proportion of
pinyons to junipers in all of the plots. Below the litter layer, we found no differences in soil carbon and
nitrogen between living trees and trees that have been dead for 50 to 100 years. We aggregated births and
deaths across all of the plots and compared demographic trends with regional climate reconstructions from
tree rings. This comparison suggests the following model for the long-term behavior of these woodlands.
First, broadscale mortality during catastrophic droughts, such as 1575-1595, 1667-1680, 1730-1750.
1890-1904, and 1942-1957 release existing seedlings and saplings from competition for light, water and nutrients and open up niches for recruitment. A preferred niche might be the footprint of a dead tree (a pool of soil and carbon and nitrogen), which persists for 100 years or more. Recruitment pulses tend to occur in the first sustained wet period following the drought and the associated mortality. An example of this process may be the pulse in recruitment since 1976, on the heels of the mid-century drought and sustained by a string of wet winters linked to anomalous warming of the tropical Pacific. Most recently, we have expanded the seedling part of our study to other areas in the middle Rio Grande Basin to discriminate between climate and grazing effects (e.g., fencing of the Sevilleta in 1976). Finally, our study underscores the importance of reconstructing, observing, and assessing ecological processes and patterns at the appropriate scales, i.e., mesoscales and centuries. Ecological synchrony at these scales is the hallmark of climatic effects on ecosystems and is a key to separating cultural from natural causes of environmental change.

Precipitation Seasonality Recorded in Pinyon Pine Cellulose D/H Ratios. (Elise Pendall, Laboratory of Tree-Ring Research, The University of Arizona, Tucson, AZ.)

The D/H ratio in sap is a tracer of water use by pinyon pine, and D/H in cellulose of tree rings and leaves records precipitation seasonality at sites along a gradient of decreasing monsoon rain. Water use by pinyons shifts from >50 cm to <50 cm depth over the course of the growing season at the Sevilleta LTER, in response to monsoon rain inputs. This contrast with water use by pinyons at sites in Nevada and northern Arizona receiving less monsoon rain, where deep water (>50 cm) is accessed throughout the growing season. The background source water D/H ratio is related to ENSO-related changes in winter rainfall, and is recorded in tree-ring cellulose at the Sevilleta and in northern Arizona. D/H ratios in sap are enriched during evaporation from needles, imparting a summer humidity signal to photosynthates that is ultimately incorporated into needle cellulose at all sites along the gradient of decreasing summer rainfall. D/H ratios in pinyon needles preserved in packrat middens at the Sevilleta suggest little change over the past ~40,000 years in monsoon precipitation. Alternatively, tropical moisture sources and abundant late spring precipitation would explain the relatively enriched D/H ratios observed during the Last Glacial Maximum. Data management is in process. All isotopic data (hydrogen and oxygen stable isotopes) from Sevilleta rainfall samples and a few groundwater samples will be contributed to the Sevilleta database.

C. Nutrient Cycling and Soil Ecology. (Carl White and John Craig)

Primary inputs to ecosystems are determined from chemical analyses of bulk precipitation and the wet/dry collectors (see meteorological section). Annually, replicate litter bags of last year’s production of black grama, juniper, Indian rice grass, and creosote are placed at 4 core sites to measure decomposition: Deep Well; Cerro Montosa; Rio Salado; and Red Tank. Collections are made seasonally through the first year and after two years. A fifth species, blue grama, is placed at the Deep Well site also, which represents the most extensive mixture of blue and black grama. The Deep Well site is also a site represented by the LIDET inter-site decomposition study. At these 4 core sites, soil erosion bridges (5 at each site) were installed and are measured to monitor changes in soil microtopography (erosion/deposition). Associated soil analyses include texture, water holding capacity, organic matter, nitrogen mineralization potential, total N and P, and soil conductivity. A synthesis of soil C and N dynamics at a creosote-grassland ecotone was accepted for publication in Ecology.

Data from the C and N dynamics study are available on the web at http://sevilleta.unm.edu/soil/tc_sub_soil.shtml. A copy of the manuscript with figures and tables is available as well. Also at this address is information on the soil erosion bridge study.

Precipitation chemistry summary and raw data can be viewed at http://sevilleta.unm.edu/water/ppt_chem/precip_chem.shtml.
Decomposition data are currently being QA/QCed and will be available on the web in the near future. Background information on plant litter decomposition, as well as the LIDET study can be viewed at http://sevilleta.unm.edu/soil/nc_sub_decomp.shtml.

D. Trophic Interactions/Animal Population Studies.

Vertebrates. (Parmenter, Yates, Brown, Friggens, Lightfoot). 1997 is the ninth consecutive year for the spring and fall rodent trapping for the Sevilleta LTER Small Mammal Population Study core dataset. Forty percent of the trapping effort generates material for continuing investigation of taxonomy and population trends of host parasites. This research measures mammal densities at six localities representing the major biomes on the SNWR. A four person crew has completed six weeks of field work this year. We can already see a dramatic population increase this year over the two past drought years, especially within the family Heteromyidae. The Bird Population Trend study consists of seasonal point counts in three habitat types on the Sevilleta. The bird densities are also up this year, largely a result of bountiful seed crops produced last fall. Rodent data can be viewed at: http://sevilleta.unm.edu/dbVmammal/doc/master-mammal.lst

Bird data can be viewed at: http://sevilleta.unm.edu/dba/animal/bird_transect.dbf

Arthropods. (Brantley, Parmenter, Lightfoot). The 1996 drought strongly reduced numbers of arthropods collected from the Sevilleta pitfall traps, with abundances not returning to more typical levels until May 1997. Camel cricket numbers increased first, followed by grasshoppers, tenebrionid beetles and spiders. Pitfall sites at Bosque del Apache and in the grasslands of the Magdalena Mountains were closed, but seven study sites remain. The reference collection of several thousand specimens was deposited with the Museum of Southwestern Biology at the University of New Mexico. Database improvements included the addition of new fields to facilitate data grouping, and a change from species number codes to codes based on species name. This development reflects the growing number of Sevilleta arthropod species that have been identified, rather than listed as “operational taxonomic units.” Species distribution data from the Sevilleta have contributed to statewide efforts to inventory arthropod diversity by documenting range extensions and undescribed species. Data are not archived as yet, pending identification confirmations.

E. Disturbance Studies

Wildfires. (Robert Parmenter, James Gosz)

Post-fire measurements of vegetation re-growth is continuing for experimental and natural fire sites on the Sevilleta. Analyses are underway, though data have not been archived. One manuscript on grama grass responses to fires has been published (Gosz and Gosz 1996), and one manuscript on harvester ant responses to fires (Zimmer and Parmenter) has been submitted to Environmental Entomology; eight more manuscripts on plants, rodents (2), pronghorn, beetles, grasshoppers, spiders, and homopterans are in preparation.

Prairie dog reintroduction project. (James Gosz, Robert Parmenter, REU-Ana Davidson)

A population reintroduction of Gunnison's prairie dogs was begun in March 1997 in the grasslands near the South Gate region of Sevilleta. The influence of the prairie dogs on vegetation and other rodent species is being measured by REU student Ana Davidson. Data are entered and are being analyzed, but are not archived as yet.

Small scale disturbance studies. (D. Coffin)

We are evaluating the effects of small, patchy disturbances, such as nest sites of harvester ants and mounds
from kangaroo rats, on vegetation dynamics through field studies and simulation modeling. Removal plots (3 m x 4 m) of the dominant species that were initiated in 1995 at five sites along a grassland-shrubland transition zone were resampled in 1996. We found that plant recovery was dependent upon the dominant species removed (Coffin 1997b). Recovery on plots previously dominated by blue grama was largely due to the invasion of species from the surrounding landscape whereas recovery on plots previously dominated by black grama was primarily growth of plants of other species remaining on the plots. Recovery on creosotebush plots was limited to microsites located under shrubs that were removed. These plots will continue to be monitored annually for plant recovery and will be maintained to exclude the previous dominant species from the plots in order to evaluate shifts in dominance through time. As part of this project we are modifying the STEPPE individual plant based model developed for shortgrass steppe communities at the SGS-LTER for grass-shrub ecotones at the Sevilleta. Results from the ECOTONE model indicate that long-term dynamics on these removal plots depend upon the source of propagules, either from the plot, patch or landscape. A recent award to Coffin (DEB97-07100) will allow us to continue to refine the ECOTONE model for spatial processes (seed dispersal, soil redistribution) occurring across landscapes at the Sevilleta. We will link the model with Arc/Info to access the spatial datalayers already available for the site. We are also analyzing the long-term vegetation transect data to determine the relative importance of patchy disturbances and climate variation to species diversity and composition. Transect data from Rio Salado, Bronco Well, Five Points, and Deep Well from 1989-1996 were separated into undisturbed and disturbed patches, and are being analyzed for temporal and spatial patterns in vegetation.

F. GIS/Remote Sensing. (Greg Shore)

Major tasks undertaken in 1996-97 include: (1) Upgrade/transition primary computer system to Sun Solaris 2.5, and migrate GIS/RS/PS databases and software to this new system. (2) Complete VegMap Project field work; enter, QA/QC, and archive all field data for Sevilleta LTER and NM Nat Heritage Program for 1994 through 1996; transmit field databases to Dr. Muldavin to complete map labeling, class aggregation, error analysis, and map production Fall 1997. (3) Derive various map products from preliminary VegMap for general use, and for specific use in MODLERS and Water Balance Modeling Projects. Products included average plant cover, height, LAI, and Running's Land Cover Classification, both by image class, and by Jomado LTER (SWB Model) plant guilds within image class. (4) Finish GPS base station installation, real-time DGPS telemetry system, and lightning protection system for same. DGPS telemetry system includes 35W base station transmitter at Sevilleta Field Station, and 17W solar-powered repeater station located on top of Los Pinos mountains on east side of Sevilleta NWR. WWW and anonymous FTP access to GPS base station files to be enabled Fall 1997. (5) Design GIS/RS data management, archiving, and WWW access schema. Conduct ArcView training for PI's, staff, and students. (6) Design VegMap-related research project as part of NASA funded Operational Atmospheric Correction of Satellite Imagery grant, and attended workshop last summer to present proposal. (7) Work with ESA to design and conduct an "Intro to GPS" workshop as part of the annual ESA conference in 1997.

G. Public Outreach. (Robert Parmenter, Terry Yates)

The Sevilleta LTER Program has been featured on public television several times in the past year, and is participating in a future production for PBS. In 1996, we participated in the PBS/Audubon Special, Wild Wings Heading South, which featured Sevilleta data on climate change from tree ring analyses and pack rat middens. In addition, the Sevilleta was on the CBS Evening News in June, 1997, in regard to possible Hantavirus problems associated with the predicted 1998 El Niño. The Sevilleta has also been featured repeatedly in local newspapers and on local TV news shows in regard to the El Niño. In September, 1997, we will participate in the making of a PBS teaching video on mathematics and field ecology (C. Marsh's NSF Project). Finally, the Sevilleta LTER group is functioning as the "local organizing committee" for the
H. REU/UMEB Program. (Ann Evans, Ursula Shepherd, Robert Parmenter, plus many faculty mentors).

The Sevilleta Site REU Program was renewed for 3 years in 1995. The UMEB Program continues to operate in collaboration with the Sevilleta LTER. As in prior years, the goals of these programs are to (1) instruct undergraduates in the principles of scientific research, (2) expose the students to a wide variety of ecological research techniques and career opportunities, (3) facilitate individual student research projects, and (4) encourage students to continue their scientific education in upper-division courses and graduate school. To accomplish these goals, the programs include (1) orientation meetings and a seminar series devoted to the variety of scientific opportunities in ecological research at the Sevilleta, (2) faculty-student one-on-one instruction of hypothesis development and research protocols in ongoing Sevilleta LTER projects, (3) field and laboratory experiences in sampling and data collection, (4) implementation of individual student research projects, carried out under the guidance of student-selected faculty members, (5) a Sevilleta REU Symposium for project presentations by the students, (6) attendance at scientific meetings, and (7) preparation and submission of project manuscripts to scientific journals. These activities integrate all theoretical and technical aspects of the LTER and promote a holistic approach to large-scale ecological studies. All of the 1997 REU/UMEB students have volunteered to assist with the 1997 Ecological Society of America meeting in Albuquerque.
2. Cross-site Activities.

Chihuahuan Desert small mammal exclosure study with Jornada LTER and Mapimi, Mexico.  
(David Lightfoot and Jim Brown)

We continue to make routine measurements on the small mammal exclosure study plots at the Sevilleta.  
Vegetation quadrat measurements, including plant canopy cover, plant species composition, and soil surface  
 disturbance were measured on all quadrats in the autumn of 1996, and early summer of 1997. Grasshopper  
 species composition and abundance, ant nests, and termite foraging activity were measured on all plots at  
 the same time. All data have been entered into computer database files. We have recently implemented the  
 use of a data entry program specifically designed for this project. Image processing analysis of aerial  
 photographs of all study plots is in progress. We will continue with these efforts through 1998.  
 Measurements were also taken at the Jornada LTER, and the Mapimi Biosphere Reserve. We continue to  
 have excellent collaboration and interaction with researchers from the Jornada and Mapimi. We are now  
 supporting four students on the cross-site small mammal exclosure study. One Ph.D. level student, one  
 masters level student, and two undergraduate REU students. All four students are currently conducting their  
 field research at Sevilleta, Jornada, and Mapimi.

Ground-dwelling Arthropods: Bandelier/Sevilleta/Jornada/Mapimi. (David Lightfoot)

We have implemented the same sampling design and protocols for monitoring ground-dwelling arthropods  
 at the Jornada LTER site (NSF funding to the Jornada LTER program) in southern New Mexico, and at  
 Bandelier National Monument (USGS-BRD funding) in northern New Mexico. This extends the Sevilleta  
 ground-dwelling arthropod studies to a regional level, encompassing an environmental gradient from the  
 southern Rocky Mountains to the northern Chihuahuan Desert. All three study areas include a variety of  
 major habitat types, and elevation gradients. We are coordinating sampling times, target arthropod groups,  
 and data formatting at all three sites. We will continue these efforts through 1998.

The Ecology of Small-Scale Disturbances Along a Continental Gradient.  
(Debra Coffin, Tamera Minnick)

Many of the small scale disturbance and plant population studies have comparable studies ongoing at the  
 SGS LTER. Furthermore, we are evaluating the probability of seedling establishment for blue and black  
 grama for 16 sites along a climatic gradient from the SGS to Columbus, New Mexico, including the SGS,  
 Sevilleta, and JER LTER sites (Minnick and Coffin 1995). We found the simulated probability of  
 establishment decreased for blue grama and increased for black grama along this north-south transect.  
 Effects of soil texture on these probabilities were recently evaluated (Minnick and Coffin 1997). We are  
 currently conducting a growth chamber study using blue grama seed from the Sevilleta and SGS, and black  
 grama seed from the Sevilleta to determine experimentally the relationship between soil texture, water  
 availability, and seedling establishment for each species. We are continuing a common garden study  
 initiated in 1995 to reveal mechanisms for the exclusion of black grama in northern Colorado, and to  
 compare variation in two populations of blue grama (Minnick and Coffin 1996). Black grama seedlings  
 from the Sevilleta, and blue grama seedlings from the Sevilleta and the SGS are being grown with and  
 without warming chambers at the SGS. Winter mortality in 1995 was low for all treatments, suggesting that  
 low winter temperatures are not the factor constraining the northern limits to the distribution of black grama.  
 Because only seed from black grama plants growing initially at the SGS were viable, and these plants  
 flowered earlier than plants from the Sevilleta, we hypothesize that phenological differences in response to  
 daylength are important in determining the geographic distribution of black grama. We are continuing a  
 study started in 1994 to evaluate the response to disturbance by blue and black grama at the Sevilleta, SGS,
and JER (Minnick and Coffin). We removed half of individual plants of each species at each site where they exist, and have measured annual rate of response by the remainder of the plants. We also removed entire plants to evaluate successional dynamics on these gaps. Very slow response or recovery has been observed; these results are similar to those obtained in previous small-scale disturbance studies at the SGS.

**Hungarian cross-site research.** (Debra Coffin)

The initiation of collaborative research between scientists at the Sevilleta, Jornada, Short Grass Steppe LTER sites and Hungary is proposed to evaluate the importance of drought and soil texture to arid and semiarid grasslands in both countries. As part of our US-Hungary project (Coffin and Gosz; INT95-13261), we are conducting cross-site comparisons of vegetation pattern and dynamics at three LTER sites (Sevilleta, SGS, JER) and three sites in Hungary along a climatic gradient. In 1997, we are conducting similar spatial sampling of vegetation at all six sites that will allow us to determine the spatial assemblages of species as well as spatial pattern in vegetation from small (1cm) to larger (32m) scales (Kreel-Dulay et al. 1997). Simulation modeling analyses will be used to evaluate current environmental constraints on plant community composition and to predict effects of climate change on vegetation dynamics. James Gosz, Deb Coffin and Sandra Brantley spent two weeks in Hungary in 1996 and Hungarian scientists will work at the Sevilleta and Jornada in 1997.

**Nitrogen limitation of mycorrhizae in grassland ecosystems.** (Nancy Collins Johnson and Edith B. Allen)

Sevilleta is collaborating on an inter-site mycorrhizae study which examines the effect of N enrichment on grassland mycorrhizae (DEB-9527317). The study examines long-term fertilization plots at Kellogg, Cedar Creek, Konza, Shortgrass Steppe and Sevilleta. In December, 1995, the P.I.'s established nitrogen addition plots near Black Butte at Sevilleta. The plots were fertilized again (with NH4NO3) in July and December 1996, and they will be fertilized again in August and December, 1997. Grasses and soils were sampled in April, July and September, 1996. There are measurable changes in root colonization and spore communities (of mycorrhizal fungi) at all of the sites except Sevilleta. The other enrichment experiments have been maintained for 10 or more years so it isn't surprising that Sevilleta hasn't responded yet. The P.I.'s will continue to monitor the responses through next year (and beyond), and will do some functional response experiments using Sevilleta soil inoculum early next year.
3. Network-level Activities.

A. NASA/MODIS MODLERS Project. Bruce Milne has a subaward from Oregon State University to participate in the NASA/MODIS MODLERS Project. This project brings together 14 Long-Term Ecological Research (LTER) Network sites and NASA’s MODIS Land (MODLAND) Science Team for the purpose of locally validating Earth Observation System-era global data sets. (http://atlantic.evsc.virginia.edu/~jhp7e/modlers/).

B. LIDET Experiment. Sevilleta continues to participate in the LTER Network, and has included the Sevilleta data in the project analyses.

C. LTER Network Soils Workshop. A follow-up working-session of the LTER Soils Workshop was held at Sevilleta in the spring of 1997.

D. LTER Network Climatology Workshop. Sevilleta will host the upcoming workshop on Meteorological Methods to be held in early October, 1997.

E. NASA Sun Photometer Calibration Study. Sevilleta continues to maintain and service a Sun Photometer for NASA which is important for atmospheric corrections of satellite images.

F. USDA/ARS Project. Sevilleta is actively involved in supplying meteorological and evapotranspiration data to a 1997 USDA-ARS Global Change project that was integrating remotely sensed data with ground measurements of energy budgets and water fluxes.
4. Additional Grant Support.

(Total = 22 grants, $8,026,703)


REU supplement to small mammal exclosure cross-site grant, DEB 95-27583. NSF, $5,000. PIs: David Lightfoot and James Brown.


Replacement and consolidation of research training facilities of the Department of Biology, University of New Mexico. Terry L. Yates, Robert R. Parmenter, and Howard Snell. National Science Foundation, 15 Mar 1997 - 31 March 1998, $960,000 + $2,300,000 matching funds from UNM. NOTE: This project will fund the renovation of a UNM campus building which will house the new offices, laboratories and museum collections of the Sevilleta LTER Program and the LTER Network Office.

Ecosystem and Soil Studies of Native American Runoff Agriculture. NSF, $476,713. P.I.: Jonathan A Sandor, Iowa State University (ISU); Co-P.I.s: Mark Ankeny, Daniel Stephens, Carleton S. White, Stephen E. Williams, and Deborah A. Muenchrath.
Water Quality Study in the Santa Fe Watershed. USDA Forest Service. $20,000. PI: Carleton S. White.


USGS Paleoclimatological Research at the Sevilleta LTER. DOI, U.S. Geological Survey, Global Change Program: The paleoclimatological work at the Sevilleta LTER has been done through cooperative agreements where at least half of the resources have been contributed by USGS.


A. Journal Articles


B. Book Chapters


C. Other Publications


APPENDIX D

FACULTY SCHOLARLY & PROFESSIONAL ACHIEVEMENTS,
CY 1997
1. TEACHING.
   
A. Graduate Education.
   
1. Masters degrees awarded.
   
ALTENBACH, S.
Paul Cryan, "Ecology and Distribution of Bats of the Southern Black Hills."

DUSZYNSKI, D.
Summer: Brett Pickering, Plan II (non-thesis)

LI, B.-L.
Fall: Andrew J. Kerkhoff, Master's Thesis: "Toward a Panther-centered View of the Forests of South Florida."

LOKER, E.S.


MILNE, B.

MOLLES, M.

Mary C. Stuever, "Fire-induced Mortality of Rio Grande Cottonwood."

NELSON, M.A.
Spring: Kelly A. Howe, "Characterization of the carl Gene of Neurospora crassa: A Putative Peroxisome Assembly Factor Gene."
2. Doctors degrees awarded.

BARTON, L.

Fall: Keka Choudhury, “Microbial Activity Associated with Uranium Mill Tailings.”

BROWN, J.


DAHM, C.

Fall: John Morrice, Influences of Stream–Aquifer Interactions on Nutrient Cycling in Headwater Streams. (John is now a research scientist with the US EPA regional research laboratory in Duluth MN.)

KODRIC–BROWN, A.


LIGON, D.

Fall: Patrick Zwartjes, “Comparative Genetic Variation in the Avian Genus Vireo of the West Indies.”

NATVIG, D.

Summer: James Baldwin, “A Catalase Journey.”
Kenneth Sylvester, “Molecular Analysis of Neurospora crassa mei-3 Mutants.”

WERNER–WASHBURN, M.

Spring: Edward Braun, “Protein Synthesis in Stationary Phase Yeast: Global Patterns and Characterization of Snz1p, a Novel Stationary-phase Protein.”

3. Bona fide graduate courses and number of students enrolled. Indicate new courses (for you) with an asterisk.

BARTON, L.

Spring: Biol. 460, Microbial Physiology, 34 students
Fall: Biol. 502, ST/Bioremediation, 2 students

BROWN, J.

Fall: Biol. 502, ST/Ecological Complexity, 10 students
Biol. 511, Community Ecology, 13 students
Spring: Biol. 502, ST/Ecological Complexity, 10 students

CARROLL, S.

Fall: *Biol. 502, ST/Insect Biology, 8 students
DAHM, C.

Fall: Biol. 451, Microbial Ecology, 11 students (4 graduate students)
Spring: Biol. 495, Limnology, 11 students (2 graduate students)
       Biol. 514, Ecosystem Studies, 12 Students (all graduate students)

DUSZYNSKI, D.

Spring: Biol. 502, ST/Tropical Ecology, 1 student
       Biol. 551, Problems, 1 student
       Biol. 599, Masters Thesis, 1 student
       Biol. 699, Dissertation, 1 student
Summer: Biol. 599, Masters Thesis, 1 student
       Biol. 699, Dissertation, 1 student
Fall: Biol. 599, Masters Thesis, 2 students
      Biol. 699, Dissertation, 1 student

GOSZ, J.

Spring: Biol. 514, Ecosystem Studies, 13 students

HOFMANN, G.

Fall: *Biol. 500, New Graduate Student Seminar, 17 students

KODRIC-BROWN, A.

Fall: Biol. 521, Advanced Behavioral Ecology, 5 students
Spring: *Biol. 402/502, ST/Senescence, 5 students

LEWIS, P.

Spring: *Biol. 402/502, Statistical Genetics and Phylogenetics, 8 graduate students (no undergraduates)

LOKER, E.S.

Spring: *Biol. 402/502, ST/Comparative Immunobiology, 10 students (co-taught with Dr. Robert Miller)
       Biol. 502, ST/Parasites and Hosts, 1 hr credit, 5 students
Fall: Biol. 502, ST/Parasites and Hosts, 1 hr credit, 6 students

MARSHALL, D.

Spring: Biol. 567, Evolutionary Plant Ecology, 10 students
Fall: Biol. 502, ST/Topics in Plant Ecology, 3 students

MILLER, R.

Spring: *Biol. 502, ST/Comparative Immunology, 8 students (w/ Sam Loker)

D-3
MILNE, B.
Spring: Biol. 502, ST/Complexity Seminar, 15 students  
Fall: Biol. 502, ST/Complexity Seminar, 15 students

MOLLES, M.
Fall: Biol. 507L, Bosque Biology, 5 students

NAVIG, D.
Fall: Biol. 546, Laboratory Methods in Molecular Biology, 9 students

NELSON, M.A.
Spring: Biol. 402/502, ST/Advanced Fungal Physiology, 5 students  
*Biol. 402/502, ST/Eukaryotic Genomics, 6 students  
Biol. 425, Molecular Genetics, 22 students  
Fall: *Biol. 402/502, ST/Fungal Molecular Biology, 8 students  
*Biol. 402/502, ST/Neurospora Genomics, 4 students

THORNHILL, R.
Spring: *Biol. 502, ST/Darwin’s Methods, 10 graduate students

WERNER-WASHBURN, M.
Fall: Biol. 444, Molecular Biology, 20 students (2 graduate students)  
Biol. 699, Dissertation, 2 students
Spring: Biol. 699, Dissertation, 3 students

YATES, T.
Spring: Biol. 551, sect. 43, Problems, 1 student  
Biol. 599, sect. 43, Master’s Thesis, 1 student  
Biol. 699, sect. 43, Dissertation, 3 students  
Fall: Biol. 502, sect. 13, Special Topics in Biology, 2 students  
Biol. 551, sect. 73, Problems, 3 students  
Biol. 699, sect. 43, Dissertation, 4 students

4. Your service on graduate student committees, not as chair, in semester oral exam was given.

BARTON, L.
Spring: Mark Tucker, Ph.D., Department of Civil Engineering, UNM
Fall: Carolyn Hollway, M.S., Engineering Dept., UNM  
Yongming Lu, Ph.D., Department of Chemical & Nuclear Engineering, UNM

BROWN, J.
Lisa Ellis
DAHM, C.
Spring: Chuck Buxbaum, written and oral preliminaries

DUSZYNSKI, D.

GOSZ, J.
Mary Stuever, M.S.

JOHNSON, G.
A. Joshua Leffler, Ph.D. comprehensive exam, February 27, 1997
Hilary Noskin, Ph.D. dissertation defense, August 29, 1997
Keka Choudhury, Ph.D. comprehensive exam, October 3, 1997
Keka Choudhury, Ph.D. dissertation defense, December 5, 1997

KODRIC-BROWN, A.
Julie Hagelin

LOKER, E.S.
Outside Committee Member for Ph.D. defense for Dr. Juliette Langand, Universite de Perpignan, Perpignan, France, June 1997.

LOWREY, T.
Spring: Dov Sax, Ph.D.; Robert Taylor, Ph.D.

MILLER, R.
Kelly Howe (Mary Anne Nelson), M.S. defense
Ken Sylvester (Donald Natvig), Ph.D. defense

MILNE, B.
Spring: William Hart, Journalism and Communication

MOLLES, M.
Spring: Final Exam: Paul Cryan; Brett Pickering
Fall: John Morrice; Christie Fellows; Kristen Cockerill (American Studies)

NATVIG, D.
Kelly Howe, Master’s final
Edwin Weeber, Doctoral comprehensive

NELSON, M.A.
Spring: Lara Hays, Master’s thesis defense
STRICKER, S.
Summer: Jackie Miralles-Salazar

TAYLOR, F.
Patricia Ashby, Department of Biology, UNM
Dave Greenfield, Department of Psychology, UNM

TOOLSON, E.
Morgan Ernest

VOGEL, K.
Spring: Kevin Wilcox. M.S., Dept. of Mechanical Engineering, UNM

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.

FORD BALLANTYNE:


ROBERT TAYLOR:


Foreign Travel: Participant in Audubon Christmas Bird Count, 1997 at Janos, Chihuahua, Mexico.

JENNIFER PARODY:

Grants: USGS, Species at Risk program, $10,000; N.M. Dept. of Game and Fish, Share with Wildlife grant, $9,000. Both are toward her project currently titled, "Habitat Requirements of Bell’s Vireo: A Landscape Analysis of Southwest Populations."

LAURA GONZALEZ-GUZMAN:

MORGAN ERNEST:


DAWN KAUFMAN:

Honors: Excellence in Graduate Research Award, Sigma Xi, The University of New Mexico Chapter; Full Member (elected), Sigma Xi Scientific Research Society; H. Wayne Springfield Fellowship in Plant Ecology, Department of Biology, The University of New Mexico.

Professional Activities and Service: Member, "The Ecological and Evolutionary Dynamics of Species' Borders" Working Group, National Center for Ecological Analysis and Synthesis; Member, Education and Graduate Students Committee, American Society of Mammalogists; Member, ad hoc Committee on Human Diversity in Mammalogy, American Society of Mammalogists; Member, Operations Subcommittee, ad hoc Strategic Planning Committee, American Society of Mammalogists; reviewer of manuscripts for scientific journals (The American Naturalist, Journal of Biogeography); Member, Space Committee, Department of Biology, The University of New Mexico.

Fellowship and Grant Support: Graduate and Professional Student Association, The University of New Mexico, SRAC Travel Award, $100; Seventh International Theriological Congress, Acapulco, Mexico; Biology Graduate Student Association, The University of New Mexico, GRAC Travel and Research Awards, $400; Department of Biology, The University of New Mexico, H. Wayne Springfield Fellowship in Plant Ecology, $2000.

Invited Seminars: "Latitudinal Gradients of Diversity: Patterns and Processes," Division of Biology, Kansas State University, Manhattan KS; "The Latitudinal Gradient of Diversity: It's Not Just Species Richness," Sigma Xi and Department of Biology, The University of New Mexico, Albuquerque NM; "How Species' Borders Are Affected by Large-scale Patterns and Processes (or Why All Local Sites Are Not Created Equal in a Regional Context)," National Center for Ecological Analysis and Synthesis (Species' Borders Working Group), Santa Barbara CA.

Publications:


DAHM, C.

MICHELLE BAKER: Awarded one of the ten outstanding student paper awards in hydrology by the American Geophysical Union and featured in the weekly paper EOS in June 1997.

DUSZYNSKI, D.

INGRID ASMUNDSSON:

Travel: England, Egypt, Kenya, Tanzania, Uganda, India, Nepal, Thailand, Singapore, Indonesia, Malaysia, Hong Kong (January–May); Puerto Peñasco, Mexico (Biol. 404L).

KIM HECKSCHER:

Travel: Southwestern Association of Parasitologists (SWAP), Lake Texoma OK; American Society of Parasitologists (ASP), Nashville TN.

JOHN HNIDA:

Papers Published:


Papers Presented:

Hnida, J.A. “Using ITS1 sequencing and cross-transmission studies to examine the relationships of cryptic species of *Eimeria*.” 30th Annual Meeting of SWAP, Lake Texoma OK, April 1997.

Hnida, J.A. “Using ITS1 sequencing and cross-transmission studies to examine the relationships of cryptic species of *Eimeria*.” 72nd Annual Meeting of the American Society of Parasitologists, Nashville TN, June 1997.


Travel: Lake Texoma OK (SWAP), Nashville TN (ASP), Oxford, England (Seventh International Coccidiosis Conference).
PATTY WILBER:

Papers Published:


Awards Received: President-Elect, Southwestern Association of Parasitologists (SWAP).

Travel: Lake Texoma OK (SWAP)

WADE WILSON:

Travel: Belize, Central America (Biol. 461L); Washington DC (Smithsonian-research).

XIAOMIN ZHAO:

Travel: Puerto Peñasco, Mexico (Biol. 404L).

Grants Received: $125 Biology GRAC, Studies on Plastid-like DNA of *Eimeria*.

GOSZ, J.

Charles Buxbaum, Albuquerque Daylily Society Award

JOHNSON, G.

ARLENE HEILMAN: New Mexico Cactus and Succulent Society Research Award, $350; Student Research Allocations Committee, UNM Dept. of Biology, $225; Graduate Research Allocations Committee, UNM, $100.

ELISHEVA CROWELL: Springfield Fellowship Award, Summer 1997.

KODRIC-BROWN, A.

DAN ALBRECHT: Animal Behavior Society research award

DAVID GRAY: two papers published *(Animal Behavior and American Naturalist)*

LIGON, D.

REBECCA KIMBALL, Ph.D., and JULIE HAGELIN publications:


MILNE, B.

Papers presented:


NELSON, M.A.


Won first place for Graduate Student Oral Presentations, Sixth Annual Research Day, Department of Biology, UNM, April 18, 1997.

SNELL, H.

MARK JORDAN, Ph.D. Student

Grants and Fellowships: Fulbright Fellowship PRA Fellowship, Organization of American States.

Presentations:

Foreign Travel:

DONALD SIAS, Ph.D. Student

Presentations at Meetings:
Biological Photography (incomplete list):
The following entities were provided with photographs:
1997 Association of Texas Herpetological Societies
1997 Coronado National Forest
1997 Hatari Invertebrates
1997 Hegen Schmidt, Germany, Xantusia vigilis article
1997 New England Aquarium
1997-95 The Nature Conservancy

STEPHEN EARSOM, Master's Student

Concurrent Professional Experience:
Staff Scientist, Charles Darwin Research Station Galápagos Islands, Ecuador, May 1997-present.

Funded Grants without Howard Snell as Co-PI:


Presentations:

Temperature-dependent sex determination in reptiles. Guest lecturer, Biol. 488 (Herpetology), Department of Biology, The University of New Mexico, March 1997.

Professional Affiliations:
Society for Ecological Restoration
Society for Conservation Biology
Ecological Society of America

MARCO ALTAMIRANO, Ph.D. Student

Presentations:

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Service:
Search Committee Member (Curator of Fish Division), Department of Biology, The University of New Mexico, Albuquerque NM.

JENNIFER BROWN, Master's Student

Research Travel:
November '97: Trip to California Academy of Sciences, San Francisco CA, to acquire genetic samples from 100-year-old Galápagos Land Iguanas.

Concurrent Professional Experience:
Aquariaist at Albuquerque Biological Park Aquarium.

THORNHILL, R.

VOGEL, K.
THOMAS EHLERS: poster presentation, Annual Research Day, Department of Biology, UNM

WERNER-WASHBURRE, M.

YATES, T.
M. SCOTT BURT:

Papers/posters presented:

Macrogateographic habitat characterization for *Thomomys bottae* and *T. talpoides*, presented at American Society of Mammalogists’ Annual Meeting, OK, and International Theriological Congress, Acapulco, México.

Ecological and geographical correlates of New Mexican Bats: Summary results from four field seasons, the North American Bat Research Conference, Tucson, AZ; Southwestern Association of Naturalists annual Meeting, Albuquerque NM; and Biological Honour Society (Angelo State University Chapter), San Angelo, TX.

GÁBOR RÁCZ:

Soros Foundation Supplementary grant, 1997 Fall, $1,200
University of New Mexico, GRAC Travel Grant (Fall, 1997), $100

7th International Theriological Congress, Acapulco, México:
Gábor Rácz and András Demeter; Mapping the distribution of two closely related species of water shrews, _Genus Neomys_, in Hungary.

The 4th International Conference on HFRS and Hantaviruses, Atlanta GA:

Euro-American Mammalogical Congress, Santiago de Compostela, Spain:


JORGE SALAZAR-BRAVO:


Paper published: Conservation of felids in Bolivia (with Luis Pacheco), March 1.

Visit collections at Texas Tech University in Lubbock, TX, March 16.


Presented three papers: International Theriological Congress, September:
- Mammal collection in Latin America. Status and Perspectives
- Diversidad y Conservación de los mamíferos de Bolivia
- Molecular systematics of _Calomys_ (poster)

B. Undergraduate Education. _Bono fide_ undergraduate courses you taught each semester and the number of students enrolled. Indicate new course (for you) with an asterisk.

ALTENBACH, S.

Spring: Biol. 435, Animal Physiology, 35 students
Fall: Biol. 435, Animal Physiology, 30 students

BARTON, L.

Spring: Biol. 350, General Microbiology, 86 students
Biol. 402, ST/Waste Management, 3 students
Fall: Biol. 350, General Microbiology, 113 students
Biol. 402, ST/Bioremediation, 7 students
Biol. 402, ST/Waste Management, 5 students

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BROWN, J.
Undergraduate honors theses, 2 students

CARROLL, S.
Fall: *Biol. 402, ST/Insect Biology, 16 students

DAHM, C.
Spring: Biol. 495, Limnology, 9 undergraduates
Biol. 496L, Limnology Laboratory, 5 undergraduates
Fall: Biol. 451, Microbial Ecology, 7 undergraduates

DUSZYNSKI, D.
Spring: Biol. 402, ST/Tropical Ecology, 1 student
Biol. 461L, Introduction to Tropical Biology, 12 students
Summer: Biol. 499, Undergraduate Problems, 1 student
Fall: Biol. 402, ST/ Marine Ecology, 4 students
Biol. 404L, Marine Invertebrate Laboratory, 12 students

GOSZ, J.
Spring: Biol. 403, Ecosystem Ecology, 35 students
Biol. 402, Field Ecosystem Studies, 6 students

HOFMANN, G.
Fall: Biol. 435L, Animal Physiology, ~33 students

JOHNSON, G.
Spring: Biol. 478, Plant Physiology, 26 students
Biol. 478L-002 & -003, Plant Physiology Laboratory (two sections), 26 students (total)
Fall: Biol. 440, Soil Ecosystems, 11 students
Biol. 440L, Soil Ecosystems laboratory, 11 students

KODRIC-BROWN, A.
Fall: Biol. 487, Ichthyology (co-taught with Manuel Molles), 11 students
Spring: Biol. 455, Ethology: Animal Behavior, 38 students
Biol. 457L, Ethology Lab.: Animal Behavior, 8 students

LEWIS, P.
Fall: Biol. 121, Principles of Biology; 311.5 students (Sam Loker and I each taught half of both sections; one section had 398 students, the other had 225 students, 311.5 is the average)

LIGON, D.
Spring: Biol. 386L, General Vertebrate Zoology, ca. 50 students
| Fall: | Biol. 379, Conservation Biology, ca. 50 students |
| LOKER, E.S. | |
| Spring: | Biol. 382, Introductory Parasitology, 16 students (co-taught with Dr. D.W. Duszynski, C. Adema and S. Snyder) |
| Fall: | Biol. 402, ST/Parasites and Hosts, 2 students |
| Fall: | Biol. 121, Principles of Biology, Section 1: 430 students, Section 2: 225 students (both sections co-taught with Dr. Paul O. Lewis) |
| Fall: | Biol. 402, ST/Parasites and Hosts, 4 students |
| LOWREY, T. | |
| Spring: | Biol. 382, Introductory Parasitology, 16 students (co-taught with Dr. D.W. Duszynski, C. Adema and S. Snyder) |
| Fall: | Biol. 402, ST/Parasites and Hosts, 2 students |
| Fall: | Biol. 121, Principles of Biology, Section 1: 430 students, Section 2: 225 students (both sections co-taught with Dr. Paul O. Lewis) |
| Fall: | Biol. 402, ST/Parasites and Hosts, 4 students |
| MARSHALL, D. | |
| Spring: | Biol. 467, Evolutionary Plant Ecology, 1 student |
| MILLER, R. | |
| Fall: | Biol. 456, Immunology, 96 Students |
| MILNE, B. | |
| Fall: | Biol. 310, Principles of Ecology, 25 students |
| MOLLES, M. | |
| Spring: | Biol. 122, Principles of Biology, 360 students |
| Fall: | Biol. 407L, Bosque Biology, 15 students |
| NATVIG, D. | |
| Spring: | Biol. 219, Principles of Cell Biology, 233 students |
| Summer: | Biol. 446, Laboratory Methods in Molecular Biology, 12 students |
| Fall: | Biol. 402, ST/Genome Projects, 2 students |
| Fall: | Biol. 446, Laboratory Methods in Molecular Biology, 9 students |
| Fall: | Biol. 402, ST/Fungal Molecular Biology, 4 students |
| NELSON, M.A. | |
| Spring: | Biol. 402/502, ST/Advanced Fungal Physiology, 5 students |
| Spring: | *Biol. 402/502, ST/Eukaryotic Genomics, 6 students |
| Fall: | Biol. 425, Molecular Genetics, 22 students |
| Fall: | Biol. 221, Introductory Genetics, 90 students |
| Fall: | *Biol. 402/502, ST/Fungal Molecular Biology, 8 students |
| Fall: | *Biol. 402/502, ST/Neurospora Genomics, 4 students |
SNELL, H.
Spring: Biol. 488, Herpetology, 15 students
Fall: Biol. 386, General Vertebrate Zoology, 55 students

STRICKER, S.
Fall: Biol. 371, Invertebrate Biology, 24 students

TAYLOR, F.
Spring: Biol. 136, Human Anatomy and Physiology, 40 students
Fall: Biol. 136, Human Anatomy and Physiology, 36 students

THORNHILL, R.
Fall: Biology 300, Evolution, 70 students
Spring: Biology 365, The Evolution of Human Sexuality, 100 students
* Biology 402, Darwin's Methods, 8 students

TOOLSON, E.
Spring: Biology 122, Principles of Biology, 400+ students

VOGEL, K.
Fall: Biol. 219, Principles of Cell Biology (with Louise Lewis): Section 002, 50 students; Section 003, 143 students
Biol. 402/502, ST/Proteoglycans, 6 students
Spring: Biol. 402/502, ST/Proteoglycans, 5 students

WERNER-WASHBURNE, M.
Spring: Biol. 219, Principles of Cell Biology, approximately 220 students
Biol. 400, Honors, 1 student
Biol. 499, Undergraduate Problems, 2 students
Fall: Biol. 444, Molecular Biology, 20 students (18 undergraduates)
Biol. 499, Undergraduate Problems, 3 students

YATES, T.
Spring: Biol. 499, Undergraduate Problems, 3 students
Summer: Biol. 499, Undergraduate Problems, 1 student
Fall: Biol. 400, Senior Honors Thesis, 1 student
Biol. 402, Special Topics in Biology, 1 student
Biol. 499, Undergraduate Problems, 1 student

C. Teaching Awards.

JOHNSON, G.
Teaching Allocations Subcommittee award: G.V. Johnson, An Instrument for Investigations in Photosynthesis with Intact Plants in the Undergraduate Plant Physiology Laboratory, $980,
December 18, 1996-December 31, 1997. (Funds for purchase of an instrument for use in Biology 478L.)

MILNE, B.
Regent’s Lecturer in Arts and Sciences (1995–98)

WERNER–WASHBURN, M.
Regents’ Lecturer Award, UNM

D. Curriculum Development/Production of Teaching Materials.

DAHM, C.
Updated lecture notes for Biol. 514, Ecosystem Studies

DUSZYNSKI, D.
Departmental web page for Biol. 404L, Marine Invertebrate Laboratory

HOFMANN, G.
Development of new experimental labs for Biol. 435L, Animal Physiology

JOHNSON, G.
Prepared laboratory manual for Biology 440L, Soil Ecosystems.

LEWIS, P.
Extended the web page I developed last year for the Biology 121 course:
http://biology.unm.edu/bio121/mainpage.html

Created a web page for the Phylogenetics course being taught Spring 1998:
http://chee.unm.edu/statgen/

LI, B.-L.
Fall: Developed new curriculums for Mathematical Biology & Ecological Modeling.

LOKER, E.S.
Spring: Development of Comparative Immunobiology as 3-hour lecture course.

MILNE, B.

SNELL, H.
As part of newly established collaborative program between the Charles Darwin Research Station and the University of New Mexico (described below), I have established courses (in Spanish) in the Galápagos Islands for Ecuadorian students. These are evening upper-level under-
graduate and graduate level courses in the Scientific Method and Readings in Conservation Biology.

TAYLOR, F.
Introduced learning group methods to Biol. 136.

TOOLSON, E.
Developed several computer simulation labs for use in Biology 435L (Animal Physiology), and started working on others for implementation during Fall 1998.

WERNER-WASHBURN, M.
Production of video “The Mystery of an Ancient Gene.”

E. Museum Curator, Advisor, Assistant Chair, EM Director, etc.

BARTON, L.
Supervisor of Media Preparation for Microbiology
Supervisor of Bacterial Culture System for Teaching

CARROLL, S.
Associate Curator, Division of Arthropods, Museum of Southwestern Biology

DUSZYNSKI, D.
Secretary-Treasurer, Biological Society of New Mexico (BSNM)
Pre-veterinary Advisor, UNM

JOHNSON, G.
Undergraduate advisor for Department of Biology

LIGON, D.
Curator of Birds, Museum of Southwestern Biology

LOKER, E.S.
Spring: Departmental Associate Chair

LOWREY, T.
Curator, UNM Herbarium
Director, Museum of Southwestern Biology

MOLLES, M.
Curator of Arthropods, Museum of Southwestern Biology
NATVIG, D.
Director, Molecular Biology Facility

SNELL, H.
Spring: Director (& Assistant Chair), Museum of Southwestern Biology.
1997: Curator, Division of Herpetology, Museum of Southwestern Biology.
Summer & Fall: Program Leader, Vertebrate Restoration Ecology and Ecological Monitoring, Charles Darwin Research Station & UNM Department of Biology.

STRICKER, S.
Director, EM and Confocal Microscopy Facilities, Department of Biology, UNM

VOGEL, K.
Director, Howard Hughes Undergraduate Research Program

WERNER-WASHBURNE, M.
Fall: Departmental Vice Chair

YATES, T.
Departmental Chair
Curator of Mammals, MSB Division of Mammals
Curator of Frozen Tissues, MSB Division of Biological Materials

F. Other Teaching Activities.

CARROLL, S.
Coordinator, New Graduate Student Orientation

DAHM, C.
Coordinated the hydrogeocology reading group, which meets for two hours weekly during both spring and fall semester, to discuss papers and preprints.

DUSZYNSKI, D.
Took Tropical Biology Class (Bio. 461L) to Possum Point Field Station and Wee Wee Caye, Belize, Central America, for 10 days; 24 students and faculty from UNM and Albuquerque TVI, March 1997.

Traveled to Tucson AZ for the First Annual Meeting of the Advisory Board of the Centro de Estudio de Desiertos y Oceanos (CEDO, Inc.) to discuss management of teaching and research activities there as they affect the field trips to CEDO of participating institutions, August 1997.

Took Marine Invertebrate Biology Class (Biol. 404L and Biol. 402) to CEDO Inc., Puerto Peñasco, Sonora, Mexico, for seven days in October; 44 students and faculty from UNM and Albuquerque TVI, October 1997.
GOSZ, J.
Honor's Student Advisor for Anna Davidson

HOFMANN, G.
Summer and Fall: Supervision of a Howard Hughes student, Amanda Haag
Faculty organizer for Howard Hughes undergraduate seminar, meets weekly
Four UNM undergraduates worked on projects in my lab, either as work study students, as
student employees or as unpaid workers in order to gain experience in the lab: Sean Place,
Kelly Chavez, Mike Mertz and Nate Abbott.

JOHNSON, G.
Directed senior honors theses: Christopher Blackwood, B.S., May 1997; Luis Guzman, B.S.,
expected August, 1998.
Mentor for one high school student science fair project (Jennifer Lente).

KODRIC-BROWN, A.
Biol. 499, Undergraduate problems, supervised research projects of four undergraduates.
Research Opportunities Program, supervised research project of one student (Claudette
Sandoval).

LI, B.-L.
Fall: Three talks in Brown Bag Lunch Seminar and Ecological Complexity Seminar.

MILLER, R.
Spring: Faculty in the "AIDS and the Biology of HIV" course given at T-VI.

NELSON, M.A.
Spring: Biol. 400, Senior Honors Thesis, 2 students
       Biol. 499, Undergraduate Problems, 4 students
Summer: Biol. 499, Undergraduate Problems, 3 students
Fall:   Biol. 400, Senior Honors Thesis, 1 student
       Biol. 499, Undergraduate Problems, 6 students

SNELL, H.
Mentored three UNM undergraduate students as Conservation Biology Interns at the Charles
Darwin Research Station, Galápagos Islands, Ecuador, Summer 1997.

STRICKER, S.
Secondary reviewer of senior honors thesis of Pete Doucette, Department of Biology.
Gave training in research on shrew skull morphometry, Cindy Ramotnik.
Gave training in research on Aplysia neurobiology, Dr. L. Keenan, Cell Robotics.
Gave training in research on hemocyte calcium dynamics, Lynn Hertel.
Gave training in research, Dr. A. Perez with immunofluorescence studies.
Gave training in research, Jorge Salazar with chromosome analyses.
Supervised Biol. 499 research projects for: Jay Allen, John Deepak, Roberto Silva, Toni Smythe.

TOOLSON, E.
Mentored a Hughes student over the summer.

One honors student, Gerry Herrera, was given a special award during the Department's Research Day for his superb oral presentation of his Honors thesis work.

Had two, maybe more, Biol. 499 students work with me.

Attended three graduate student committee meetings while on sabbatical.

VOGEL, K.

Undergraduate students conducting research projects under my direction:
Julie Peters (Hughes), Spring, Summer, Fall
Arthur Meyers (Hughes), Summer, Fall
Tyanna Lovato (MBRS), Summer, Fall
Scott Walker, Spring, Summer

WERNER-WASHBURNE, M.
Co-advisor, Neurospora Genome Project

II. PUBLICATIONS.

A. Books Authored.

BROWN, J.


LIGON, D.


MOLLES, M.


TAYLOR, F.

Almost completed (is now completed) the manuscript for a book on human behavior titled, Thinking Behavior: An Essay On Brain Function.
B. Books Edited.
None.

C. Chapters in Books or Major Synthetic Reviews.

CARROLL, S.

DUSZYNSKI, D.

HOFMANN, G.

LOKER, E.S.


MILNE, B.

MOLLES, M.

NATVIG, D.

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THORNHILL, R.


VOGEL, K.


WERNER-WASHBURNE, M.


YATES, T.


D. Articles in Refereed Journals.

AL TENBACH, S.


BARTON, L.

BROWN, J.


CARROLL, S.


DAHM, C.


DUSZYNSKI, D.


HOFMANN, G.


JOHNSON, G.


KODRIC-BROWN, A.


LI, B.-L.


LIGON, D.


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LOKER, E.S.


LOWREY, T.


MARSHALL, D.


MILLER, R.


MILNE, B.


MOLLES, M.


NATVIG, D.


NELSON, M.A.


SNELL, H.


STRICKER, S.

THORNHILL, R.


VOGEL, K.

WERNER-WASHBURNE, M.


YATES, T.


E. Book Reviews.

CARROLL, S.

LIGON, D.

F. Articles in Non-scholarly Journals.

ALTENBACH, S.


SNELL, H.

G. Quasi-public Reports for Internal/External Circulation.

BARTON, L.


DUSZYNSKI, D.

Wrote and prepared camera-ready copy of *The Call for Papers* booklet announcing the 1998 Meeting of the American Society of Parasitologists (ASP). Mailed by Allen Press to 1,500 members and libraries of ASP. 41 p.


Prepared (with the able help of Ms. Anne Rice, Technical Writer) and edited Volume 12, *BSNM Newsletter*, sent to about 1,200 alumni and friends of the Biology Department, UNM. 16 p.

LI, B.-L.

NSF Final Project Report (INT 9512739), May 27, 1997

MARSHALL, D.


SNELL, H.


Sias, D.S. and H.L. Snell. 1997. Populations of the Sand Dune lizard *Sceloporus arenicolus* in relation to oil and gas fields in southeastern New Mexico. Executive Summary of 1996 field work, New Mexico Dept. of Game and Fish, Santa Fe NM.


YATES, T.
Center for Disease (CDC) Reports (2)

H. Abstracts (Refereed or Invited).

BARTON, L...


BROWN, J.


DAHM, C.

Dahm, C.N. and M.C. Molles Jr. 1997. Regional climate dynamics associated with the ENSO phenomenon and effects on biotic communities of stream and riparian ecosystems of New Mexico. American Society of Limnology and Oceanography Aquatic Sciences Meeting, p. 139.


LI, B.-L.


LOKER, E.S.


MARSHALL, D.


MOLLES, M.


NATVIG, D.


SNELL, H.


THORNHILL, R.

International Ethology Congress, Symmetry and Good Genes Sexual Selection.

VOGEL, K.

I. Abstracts (Contributed).

BARTON, L.


DAHM, C.


DUSZYNSKI, D.


HOFMANN, G.
Poster, Society of Integrative and Comparative Biology (SICB) annual meeting, Albuquerque NM, December 1996 (the “1997” meeting).

JOHNSON, G.


KODRIC-BROWN, A.

LI, B.-L.


MÄRSHALL, D.

MILLER, R.


MILLNE, B.


NATVIG, D.


NELSON, M.A.


THORNHILL, R.
Human Behavior & Evolution Society, Symmetry and Intelligence.

VOGEL, K.


**J. Other.**

BARTON, L.


DUSZYNSKI, D.

Traveled to Kona, Hawai‘i to site-visit the convention facilities for the 1998 Annual Meeting of the American Society of Parasitologists to be held there in August.

Traveled to San Juan, Puerto Rico, to site-visit the convention facilities and work with the Local Committee there to begin plans for the 2000 ASP Annual Meeting to be held jointly with the Society of Protozoologists in June 2000.

Research Affiliate, The Harold W. Manter Laboratory of Parasitology, University of Nebraska State Museum, Lincoln NE.

STRICKER, S.

Contributed photograph to upcoming book *Confocal Laser Scanning Microscopy* by D. Shotton and C. Sheppard.

Contributed videotape dataset on sea urchin embryogenesis to National Geographic Video "Discovering the Cell."

Contributed confocal images to exhibition at the Columbus Center Hall of Exploration in Baltimore MD.


VOGEL, K.

III. RESEARCH PROJECTS OR OTHER CREATIVE WORK IN PROGRESS OR COMPLETED DURING PERIOD.

A. Grants and Contracts, Extramural and Intramural.

I. Submitted to all agencies in 1997.

BARTON, L.


"Enhancing Teaching of General Microbiology Through the Use of Computers"; L.L. Barton, PI; Teaching Allocations Sub-Committee, UNM; $2,500, December 12, 1997—December 1, 1998.

"Investigation of Microbial Barriers for Reduction and Immobilization of Metals"; L.L. Barton, PI; US Department of Energy (DOE)/NABIR; $1,471,089; August 1, 1997—July 31, 2000.

BROWN, J.


CARROLL, S.

"Behavioral Aspects of Insect Wing Form and Life History Variation"; S.P. Carroll and H. Dingle, Co-PIs; National Science Foundation (NSF); $398,307, September 1997—September 2000, $125,000-140,000.

DAHM, C.


three excellent, three very good, and two good; the proposal has been resubmitted and is now pending.


DUSZYNSKI, D.


GOSZ, J.

"Vulnerability of Chihuahuan Desert Grasslands and Dominant Plant Species to Global Change;" J.R. Gosz, PI; NSF; $208,389.

HOFMANN, G.


"Nearshore-Benthic Linkages: Larval Nutrition Vs. Larval/Recruit Abundance as Determinants of Rocky Intertidal Mussel and Barnacle Populations"; B. Menge, R. Emlet and

ORAU Junior Faculty Award to UNM committee, February 5, 1997: submitted as one of two proposals from UNM.


KODRIC-BROWN, A.

“Introgression in Pupfish: Role of Sexual and Natural Selection”; A. Kodric-Brown, PI; National Science Foundation; $235,824.

LEWIS, P.

“Molecular Phylogeny of the Liverworts (Bryophyta) and the Extent of the Complex Thalloid Slowdown”; L.A. Lewis and P.O. Lewis, PIs; National Science Foundation; $359,961, September 9, 1998–September 8, 2001, $119,987/year for three years.

“The Structure of Phylogenetic Landscapes”; P.O. Lewis, PI; Alfred P. Sloan Foundation; $100,000, September 1, 1998–August 31, 2001, $33,333/year for three years.


LOKER, E.S.

“Training Grant in Functional Genomics, 1998-2003”; E.S. Loker, PI with several co-PIs; NSF IGERT; $2,602,318.

LOWREY, T.


MILNE, B.
"Spatially Distributed Modeling of Net Primary Productivity”; Warren Cohen, Oregon State University, PI, co-PIs from 14 Long Term Ecological Research Sites; Terrestrial and Ecosystem Change (TECO); my portion amounted to $319,800.

MOLLES, M.
"Influence of the Flood Pulse on Organic Matter Dynamics and Nitrogen Retention in a Regulated River/floodplain Ecosystem”; H.M. Valett, M.C. Molles, Jr., C.S. Crawford, co-PIs; National Science Foundation (NSF); $604,989, June 1997–June 2000, $201,663/yr.


NATVIG, D.

NELSON, M.A.
“The Neurospora Genome Project at UNM: Expressed Sequence Analyses”; M.A. Nelson, PI; National Science Foundation; $560,243, June 1, 1998–May 31, 2001; Year 1: $177,714, Year 2: $186,599, Year 3: $195,930 (direct plus indirect costs). This grant is pending.

SNELL, H.

“The Design of an Ecological Monitoring Program for the Galápagos Archipelago: The Next Step in Preventing Future Losses of Biological Diversity”; H.L. Snell and R. Bensted–Smith, co-PIs; Special Expeditions—Galápagos; $55,000, one year.

“A Proposal for Funds Supporting Science for Vertebrate Conservation Within the Galápagos Islands: A Senior Scientist as Program Leader for Restoration Ecology and Ecological Monitoring”; H.L. Snell, PI; Charles Darwin Foundation, Inc.; $70,000, one year.
WERNER-WASHBURN, M.


YATES, T.


2. Awarded with 1997 initial start date.

ALtenbach, S.

"Evaluation of Bat Habitat in the Solidad Mountain Project, Mojave CA"; J.S. Altenbach, PI; Brown Berry Biological Consulting; $2,400.

"Evaluation of Bat Habitat in Abandoned Mines in New Mexico"; J.S. Altenbach, PI; N.M. Department of Mining and Minerals; $11,250, July 1, 1997–June 30, 1998.

"Evaluation of Abandoned Mine Features for Bat Use and Bat Habitat for Sandia National Laboratories"; J.S. Altenbach, PI; Sandia National Laboratories; $992.

Barton, L.

“Enhancing Teaching of General Microbiology Through the Use of Computers”; L.L. Barton, PI; Teaching Allocations Sub-Committee, UNM; $2,500, December 12, 1997–December 1, 1998.

BROWN, J.


DAHM, C.

We were notified of an award from NASA on our bosque evapotranspiration proposal in June 1997, but the procurement has only recently been completed with a February 15, 1998 start date.

DUSZYNSKI, D.


GOSZ, J.

“Supplement to the Sevilleta LTER Award: Travel Funds for an Exchange of Asian Students with the LTER Program;” J.R. Gosz, PI; NSF; $14,500.


“A proposal for the Network Office of the U.S. Long Term Ecological Research Network from an Association of Institutions”; J.R. Gosz, PI; NSF; $5,590,000.

“Development of Criteria for the Intensive Research Sites in the National Monitoring and Research Network”; J.R. Gosz, PI; OSTP, Executive Office of the President; $10,000.

“Award for the IPA assignment of Chris French of NSF to work in the LTER Network Office”; J.R. Gosz, PI; NSF; $70,000.

HOFMANN, G.

“Ecological Significance of Heat Shock Proteins as Molecular Chaperones: Development of an Experimental System Using Fish Liver Cells”; G. Hofmann, PI; Large RAC, Research Allocations Committee, UNM; $6,285.

LI, B.-L.

"Canonical Correlation Analysis of Lake Okeechobee Phytoplanton Data"; Bai-Lian Li, PI; South Florida Water Management District; $7,800, March 15-September 15, 1997.

LOKER, E.S.

UNM Sponsor for Dr. Gerald M. Mkoji who was awarded an International Fellowship from the Fogarty International Center, $39,652, 28 August 1997.


LOWREY, T.


MILLER, R.

"Research Opportunity Award supplement to CAREER grant"; R.D. Miller, PI; NSF; $15,647, April 1, 1997-August 30, 1997.

"NSF International Programs travel supplement to CAREER grant"; R.D. Miller, PI; NSF; $10,360, December 1, 1997-November 30, 1998.

MOLLES, M.


NATVIG, D.

"Reproductive Genetics of Neurospora tetrasperma"; D.O. Natvig, PI; National Science Foundation; June 1, 1997-May 31, 2000, $52,900/year, $158,701 total.


NELSON, M.A.

SNELL, H.

"Oil/Gas Development and Habitat Influences on Sceloporus arenicolus. A management plan for Sceloporus arenicolus on public lands in southeast New Mexico"; D.S. Sias and H.L. Snell, co-PIs; New Mexico Dept. Game & Fish; $31,000, one year.

"Support for the Protection of the Biological Diversity of the Galápagos Islands: A Proposal to the Kleinwort Trust for 1998 Activities"; H.L. Snell, PI; Ernst Kleinwort Charitable Trust; $24,000, one year.

YATES, T.


"Replacement and Consolidation of Research and Training Facilities of the Department of Biology, University of New Mexico"; T.L. Yates, PI; NSF; $960,000, March 15, 1997–May 31, 1998, $480,000.

3. In force from previous years.

ALLENBACH, S.

"Evaluation of Bat Habitat in Abandoned Mines in New Mexico"; J.S. Allenbach, PI; N.M. Department of Mining and Minerals; $6,500, July 1, 1996–June 30, 1997.

BARTON, L.

"Bioremediation of two UMTRA Sites Containing Uranium in Ground Water: Shiprock, NM and Tuba City, AZ"; L.L. Barton, PI; DOE; $3,200,000, April 1, 1994–September 30, 1997.

"Mechanisms of Metal Transformation by Bacteria"; L.L. Barton is one of 15 faculty PIs on the grant; NIH; $2,000,000, yearly rate to L.L. Barton is $17,500, February 1, 1996–January 31, 2001.


BROWN, J.


CARROLL, S.
“Genetic and Environmental Influences on Behavioral Flexibility in an Insect”; S.P. Carroll and H. Dingle, Co-Pis; NSF; $230,500, January 1994–December 1997, $70,000–80,000.

DAHM, C.


“Nitrogen Uptake, Retention and Cycling in Stream Ecosystems”; C.N. Dahm and H.M. Valett, co-Pis; Virginia Tech/NSF; $39,727, June 1, 1997–August 31, 1998.


DUSZYNSKI, D.

“Sevilleta LTER II: Biome-level Constraints on Population, Community and Ecosystem Responses to Climatic Fluctuation.” Parasite subproject; B. Milne, PI, 10 co-Pis; NSF BSR-9411976; $3,700,000, October 1994–September 2000.

GOSZ, J.

“Supplement to the Sevilleta LTER Award: Travel Funds for Interactions with S. Africa”; J.R. Gosz, PI; NSF; $5,400.

“Supplement to the Sevilleta LTER Award: Travel Funds for Polish Scientists to Attend the ILTER Meeting in Panama”; J.R. Gosz, PI; NSF; $5,500.
KODRIC-BROWN, A.

"A Video-imaging Technique for the Analysis of Mate Choice in Fishes"; A. Kodric-Brown and P. Nicolette, co-PIs; National Science Foundation; $120,000.

LOKER, E.S.


"Biology of Trematode–Snail Associations"; E.S. Loker, PI; National Institutes of Health Grant; Competing Renewal of RO1 AI24340; $821,404 (direct costs), December 1994–November 1999.

"Molecular Studies of Schistosome–Snail Interactions"; E.S. Loker, PI, Dr. M.H. Mansour; Egyptian Co-PI; Medical Service Corporation International's Schistosomiasis Research Program; $35,714 (direct costs), 1996–97.

"Molecular Phylogeny for the Family Schistosomatidae"; Dr. S. Snyder, PI, E.S. Loker, UNM Faculty sponsor; NSF–Sloan Foundation; 1 September 1, 1996–August 30, 1998.

LOWREY, T.


MARSHALL, D.

"Does a Mating Character Respond to Selection in Wild Radish?"; D.L. Marshall, PI, A.S. Evans, Co-PI; National Science Foundation; December 1, 1995–May 31, 1997, $55,000.

MILLER, R.

"Isolating the SCID Mouse DNA Repair Gene"; R.D. Miller, PI; NIH/NIAID, 5 RO1 AI 34945; $346,211, December 1, 1995–August 30, 1997.

"CAREER Award: Immunological Development in a Marsupial"; R.D. Miller, PI; NSF; $300,000, October 1, 1996–September 30, 2000, yearly expenditures approx. $75,000.

MILNE, B.

"Sevilleta LTER II: Biome-level Constraints on Population, Community, and Ecosystem Responses to Climate Fluctuation"; B.T. Milne, PI, 10 other co-PIs; National Science Foundation; 1994–2000, $3,780,000 ($560,000/year).

"Multi-scaled Ecological Assessment Methods: Prototype Development Within the Interior Columbia Basin"; B.T. Milne; University of Colorado subaward; 1997–99, $40,000 per year.


"Linking Vegetation Succession with Slope Failure: From Single Landslides to Landscapes"; National Science Foundation; B.T. Milne and C. Restrepo, co-PIs; 1997–98, Minority Postdoctoral Research Fellowship, $37,320. Dr. Restrepo transferred to UNM from Dr. Peter Vitousek’s laboratory at Stanford University.


MOLLES, M.


NATVIG, D.


NELSON, M.A.


SNELL, H.

"Oil/Gas Fields and Habitat Influences on Sceloporus arenicola"; D.S. Sias and H.L. Snell, PI; New Mexico Dept. Game & Fish; $30,000, one year.

"Replacement and Consolidation of Research and Research Training Facilities of the Department of Biology, University of New Mexico"; T.L. Yates, R.R. Parmenter, H.L.
Snell and R.B. Lujan, co-Pis; $960,000, December 1996–December 1998, approximately $480,00/yr.

VOGEL, K.
"Proteoglycan Structure, Metabolism and Role in Tendon"; K.G. Vogel, PI; National Institutes of Health; September 1985–December 1998; 1997 award: direct costs $122,768, total award (direct + indirect) = $180,737.

WERNER–WASHBURN, M.
"The Mystery of an Ancient Gene" (production of a video for PBS broadcast); M. Werner–Washburne, PI; National Science Foundation, special supplement for integrating research and education; September 1996–August 1998; $50,000 plus contract with Los Alamos National Laboratories for animation for $34,000.

"Developmental Regulation of Signal Transduction: Bcy1p in Stationary-phase Yeast"; M. Werner–Washburne, PI; National Science Foundation; September 1996–August 1999, $240,000 plus supplements.

"Characterization of a Novel, Stationary-phase Gene in the Yeast Saccharomyces cerevisiae"; M. Werner–Washburne, PI; National Science Foundation; May 1995–April 1998, $380,000.

"The Neurospora Genome Sequencing Project"; M. Werner–Washburne, co-PI; National Science Foundation, HRD (for student training); August 1995–July 1998, $372,000 plus $300,000 matching.

"The Role of Gene Regulation in Starvation-induced Arrest in the Yeast Saccharomyces cerevisiae"; M. Werner–Washburne, PI; Presidential Young Investigator Award, NSF; July 1990–June 1996, $450,000.

YATES, T.


"Cooperative Agreement: Response of Southwestern Mammalian Communities to Global Climate Change"; T.L. Yates, PI; U.S. Fish & Wildlife Service; $264,000, September 2, 1993–September 30, 1998, $52,800.


B. Other.

HOFMANN, G.
Invitation to join faculty at University of Santa Barbara, Stanford and Oregon State University in a proposal to the Packard Foundation to fund long-term environmental research on the U.S. West Coast. Estimated budget: $60 million endowment to fund a 10-20 year project. Proposal has been submitted and is currently being reviewed by the Science Board of the Packard Foundation.

LEWIS, P.
Computer program (Genetic Data Analysis [GDA]) in progress, expected to be completed by Summer 1998. Currently more than 700 registered users.

LI, B.-L.
Completed two NSF projects and one EPA Corvallis Lab collaborative project (in Texas) in 1997; but all fundings did not go through UNM.

SNELL, H.
Dr. Robert Bensted-Smith (Director of the Charles Darwin Research Station) and I initiated a major collaborative program of Conservation Biology Research between the Charles Darwin Research Station in the Galápagos Islands and the University of New Mexico. This collaboration will promote the already extensive research collaborations among faculty and students of the Biology Department and the CDRS.

IV. ACTIVITES IN LEARNED AND PROFESSIONAL SOCIETIES.

A. Invited or Plenary Talks at Professional Meetings, Workshops, Etc.

BARTON, L.
Member of the topic Roundtable, International Biometals Symposium, “Metal Interactions in Bioremediation,” University of Calgary, Calgary, Alberta, Canada, August 10-14, 1997.

BROWN, J.

CARROLL, S.

DÁHM, C.
Dahm, C.N. and M.C. Molles Jr. 1997. Regional climate dynamics associated with the ENSO phenomenon and effects on biotic communities of stream and riparian ecosystems of New Mexico. American Society of Limnology and Oceanography Aquatic Sciences Meeting, Santa Fe NM, February 12.


DUSZYNSKI, D.


GOSZ, J.
Mexican Conference on LTER Networking in Mexico; NSF; "Interactions between Mexico and the U.S. LTER Network"; Puerto Viarta, Mexico; January 5, 1997.

International Symposium, Second Annual Southern Connections Congress; NSF; "International LTER Efforts: Opportunities in Latin America"; Chile; January 8, 1997.


International Symposium, Second Asian Pacific Regional Meeting; NSF; two seminars: "International LTER Efforts in the Asia Pacific Region" and "The U.S. LTER Network Program"; Tsukuba, Japan; March 3, 1997.

Mexican–U.S. Workshop on Long-term Research; NSF; "LTER/ILTER in the Future"; Sevilleta Field Station NM; April 1, 1997.


D-53
International Symposium; Third Latin American Regional LTER Meeting, NSF; two seminars: “Regional Efforts of the ILTER Network in Latin America” and “Lessons from the U.S. LTER and ILTER Experience”; Igua de Faca, Brazil; June 10, 1997.


Polish Academy of Sciences Workshop; NSF, PAC; “Central European Network of LTER Research Sites” Warsaw, Poland; June 23, 1997.


Workshop on the National Network of Monitoring and Research Index Sites; OSTP; “Role of Research at Index Sites in the National Program”; Baltimore MD; October 16, 1997.


Li, B.-L.


Invited talk, Beijer International Institute for Ecological Economics, University of Florida (Gainesville), MacArthur Foundation, MN Department of Natural Resources and University of MN (Duluth), Resilience Network Workshop on Sustainability in Boreal Regions: Sources and Consequences of Variability, “The Role of Modeling in Management for Ecological Resilience,” Lake Itasca State Park, MN, October 4-9, 1997.

MARSHALL, D.


MOLLES, M.

NATVIG, D.


NELSON, M.A.

SNELL, H.

STRICKER, S.


THORNHILL, R.


TOOLSON, E.

YATES, T.


Annual meeting US–Mexico Border Health Department, “Human Health, Climate Change, and Land Use,” Anthony, NM.

B. Contributed Talks at Professional Meetings, Workshops, Etc.

AL TENBACH, S.


BROWN, J.


CARROLL, S.

DUSZYNSKI, D.


GOSZ, J.

HOFMANN, G.
Presentation of paper, annual meeting for the Society of Integrative and Comparative Biology (SICB); "Molecular Chaperone Activity of the Stress Protein hsc70 Purified from an Eurythermal Goby G. mirabilis," Albuquerque NM, December 27-31, 1996 (the "1997" annual meeting).

JOHNSON, G.


KODRIC-BROWN, A.

Desert Fishes Council meeting, "Female Choice in Pecos Pupfish and Sheepshead Minnow" (with Jonathan Rosenfield), Death Valley CA, November 19-22, 1997.

LEWIS, P.


LI, B.-L.


LOKER, E.S.

Mirrales-Salazar, J. and E.S. Loker. 1997. Comparison of the relative susceptibility to digenean infection of a field-derived and two laboratory strains of Biomphalaria glabrata. Presented at the annual meeting of the Southwestern Association of Parasitologists, Lake Texoma OK, April 10-12.


LOWREY, T.


MARSHALL, D.

Co-author on contributed presentation, with Anna Sher, ESA Annual Meeting, Albuquerque NM, August 1997.

MILLER, R.

MILNE, B.


MOLLES, M.

THORNHILL, R.

VOGEL, K.


YATES, T.


Contributed presentation at VII International Theriological Congress, “Mammalian Collections Care: Towards a Higher Standard,” Acapulco, Mexico, September 6-12, 1997.

C. Attendance at Professional Meetings, Workshops, Etc.

BARTON, L.
The International Biometals Symposium, University of Calgary, Calgary, Alberta, Canada, August 10-14, 1997.
The 97th General Meeting of American Society for Microbiology, Miami Beach FL, May 4-8, 1997.

BROWN, J.

DAHM, C.
Evapotranspiration in Southwestern Riparian Ecosystems: Issues & Methods, Sevilleta Field Station, Socorro NM, April 7-8, 1997.
National Ground Water Association, Las Vegas NV, September 4-6, 1997.

DUSZYNSKI, D.
Annual Meeting, Ogden Medical-Surgical Society, 52nd Annual Meeting, Ogden UT, May 1997.
Bi-annual Meeting, Regional Pre-veterinary Advisors, Colorado State University, Ft. Collins CO.

10th International Congress of Protozoology, Sydney, Australia.

GOSZ, J.

Mexican Conference on LTER Networking in Mexico, Puerto Viarta, Mexico, January 5, 1997.

Second Annual Southern Connections Congress, Chile, January 8, 1997.


Second Asian Pacific Regional Meeting, Tsukuba, Japan; March 3, 1997.


Third Latin American Regional LTER Meeting, Iguazu de Faca, Brazil, June 10, 1997.


Polish Academy of Sciences Workshop, Warsaw, Poland, June 23, 1997.


Workshop on the National Network of Monitoring and Research Index Sites, Baltimore MD, October 16, 1997.

Southern China Symposium on Long Term Research, Guanzhao, China, November 6, 1997.

International Union of Biological Sciences, Taipei, Taiwan, November 12, 1997.

JOHNSON, G.


KODRIC-BROWN, A.

LEWIS, P.

American Institute of Biological Sciences, 48th Annual Meeting, Montreal, Quebec, Canada, August 3-7, 1997.

LI, B.-L.
SFI Workshop on Scaling in Biology, Santa Fe NM, October 27-29, 1997.

LOKER, E.S.

LOWREY, T.


Workshop, National Science Foundation and San Francisco State University, Molecular Genetic Analysis Applied to Evolution, Ecology, and Systematic Biology: An Extended Laboratory Course. San Francisco State University, San Francisco CA, August 4-17, 1997.

MARSHALL, D.
ESA Annual Meeting, Albuquerque NM, August 1997

GRMPB Annual Meeting, Baca Facility of Colorado College CO, September 1997

New Mexico Higher Education Assessment Conference, Las Cruces NM, February 1997

Indianapolis Assessment Conference, Indianapolis IN, November 1997

MILLER, R.

National Academy of Sciences Colloquium on Genetics and the Origin of Species, Irvine CA, January 30-February 1, 1997.


D-63
MILNE, B.
International Association for Landscape Ecology, Duke University, March 1997.

MOLLES, M.

NATVIG, D.
West Coast Neurospora Conference, University of California, Los Angeles CA, August 1997.
Annual conference of the Society for Advancement of Chicanos and Native Americans in Science, Houston TX, October 1997.

NELSON, M.A.

SNELL, H.

STRICKER, S.

THORNHILL, R.
Human Behavior and Evolution Society annual meeting, Tucson AZ, July 1997.
International Ethological Congress, Vienna, Austria, August 1997.

VOGEL, K.
WERNER-WASHBURNE, M.
Attended Advancement of Chicanos and Native Americans in the Sciences (SACNAS) meeting, Houston, October 1997.


YATES, T.
Southwestern Association of Naturalists
American Society of Mammologists
International Theriological Congress

D. Service as Editor of Scholarly Journal.

BARTON, L.
Editor-in-Chief for the international journal Anaerobe.

BROWN, J.
Associate Editor for North America, Journal of Biogeography.

DAHM, C.
Began a three-year term as an associate editor for the journals Ecology and Ecological Monographs in August 1997.

GOSZ, J.
Biogeochemistry.

KODRIC-BROWN, A.
Guest Editor, Environmental Biology of Fishes.

LI, B.-L.
Guest Editor for Ecological Modelling Special Issue: ISEM '95.

LOKER, E.S.
Associate Editor for “Invertebrate Host–Parasite Associations,” Journal of Parasitology.

Journal of Medical and Applied Malacology, member of Editorial Board.

SNELL, H.
Editor, Noticias de Galápagos.

YATES, T.
Editor for Book Reviews, Journal of Mammalogy.
E. Service on Editorial Board of Scholarly Journal.

BARTON, L.
Member of Editorial Board for the international journal BioMetals.

BROWN, J.
Evolutionary Ecology.

KODRICK-BROWN, A.
Environmental Biology of Fishes.

LOKER, E.S.

MILNE, B.
Special Topics Editor for Conservation Ecology.

MOLLES, M.
Associate Editor, Journal of the North American Benthological Society.

STRICKER, S.
Acta Zoologica.

THORNHILL, R.
Evolution and Human Behavior.
Zoology: Analysis of Complex Systems.

VOGEL, K.
Editorial Board, Archives for Biochemistry and Biophysics.
Editorial Board, European Journal of Cell Biology.

YATES, T.
Journal of Mammalogy.

F. Service as Officer of Professional Organization (indicate whether Elected or Appointed).

BARTON, L.
Secretary of International Biometals Society (appointed).

Member of Steering Committee for International Society for Iron Nutrition and Interaction in Plants.
BROWN, J.
President, Ecological Society of America (elected).

Merriam Award Committee, American Society of Mammalogists.

DAHM, C.
Chair of the Executive Committee of the North American Benthological Society (NABS) for 1996–97. Presently a candidate for President of NABS.

DUSZYNSKI, D.

Archivist, Annual Coccidiosis Conference (appointed).

Archivist, Southwestern Association of Parasitologists (appointed).

Research Affiliate, The Harold W. Manter Laboratory of Parasitology, University of Nebraska State Museum, Lincoln NE (elected).

GOSZ, J.
Chairman of the LTER Network (elected).

Chairman of the International LTER Network (elected).


LI, B.-L.
Statistical Ecology Program Committee for the VII International Congress of Ecology (INTECOL), member, 1997–98 (appointed).

LOWREY, T.
Council Member, American Society of Plant Taxonomists (elected).

NELSON, M.A.
New Mexico Computational Biology Committee, member, 1994–present (appointed).

Neurospora Policy Committee, 1997–present (elected to four-year term).

SNELL, H.
Vice President, North America of the Charles Darwin Foundation (elected).
VOGEL, K.
Chairman, Editorial Advisory Board (J. Orthop. Res.)

Ex officio member of Board of Directors, Orthopaedic Research Society (appointed).

WERNER-WASHBURNE, M.
Board of Directors, Society for the Advancement of Chicanos and Native Americans in the Sciences.

Publications committee, American Society for Cell Biology.

Minority Affairs, American Society for Microbiology.

YATES, T.
Trustee, Southwestern Association of Naturalists (SWAN).

Board of Directors, SWAN (appointed).

Trustee and Board of Directors, American Society of Mammalogists (appointed).

G. Other.

MARSHALL, D.
Organized and conducted an arts and crafts benefit sale for the Plant Population Ecology section of the ESA, August 1997.

V. OTHER PROFESSIONAL ACTIVITIES.

A. Colloquium Presentations, UNM and Elsewhere.

DUSZYNSKI, D.

LOWREY, T.
Department of Biology, “Phylogeny and Biogeography of Tetramolopium in the Pacific,” Wednesday Noon Seminar, UNM, October 1997.

NELSON, M.A.

THORNHILL, R.
Distinguished Developmental Biology Lecture Series, Department of Psychology, Cornell University, November 1997. Topics dealt with developmental stability, evolution, and psychology.
Department of Biology, Northern Arizona University, Flagstaff AZ, February 1997.

Department of Mathematics, University of Houston, Houston TX, March 1997.

WERNER-WASHBURNE, M.
Chair, session on graduate student choices, SACNAS meeting

YATES, T.
Colloquium in Biodiversity & Systematics series, Museum, "Mammalian Diversity and Changing Climate," Department of Biology, University of Colorado, Boulder CO.

B. Seminar Presentations, UNM and Elsewhere.

BROWN, J.
UNM Department of Biology Brown Bag Seminar
University of Missouri
Montana State University
James Cook University (Australia)
Auburn University

CARROLL, S.

DAHM, C.

Hydrogeocology Studies of Streams and Rivers in New Mexico." Flathead Lake Biological Station, Polson MT, April 26, 1997.

"An Overview of the Hydrogeocology Research Program at the University of New Mexico." The University of New Mexico, June 13, 1997.


GOSZ, J.
REU Program at the Sevilleta Field Station, "U.S. LTER Program."

HOFMANN, G.
University of Oregon, Oregon Institute for Marine Biology; Charleston OR, November 1997.
JOHNSON, G.
Presented Radiation Safety Lecture to Hughes Program summer students, UNM Dept. of Biology, June 4, 1997.

KODRIC-BROWN, A.
Presentation of two invited lectures at James Cook University, Townsville, Queensland, Australia, July 26-31, 1997.

Seminar on “Color Patterns in Freshwater Fishes,” Auburn University, Auburn AL.

LEWIS, P.

LI, B.-L.
“Innovative Mathematical and Computational Methods for Complex Ecosystems Studies,” Computational Biology Seminar, Department of Biology, UNM, April 8, 1997.


LOKER, E.S.
“Flukes and Snails: Some New Looks at Ancient Associations,” Department of Veterinary Pathology, Colorado State University, August 14, 1997.

MILNE, B.
Department of Mathematics and Statistics, The University of New Mexico, “The Canonical Structure and Dynamics of Landscapes.”

MOLLES, M.

NATVIG, D.
“It’s a Good Thing that Mendel Didn’t Study Neurospora tetrasperma,” UNM Department of Biology departmental seminar, November 1997.
NELSON, M.A.

"The Neurospora Genome Project: Gold from the Mold," Department of Molecular Genetics and Microbiology Seminar Series, The University of New Mexico Medical School, September 23, 1997.

SNELL, H.
El Estado de Nuestra Conocimiento de la Diversidad Biologica de las Islas Galápagos, Charles Darwin Research Station, Galápagos Islands, Ecuador, September 1997.

STRICKER, S.

Seminar, Department of Biology, UNM, "Intracellular Injections of a Soluble Sperm Factor Trigger Calcium Oscillations and Egg Activation in a Marine Worm," April 11, 1997.

Seminar, Department of Anatomy, UNM, November 21, 1997

VOGEL, K.
Rush-Presbyterian School of Medicine, Department of Biochemistry, Chicago IL January 1997.

University of Turku, School of Medicine, Department of Pathology, Turku, Finland, March 1997.

Lunds University, Department of Physiological Chemistry, Lund, Sweden, April 1997.

Department of Cell Biology and Physiology, UNM, October 1997.

University of California, San Francisco, Department of Bioengineering/Orthopaedics, San Francisco CA, October 1997.

WERNER-WASHBURNE, M.
"Hey, There's Life Out There: Studies of Stationary Phase in the Yeast Saccharomyces cerevisiae," Biology Department, University of Iowa, October 31, 1997.

C. Testimony in a Scholarly Capacity at Hearings of Commissions, Legislative Committees, Etc.

MILNE, B.
Appeared on the New Mexico telecast of "White House Conference on Global Climate Change," October 6, 1997.
SNELL, H.
Participated in a week-long conflict resolution proceeding that planned the interactions of Tourism, Scientific Research, and Artesinal Fishing in the Newly Sanctioned Galápagos Marine Reserve, October 1997.

THORNHILL, R.
Santa Fe, NM state legislature, regarding evolution bill.

YATES, T.
Evolution debate at State of New Mexico Legislature, Santa Fe NM.

D. Presentation to General Audience in a Scholarly Capacity.

ALTENBACH, S.

“Bats, A 40-Year Journey,” invited lecture presented to the participants and visitors at the bats/abandoned mines workshop in Muddy IL, August 14, 1997.

“Bats,” invited lecture presented to the participants and visitors at the bats/abandoned mines workshop, Salt Lake City UT, June 25, 1997.

BROWN, J.
Ecology, Santa Fe Institute Science Board, Santa Fe NM.

MOLLES, M.

NELSON, M.A.
Presented a general lecture on my research to a class at TVI, June 11, 1997.

SNELL, H.
Fifteen evening seminars to audiences of 70-100 visitors to the Galápagos National Park. Spoke about future conservation efforts for the islands, two seminars a month between June and December 1997.

THORNHILL, R.
E. 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.

BARTON, L.
Reviewed three grant applications for National Research Initiative Competitive Grants Program, Washington DC.

BROWN, J.
Scientific Advisory Board, Malpai Borderlands Group

Scientific Advisory Board, National Center for Ecological Analysis and Synthesis

DAHM, C.
Representative of the North American Benthological Society at the Council of Aquatic Sciences semi-annual meeting, Santa Fe NM, February 14, 1997.

External site reviewer for science content for the National Science Foundation for the Graduate Research Traineeship (GRT) program in environmental biology at the University of Wisconsin and University of Washington, March 10-11, 1997.

Panelist for the Environmental Geochemistry and Biogeochemistry (EGB) competition of the National Science Foundation, April 1-6, 1997.

External site reviewer for science content for the National Science Foundation for the Graduate Research Traineeship (GRT) program in environmental biology at the University of Notre Dame, April 14-16, 1997.

External site reviewer for science content for the National Science Foundation for the Graduate Research Traineeship (GRT) program in environmental biology at the University of Montana, April 27-29, 1997.

Site reviewer for the mid-term review of the Luquillo Long-Term Ecological Research (LTER) project for the National Science Foundation in Puerto Rico, June 4-7, 1997.

Panelist for NSF review of the GRT program held at the National Science Foundation, July 22-24, 1997.

DUSZYNSKI, D.
NSF Survey and Inventory Panel Member, traveled to Washington DC, February 1997.

GOSZ, J.
National Science Foundation Panel on Urban LTER sites
JOHNSON, G.
Judge State Science Fair, Chair of Senior Botany Section, Socorro NM, April 12, 1997.

LI, B.-L.

LIGON, D.
New Mexico Department of Game & Fish Panel on the status of the Lesser Prairie Chicken.

LOKER, E.S.
NIH NIAID Panel member for Tropical and Medicine and Parasitology Study Section, July 9-10, 1997.
NIH NIAID Panel member for Tropical and Medicine and Parasitology Study Section, November 6-7, 1997.

LOWREY, T.
Member, New Mexico Plant Recovery Team, Advisory committee to U.S. Fish and Wildlife Agency, Department of the Interior.

MILNE, B.
Ecological Society of America, Session Chair.
Ecological Society of America, Tour Leader, annual meeting, 1997.
International Association for Landscape Ecology, Student Presentation judge.

NATVIG, D.
NSF Genetics panel member, June 1997

SNELL, H.
Program Leader for Vertebrate Restoration Ecology and Ecological Monitoring at the Charles Darwin Research Station.

STRICKER, S.
Reviewed grant proposal for NSF Cell Biology Program.
Reviewed grant proposal for Marine Biological Association of the United Kingdom, November 1997.
VOGEL, K.
Pathobiochemistry Study Section (regular member), National Institutes of Health, 1994–97.

WERNER-WASHBURNE, M.
Committee on Equal Opportunity in Science and Engineering (CEOSE), NSF, advisory board to Neal Lane, Director.

Howard Hughes pre-doctoral fellowship panel, February 1997


BARTON, L.
 Anaerobe (86)
 Applied & Environmental Microbiology (3)
 Biometals (2)
 Journal of Bacteriology (1)
 Journal of Plant Nutrition (3)

BROWN, J.
 Conservation Biology (1)
 Science (1)
 Ecology (1)
 Proceedings of the National Academy of Sciences (1)
 Oecologia (1)

CARROLL, S.
 Trends in Ecology and Evolution (1)

DAHM, C.
 Ecology (6)
 Journal of the North American Benthological Society (1)

DUSZYNSKI, D.
 American Midland Naturalist (1)
 Journal of Parasitology (2)

GOSZ, J.
 Biogeochecmistry (1)
 Ecology (2)

HOFMANN, G.
 Journal of Experimental Biology (4)
 Journal North American Benthological Society (1)
 American Zoologist (1)
KODRIC-BROWN, A.
Animal Behaviour (5)
American Naturalist (2)
Behavioral Ecology (4)
Behavioral Ecology & Sociobiology (2)
Copeia (1)
Ecology (1)
Evolution (1)
Environmental Biology of Fishes (6)
PNAS (2)

LEWIS, P.
Genomics (1)
Evolution (1)
American Journal of Botany (1)

LI, B.-L.
Landscape Ecology (1)
Environmental and Ecological Statistics (1)

LIGON, D.
American Naturalist (2)
Animal Behaviour (1)
Proceedings of the Royal Society, London (1 or 2)
Behavioral Ecology (1)

LOKER, E.S.
Experimental Parasitology (2)
Journal of Invertebrate Pathology (1)
Journal of Leukocyte Biology (1)
Journal of Medical and Applied Malacology (1)
Journal of Parasitology (18)
Parasitology (1)
Book review for Johns Hopkins University Press (1)
Reviews of NSF proposals (1)

LOWREY, T.
Systematic Botany (1)
American Journal of Botany (1)

MARSHALL, D.
American Journal of Botany (2)
Annals of Botany (1)
Ecology (1)
Evolution (1)
MILLER, R.

*Journal of Immunology* (4)
*Laboratory Animal Science* (2)

MILNE, B.

*BioScience* (1)
*Computational Science and Engineering* (1)
*Conservation Biology* (1)
*Journal of Ecology* (1)
*The Nature Conservancy* (1 proposal review)

MOLLES, M.

*Journal of the North American Benthological Society* (4)

NATVIG, D.

*Genetics* (1)
*Fungal Genetics and Biology* (1)
*Mycological Research* (1)

NELSON, M.A.

*Genetics* (2)
*Fungal Genetics and Biology* (1)
Reviewed 2 proposals for National Science Foundation
Reviewed 1 proposal for US Department of Agriculture

STRICKER, S.

*Cell Calcium* (1)
*Developmental Biology* (2)
*International Journal of Developmental Biology* (1)
*Biological Bulletin* (2)

THORNHILL, R.

*Animal Behaviour* (3)
*Behavioral Ecology* (1)
*Ecology* (1)
*Evolution and Human Behavior* (2)
*Insect Behavior* (2)
*Nature* (2)
*Science* (1)

WERNER-WASHBURN, M.

*EMBO Journal* (1)
*Journal of Bact.* (2)
*Genetics* (1)
YATES, T.
Journal of Mammalogy
Journal of Molecular Evolution

VI. NON-TEACHING UNIVERSITY, COLLEGE AND DEPARTMENT SERVICE.

A. Symposia, Workshops, Conferences, Etc., Sponsored, Hosted, Organized.

BARTON, L.
Organizing Committee for International Biometals Symposium held in Canada, August 1997.

BROWN, J.
Hosted and organized "Universal Phenomena in Ecology?" Workshop, National Center for Ecological Analysis and Synthesis/Santa Fe Institute, March 10-13, 1997.

Hosted and organized "Scaling in Biology" Workshop, Santa Fe Institute, October 27-29, 1997.

DAHM, C.
Assisted in hosting the Symposium on Evapotranspiration in Southwestern Riparian Ecosystems: Issues and Methods at the Field Station of the Sevilleta LTER.

GOSZ, J.

LI, B.-L.
The Second Workshop of the International Institute for General Systems Studies, Member of the Program/Organizing Committee and Chairman of the Session on Systems Analysis in Ecological Sciences, San Marcos TX, January 1997.

YATES, T.
Organized and hosted 1998 Southwestern Association of Naturalists' Annual Meeting, Albuquerque NM.

B. Distinguished Departmental Visitors You Hosted.

BROWN, J.
Eric Charnov, Professor of Biology, University of Utah
John Bonner, Distinguished Professor, Princeton University

DAHM, C.
Dr. Michael F Allen, San Diego State University
DUSZYNSKI, D.
Dr. Lynn Wheaton, Associate Dean, College of Veterinary Medicine, Washington State University, Pullman WA, "The Program at WSU," September 17, 1997.

Dr. Duane Lassen, Associate Dean, College of Veterinary Medicine, Colorado State University, Ft. Collins CO, "Open Forum on the CSU Vet School," November 19, 1997.

GOSZ, J.
Dr. Sam McNaughton, Department of Biology, Syracuse University

LOKER, E.S.
Dr. Petr Horak, Charles University, Prague, Czech Republic, July 26–August 3, 1997.
Dr. Wil vanderKnaap, IFREMIR, Montpellier, France, July 26–August 3, 1997.

LOWREY, T.
Summer: Professor Christopher Quinn, School of Biological Sciences, University of New South Wales, Sydney, Australia

MILNE, B.
Members of the NSF LTER site review panel.

NELSON, M.A.
Dr. Peter Schad, Vice President of Bioinformatics and Biotechnology, National Center for Genome resources, Santa Fe NM, November 14, 1997.

THORNHILL, R.
Fall: John Manning, UNM Department of Biology seminar speaker
Deva Singh, UNM Department of Biology seminar speaker

VOGEL, K.
Dr. Hernandez de Carvalho, Campinas, Brazil, Visiting Research Professor, October 1997–April 1998.

WERNER–WASHBURNE, M.
Mike Yaffee, Professor, University of California, San Diego CA
Mike Snyder, Professor, Yale University CT

YATES, T.
C.J. Peters, Leonard Krishtalka, Sydney Anderson
C. Committee Service.

1. Departmental committees served on in 1997 (indicate chair with asterisk).

ALTENBACH, S.
*Undergraduate Policy Committee
*Graduation Committee

BARTON, L.
Graduate Policy Committee

BROWN, J.
*Graduate Student Selection Committee

CARROLL, S.
Graduate Student Selection Committee

DAHM, C.
Library Liaison Committee

DUSZYNSKI, D.
*Biological Society of New Mexico
Biology Development Committee
Field Program Committee
Undergraduate Systematics Course Development Committee

GOSZ, J.
Space Committee
Promotion and Tenure Committee
*Job Search Committee for Computational Biologist
Graduate Student Selection Committee

HOFMANN, G.
Graduate Policy Committee

JOHNSON, G.
Greenhouse Committee

KODRIC-BROWN, A.
*Graduate Policy Committee
Ichthyology Search Committee
Field trip Resources Committee
Research Day Committee
LEWIS, P.
Search Committee for Ichthyologist/Curator of Fishes
Departmental Seminar Committee

LOKER, E.S.
Graduate Student Selection Committee, Spring
Promotion and Tenure Committee
Undergraduate Policy Committee, Spring
Hughes Governance Committee
Developmental Biology Search Committee
*Departmental Space Committee

LOWREY, T.
*Ichthyology Position Search Committee
Space Committee

MARSHALL, D.
*Greenhouse Committee
Space Committee
Undergraduate Policy Committee

MILLER, R.
Undergraduate Policy Committee
Developmental Biology Faculty Search Committee
Departmental Safety Committee

MILNE, B.
Computational Biology Search Committee

MOLLES, M.
Ichthyology Search Committee

NATVIG, D.
Space Committee
Undergraduate Policy Committee

NELSON, M.A.
Hughes Undergraduate Research Program Advisory Committee
Research Improvements in Minority Institutions (RIMI) Committee
Library Liaison
Developmental Biologist Search Committee
Graduate Student Selection Committee

D-81
SNELL, H.
Latin American Institute Field Grants and Awards Committee.
*Graduate Policy Committee
Graduate Student Selection Committee
Field Courses Committee

STRICKER, S.
Search Committee, Molecular Developmental Geneticist

THORNHILL, R.
Annual Research Day

VOGEL, K.
Undergraduate Policy Committee
*Promotion and Tenure Committee

WERNER-WASHBURN, M.
Undergraduate Policy Committee
* Developmental Biology Search Committee
Departmental Space Committee

2. College/University committees served on in 1997 (indicate chair with asterisk).

BARTON, L.
Bachelor of University Studies Committee
Admissions and Registration Committee

BROWN, J.
Regents’ Committee

DAHM, C.
Department of Biology representative to the Graduate Studies Committee
Curriculum Committee

DUSDZYNKI, D.
Athletic Council
*Academic Integrity Subcommittee, NCAA Accreditation of the UNM Athletic Department
Evans Distribution Committee, UNM Foundation

GOSZ, J.
University Research Allocations Committee

HOFMANN, G.
UNM Radiation Control Committee

D-82
JOHNSON, G.
Faculty Senate Undergraduate Committee

LOKER, E.S.
A&S Committee to Select Regents' Lecturers
A&S Graduate Advising Committee

LOWREY, T.
Academic Freedom & Tenure Committee
Library Committee
Science and Engineering IDC Library Committee

MILNE, B.
Advisor to Statistical Consulting Program.


NELSON, M.A.
Faculty Senate, elected to two-year term (1997–99)
SEC Program Committee
Minority International Research Training (MIRT) Advisory Committee

SNELL, H.
Faculty Ethics Committee

TAYLOR, F.
Faculty Senate Budget Committee

THORNHILL, R.
A&S Promotion

WERNER–WASHBURNE, M.
A&S Dean's Search Committee

D. Other.

ALTENBACH, S.
Advisor to the New Mexico Chapter of the Nature Conservency on the Jornada del Muerto bat caves.

Advisor to the University of Wisconsin, Milwaukee, on the Neda Mine Bat Hibernaculum, Dodge County, WI.
CARROLL, S.
Coordinator, Departmental Ecology and Evolution Seminar

DUSZYNSKI, D.
UNM Advisor, Pre-veterinary Medicine; counseled 12 students for about 30-60 minutes each in 1997.

Helped the Athletic Department recruit student athletes in men's football and women's soccer.

HOFMANN, G.
Judge at UNM Department of Biology 1997 Research Day, April 1997

Participated in mentorship program for grade school girls

Faculty sponsor for the student group, Southwest Biology Initiative (SBI)

LEWIS, P.
Developed Department of Biology Photoboard (accessible from UNM Biology Home Page at http://biology.unm.edu/)

LOKER, E.S.
Poster Judge, Sixth Annual Research Day, Department of Biology, UNM, April 1997
Mentor for MBRS students David Quintana and Danny Molina
Mentor for Regents' Scholars Danny Molina and Beau Nelson
Mentor for Seniors Honors student Peter Doucette
Informal mentor for Elizabeth Martinson, Anthropology graduate student

MILNE, B.
Reviewed applications for the Dean's Research Semester Award.

Called potential undergraduate students as part of the “Recruitment Calling Campaign.”

NELSON, M.A.

Mentored one undergraduate student, Robert Trujillo, in the Minorities in Biomedical Research Support (MBRS) Program.

Mentor for a Regents' Scholar (Leslie Reeves)

Judge for Oral Presentations, Sixth Annual Research Day, Department of Biology, UNM, April 18, 1997.

D-84
MARSHALL, D.
Director, UNM Student Outcomes Assessment (half-time administrative appointment)
Honors Advisor, Biology Department
Mentor for a Regents' Scholar

WERNER-WASHBURN, M.
MBRS Advisory Board

VII. ADVANCED STUDY AND NEW SCHOLASTIC HONORS, FELLOWSHIPS, ETC.

BROWN, J.
Invitation to deliver 17th Annual Lubinsky Lecture, University of Manitoba.

HOFMANN, G.
The Bartholomew Award, Society of Integrative Biology (distinguished young investigator award)

LOWREY, T.
Participated in: National Science Foundation and San Francisco State University, Molecular Genetic Analysis Applied to Evolution, Ecology, and Systematic Biology: An Extended Laboratory Course. San Francisco State University, San Francisco CA, August 4-17, 1997. Selected from national list of faculty applicants.

MILNE, B.
Spring: Dean's Research Award Semester
Regents' Lecturer Award (1995–98)

VIII. SABBATICALS, LEAVES OF ABSENCE, SUMMER TEACHING ELSEWHERE, TRAVEL, ETC., DURING THE PERIOD.

CARROLL, S.
Fieldwork, Costa Rica after Fall semester.

DUSZYNSKI, D.
Traveled to the following locations on some aspect of teaching or research:

Washington DC (NSF Survey & Inventory Panel member), February 1997.
Belize, Central America (Biol. 461L, Tropical Biology class), March 1997.
Lake Texoma OK (SWAP meeting), April 2, 1997.
Ogden UT (Ogden Surgical meeting), May 1997.
Ft. Collins CO (CSU Pre-vet advisors meeting), June 1997.
Nashville TN (ASP meeting), June 1997.
Pullman WA (WICHE meeting), June 1997.
Canberra/Sydney/Brisbane/Cairns/Darwin/Adelaide, Australia (Australian Parasitologist Society and Seventh International Congress Protozoologists meetings & PEET grant sponsored research), July 1997.
Tucson AZ (CEDO, Inc. advisors meeting), August 1997.
San Juan, Puerto Rico (ASP site visit), September 1997.
Kona HI (ASP site visit), November 1997.

HOFMANN, G.
March: Collecting trip to Monterey CA.
June: Three-week research trip to Friday Harbor Laboratories, University of Washington.
August: Collecting trip to Monterey Bay CA.
August: Research field trip to Northern Gulf of California, Sonora, Mexico.
October: Trip to Oregon to participate in grant writing workshop for submission to Packard Foundation.
November: Seminar at the University of Oregon, Oregon Institute of Marine Biology, Charleston OR.

LOKER, E.S.
Visiting Scholar, Universite de Perpignan, Perpignan, France, June 28–July 6, 1997.

MOLLES, M.
Summer course: Riparian Ecology, University of Montana, Flathead Lake Biological Station, Polson MT, June–July 1997.

SNELL, H.
I began a “split position” between the Biology Department at UNM and the Charles Darwin Research Station in June of 1997. This reassignment is part of the major collaborative agreement between UNM and the Charles Darwin Research Station. Under the reassignment, I spend 1.5 months of every semester at UNM and the rest of the year leading research projects within the Galápagos Islands.

An added benefit of this arrangement is that the Biology Department has been able to use the money provided by the Charles Darwin Research Station to hire an additional faculty member, who will become the Faculty Curator of Ichthyology.

STRICKER, S.
Spring: Sabbatical. Sabbatical research conducted at Hopkins Marine Station and Friday Harbor Laboratories.


TOOLSON, E.
Fall: Sabbatical leave.
VÖGEL, K.
Research at University of Lund, Lund Sweden, March–May 1997 [reward for selection as UNM Research Lecturer, 1996].

YATES, T.
Bolivia (pwače); Spain; Washington, DC; Las Cruces, NM; Japan

IX. PUBLIC SERVICE.

CARROLL, S.
Respond to public queries made to the department about entomological issues.

DAHM, C.
Science Fair Judge for Mountain View Middle School, Rio Rancho NM.

DUSZYNSKI, D.
Statistican, American Youth Basketball League, 11/12-year-old division.

JOHNSON, G.
General Board Member, United Christian Ministries (UNM campus)

LI, B.–L.
Acted as a judge for New Mexico MESA’s Western Regional Competition.

LOWREY, T.
Science Advisor (Botany) to students and faculty, Chamiza Elementary School, Albuquerque Public Schools

MARSHALL, D.
Helped organize the Expanding Your Horizons Conference for the New Mexico Network for Women in Science and Engineering.

MILNE, B.
Led a tour of the Sevilleta LTER for the Board of Trustees of the Nature Conservancy.

MOLLES, M.
Trustee for The Nature Conservancy of New Mexico

NELSON, M.A.
Judge for Jefferson Middle School Science Fair, February 12, 1997.

Court Appointed Special Advocate (addressing child abuse and neglect).
SNELL, H.
Usual curator activities—answering queries from the public via phone and electronic mail about reptiles, conservation biology and the Galápagos islands. In 1997, responded to more than 100 queries.

Worked closely with local communities in the Galápagos on issues arising from the collision of a growing human population and the Ecuadorian government’s mandate to protect the biological diversity of the Galápagos Archipelago.

Also collaborated closely with the New Mexico Division of Game and Fish on several matters of conservation with reptiles and amphibians of New Mexico.

THORNHILL, R.
Spring: Judge, APS Science Fair
APPENDIX E
RESEARCH PROPOSALS
SUBMITTED, FY 1997–98
# BIOLOGY DEPARTMENT
## 1997–98 FISCAL YEAR

### PROPOSALS

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Agency</th>
<th>Period of Performance</th>
<th>Proposed Funding</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barton &amp; Thomson</td>
<td>WERC-DOE</td>
<td>08/01/97–07/31/98</td>
<td>61,480</td>
<td>JULY 1997: Chemical/Biological Treatment Strategies for Mixed Wastes: Phase II.</td>
</tr>
<tr>
<td>Hofmann, G.</td>
<td>NSF</td>
<td>01/01/98–12/31/00</td>
<td>33,524</td>
<td>Nearshore–benthic Linkages: Larval Condition Vs. Larval/recruit Abundance as Determinants of Rocky Intertidal Mussel and Barnacle Populations.</td>
</tr>
<tr>
<td>Muldavin, E.</td>
<td>NPS</td>
<td>09/30/96–09/30/98</td>
<td>50,000</td>
<td>Vegetation Mapping at Big Bend National Park &amp; Northern Sierra del Carmen, Mexico (revised).</td>
</tr>
<tr>
<td>Natvig &amp; Nelson</td>
<td>NSF</td>
<td>07/15/97–06/14/98</td>
<td>44,400</td>
<td>The Neurospora Genome Project at the University of New Mexico.</td>
</tr>
<tr>
<td>Werner-Washburne, M.</td>
<td>LANL</td>
<td>08/01/97–09/30/98</td>
<td>33,778</td>
<td>Computer Animation of Cell Biology.</td>
</tr>
<tr>
<td>Wilkins, E. &amp; Yates, T.</td>
<td>NSF</td>
<td>01/01/98–12/31/01</td>
<td>497,500</td>
<td>Portable Flow-through Amperometric Immunosensor Device for Fast Field Immunoanalysis of Rodent Virus.</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td></td>
<td>$720,682</td>
<td></td>
</tr>
</tbody>
</table>

### AUGUST 1997

| Barton & Thomson       | WERC-DOE     | 07/01/96–02/28/98     | 24,000           | Chemical/Biological Treatment Strategies for Mixed Wastes.                                    |
| Total:                 |              |                       | $24,000           |                                                                                                 |

### September 1997

<p>| Barton &amp; Thomson       | WERC-DOE     | 08/01/97–07/31/98     | 14,400           | Chemical/Biological Treatment Strategies for Mixed Waste Phase II.                            |
| Crawford, C.           | USF&amp;WS       | 10/01/97–09/30/98     | 24,000           | Ecological monitoring: Middle Rio Grande Bosque.                                               |
| Dahm, C.               | NASA Exobiology | 01/01/98–12/31/00    | 499,011          | Geomicrobiological Interactions of Extant and Fossil Microbial Communities in Cave Deep Subsurface Environments: Implications for Life on Mars. |
| Gosz, J.               | OSTP White House | 09/11/97–04/15/98   | 10,000           | Role of Index Sites in a National Network.                                                     |</p>
<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Agency/Proposal No.</th>
<th>Period of Performance</th>
<th>Proposed Funding</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loker, E.S.</td>
<td>NIH</td>
<td>12/01/97-11/30/98</td>
<td>226,955</td>
<td>Biology of Trematode–Snail Associations.</td>
</tr>
<tr>
<td>Loker, E.</td>
<td>NSF</td>
<td>08/01/98-09/30/03</td>
<td>2,602,318</td>
<td>Training Grant in Functional Genomics.</td>
</tr>
<tr>
<td>Johnson, C.</td>
<td>DOD</td>
<td>10/01/97-12/31/99</td>
<td>31,270</td>
<td>Endangered Species Management Plan for the Mexican Spotted Owl on White Sands Missile Range, Phase I.</td>
</tr>
<tr>
<td>Johnson, K.</td>
<td>Nature Conserv.</td>
<td>09/01/97-10/31/98</td>
<td>26,261</td>
<td>Lesser Prairie Chicken Telemetry Study.</td>
</tr>
<tr>
<td>Johnson, K.</td>
<td>DOD–US Army</td>
<td>03/01/97-12/31/98</td>
<td>3,029</td>
<td>Foraging Ecology of Wetland Birds at Holloman AFB.</td>
</tr>
<tr>
<td>Mehlhop, P.</td>
<td>DOD</td>
<td>09/20/97-03/19/99</td>
<td>1,000</td>
<td>Integrated Resource Management Plan for Holloman AFB.</td>
</tr>
<tr>
<td>Milne, B.</td>
<td>NSF</td>
<td>10/15/97-10/14/98</td>
<td>560,000</td>
<td>Sevilleta LTER II: Biome-level Constraints on Population, Community and Ecosystem Responses to Climate Fluctuations.</td>
</tr>
<tr>
<td>Milne, B.</td>
<td></td>
<td>09/09/97-12/31/98</td>
<td>40,000</td>
<td>Linking Vegetation Succession with Slope Failure: From Single Landslides to Landscapes.</td>
</tr>
<tr>
<td>Molles, M. &amp; Ellis, L.</td>
<td>USF&amp;WS</td>
<td>10/01/97-09/30/98</td>
<td>12,038</td>
<td>Fragmentation and Restoration of the Middle Rio Grande Cottonwood Forest.</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td></td>
<td>$4,066,345</td>
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</tr>
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</table>

**OCTOBER 1997**

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Agency/Proposal No.</th>
<th>Period of Performance</th>
<th>Proposed Funding</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evans &amp; Leffler</td>
<td>NSF</td>
<td>04/01/98-03/31/99</td>
<td>10,400</td>
<td>Spatial and Temporal Variation in the Physiology of a Riparian Tree.</td>
</tr>
<tr>
<td>Gannon, W.</td>
<td>NMDG&amp;F</td>
<td>10/15/97-11/30/98</td>
<td>11,733</td>
<td>Acoustic and Netting Survey of the Bats of New Mexico Amendment.</td>
</tr>
<tr>
<td>Gosz, J.</td>
<td>NSF</td>
<td>11/01/97-11/01/99</td>
<td>50,000</td>
<td>So We Last.</td>
</tr>
<tr>
<td>Johnson, K.</td>
<td>NMDG&amp;F</td>
<td>03/01/98-12/31/98</td>
<td>10,000</td>
<td>Lesser Prairie Chicken Surveys on Dept. of Game &amp;Fish Lesser Prairie Chicken areas. Structure in Populations of the Tropical Pitcher Plant.</td>
</tr>
<tr>
<td>Ladyman, J.</td>
<td>USDA–Forest Service</td>
<td>04/01/98-08/31/98</td>
<td>9,209</td>
<td>Kuenzler’s Cactus Surveys.</td>
</tr>
<tr>
<td>Lewis, L.</td>
<td>NSF</td>
<td>09/01/98-08/31/01</td>
<td>145,551</td>
<td>Subcontract: Survey of the Algae, Lichens, and Mosses of Microbiotic Crusts in Dissertations.</td>
</tr>
<tr>
<td>Lowrey &amp; Frazier</td>
<td>NSF</td>
<td>02/14/98-07/30/98</td>
<td>6,075</td>
<td>Kunezler’s Cactus Surveys.</td>
</tr>
<tr>
<td>Vogel, K.</td>
<td>NIH</td>
<td>01/01/98-12/31/98</td>
<td>127,599</td>
<td>Proteoglycan Structure, Metabolism and Role in Tendon.</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td></td>
<td>$658,207</td>
<td>Selected Semi-arid Sites in Western North America.</td>
</tr>
</tbody>
</table>

Page 2
<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Agency/Proposal No.</th>
<th>Period of Performance</th>
<th>Proposed Funding</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown, J.</td>
<td>NSF</td>
<td>05/15/98–08/15/98</td>
<td>11,250</td>
<td>Long-term Monitoring and Manipulation of an Arid Ecosystem.</td>
</tr>
<tr>
<td>Gosz, J.</td>
<td>NSF/UC</td>
<td>10/01/97–09/30/98</td>
<td>60,000</td>
<td>NPACO Program: Earth Systems Sciences Thrust 9500 Gilman Drive 0914, La Jolla, CA 92039–0914.</td>
</tr>
<tr>
<td>Wagner, A.</td>
<td>A.P. Sloane Fnd.</td>
<td>09/01/98–08/31/01</td>
<td>100,000</td>
<td>Robustness of Developmental Pathways to Mutations and the Evolution of Partially Redundant Genes.</td>
</tr>
<tr>
<td>Yates, T.</td>
<td>IHS</td>
<td>05/15/97–05/14/98</td>
<td>104,590</td>
<td>Longitudinal Studies of Hantavirus in Rodent Populations of the American Southwest.</td>
</tr>
<tr>
<td>Yates, T.</td>
<td>IHS</td>
<td>05/15/98–05/14/99</td>
<td>109,820</td>
<td>Longitudinal Studies of Hantavirus in Rodent Populations of the American Southwest.</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td></td>
<td><strong>$668,153</strong></td>
<td></td>
</tr>
</tbody>
</table>

**NOVEMBER 1997**

<p>| Dahm, C.              | NSF                 | 10/1/98–09/30/01     | 212,982          | Collaborative Research: Inter-annual Variation in Snowmelt Intensity and Control of Benthic Algal Assemblages. |
| Dahm &amp; Crossey        | NSF                 | 07/01/98–06/30/00    | 292,134          | Geomicrobiological Interactions of Microbial Communities in Cave Deep Subsurface Environments: A Novel Extreme Environment. |
| Dragoo, J.            | NMDG&amp;F              | 10/01/97–09/30/98    | 1,999,950        | Taxonomy and Conservation of Swift Foxes and Kit Foxes in New Mexico. |
| Hofmann, G.           | NSF                 | 01/20/98–08/31/98    | 10,000           | REU Supplement to NSF Grant IBN 9723063. |
| Lewis, L.             | NSF                 | 09/01/98–08/31/01    | 359,961          | Molecular Phylogeny of the Liverworts (Bryophyta) and the Extent of the Complex Thalloid Slowdown. |
| Marshall, D.          | NSF                 | 07/01/98–06/31/01    | 275,548          | Can Non-random Mating Result in Evolutionary Change?: A Selection Experiment Using Wild Radish as a Model System. Phase II |
| Molles, Dahm &amp; Valett| NSF                 | 06/01/98–05/31/01    | 479,767          | CRB: Flooding Regime and Restoration of Riparian Ecosystem Integrity. |
| Muldavin, E.          | NSF                 | 06/01/98–05/31/01    | 27,949           | Long-term Vs. Short-term Dynamics of Desert Grasslands: The Role of Climatic Variability. |
| Stacey, P.            | NSF                 | 06/01/98–05/30/01    | 380,943          | CRB. Effects of Predator–Prey Disequilibrium on Biological Diversity: How the Loss of |</p>
<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Agency/Proposal No.</th>
<th>Period of Performance</th>
<th>Proposed Funding</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vande Castle &amp; Brunt</td>
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<td>03/15/98–02/28/99</td>
<td>900,000</td>
<td>Grizzly Bears and Wolves May Affect Riparian Birds.</td>
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<td>Wagner, A</td>
<td>NSF</td>
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<td>389,784</td>
<td>A Proposal for the Network Office of the US Long Term Ecological Research Network.</td>
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<td>Genome-wide Identification of Eukaryotic Promoters at Which Transcription Factors Bind Cooperatively.</td>
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$5,329,018

**JANUARY 1998**

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<td>Long-term Monitoring and Manipulation of an Arid Ecosystem.</td>
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<td>Carroll, S.</td>
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<td>242,659</td>
<td>Behavioral Aspects of Insect Wing Form and Life History Variation.</td>
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<td>02/15/98–01/31/99</td>
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<td>Sensitive Biological Elements Database II.</td>
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<td>12/30/97–10/31/98</td>
<td>82,534</td>
<td>Biodiversity Conservation in the Chihuahuan Desert.</td>
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<td>Northup, D.</td>
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<td>Geomicrobiological interactions of microbial Communities in Cave Deep Subsurface Environments.</td>
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<td>Stacey, P.</td>
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<td>230,835</td>
<td>Floaters and Residents in Two Australian Treecreepers: The Social and Genetic Consequences of Variable Dispersal Patterns.</td>
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<td>Werner-Washburne, M.</td>
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<td>The Role of Snz and Sno Proteins in the Yeast Saccharomyces cerevisiae.</td>
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**FEBRUARY 1998**

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<td>Analysis of Relationships Between Erigeron bistiensis and E. pulcherrimus in New Mexico.</td>
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<td>Development of a Classification and Assessment of Playa Wetland Vegetation.</td>
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<td>Developing Space–Time Multifractal-based Non-equilibrium Thermodynamic Ecological Indicators to Assess Landscape Change and Sustainability.</td>
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<td>128,974</td>
<td>Linking Social, Hydrological and Biological Models for Managing an Urbanizing Watershed near Santa Fe, NM.</td>
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<td>GIS Layer of Prairie Dog Towns of Kiowa–Rita Blanca National Grasslands.</td>
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<td>NM 130 Rare Plant Mitigation Project, Cloudcroft, NM (Otero County).</td>
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<td>Muldavin, E.</td>
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<td>Portable Flow-through Amperometric Immunosensor Device for Fast Field Immunoanalysis of Rodent Viruses.</td>
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**MAY 1998**

Total: $2,892,636
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<td>Habitat Requirements of Bell's Vireo: A Landscape Analysis of SW Populations.</td>
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TOTAL FOR 1997–98 FISCAL YEAR: $21,159,940
APPENDIX F

PROFESSIONAL
& TECHNICAL
SUPPORT STAFF,
FY 1997–98
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<td>ADIA</td>
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<td>SR. RESEARCH SCIENTIST</td>
<td>Loker, E</td>
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DEPARTMENT OF BIOLOGY
ANCILLARY FACULTY
FY 1997-98

JOINT APPOINTMENTS (with other departments or areas):

Sarah Allen, Internal Medicine
Brian L. Hjelle, Dept. of Medicine
Robert Kelley, Prof., Anatomy
Tokio Kogoma, Prof., Cell Biology
Frederick Koster, Prof., Dept. of Medicine

Miriam Roman, Asst. Prof., Valencia Campus
Sherry Rogers, Assoc. Prof. of Anatomy
Henry Shapiro, Assoc. Prof. of Computer Science
John Trotter, Prof., Anatomy
Robert Waterman, Prof., Anatomy

ADJUNCTS (not on UNM payroll):

Richard Aguilar, Forest Service, Adj. Asst. Prof.
Craig R. Baird, Adj. Prof.
Susan M. Barns, Res. Asst. Prof.
Carlos Blanco-Montero, Colonia Niños Héroes, Adj. Asst. Prof.
David Bleakley, Assoc.
Michael Bogan, Res. Prof.
Penelope J. Boston, Res. Assoc. Prof.
David Breshears, Res. Asst. Prof.
Ralph T. Bryan, Adj. Res. Prof.
Richard A. Byles, USFWS, Adj. Asst. Prof.
Jack L. Carter, Associate in Biology
Jean-Luc Cartron, Res. Asst. Prof.
David M. Chapin, Univ. of Washington, Res. Asst. Prof.
James Check, Res. Asst. Prof.
James Childs, Adj. Assoc. Prof.
Roger Conant, UNM, Adj. Prof.
John O. Corliss, UNM, Adj. Prof.
David Cowley, North Carolina State, Adj. Asst. Prof.
Nancy Cox, Assoc. in Biology
Clifford S. Crawford, Res. Prof.
Harry Crissman, Los Alamos National Labs, Adj. Prof.
David C. Deardorff, Adj. Prof.
Robert Dickerman, Res. Assoc. Prof.
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Robert Harrison, Res. Asst. Prof.
Bill Hevron, Associate in Biology
Bruce Hofkin, Adj. Asst. Prof.
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Kathryn M. Jacobson, Res. Asst. Prof.
Karl Johnson, Res. Prof.
Mahmood Kassam, Ryerson University (Canada), Res. Prof.
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Timothy Keits, Visiting Asst. Prof.
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Steven Kucern, Post-Doctoral Fellow
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Juanita Ladyman, Adj. Assoc. Prof.
James Lewis, Res. Prof.
Ronald D. Ley, Lovelace Foundation, Adj. Prof.
Karen Lightfoot, Associate
John E. Lobdell, Univ. of Alaska, Adj. Assoc. Prof.
Jenella Loye, Res. Asst. Prof.
Lawrence M. Mallory, Res. Assoc. Prof.
Patricia Mehlihop, Nature Conservancy, Adj. Asst. Prof.
Paul J. Polechla, Res. Assoc. Prof. of Biology
Deborah U. Potter, Res. Asst. Prof.
Eric M. Rominger, Res. Asst. Prof.
J. Rowland, Adj. Assoc. Prof.
Kenneth Schoenly, Adj. Asst. Prof.
Daniel Shaw, Associate of Biology
Michael E. Seidel, Res. Prof.
Gary L. Simpson, Res. Prof.
Robert Sivinski, Associate
Mohan Sopori, Lovelace Foundation, Adj. Prof.
Peter B. Stacey, Res. Prof.
Eleonora Trotter, UNM, Res. Asst. Prof.
John Ubelaker, Southern University–Dallas, Adj. Prof.
Roby Wallace, Nature Conservancy, Associate
Paul J. Watson, UNM, Res. Asst. Prof.
John Wiens, Adj. Distinguished Prof.
Stephen Wood, Lovelace Foundation, Adj. Prof.
Marcus I. Yaffe, Res. Assoc. Prof.
RESEARCH OR VISITING STATUS (usually on UNM payroll):

Coenraad Adema, Res. Asst. Prof.
Sandra Brantley, Res. Asst. Prof.
Debra Coffin, Res. Asst. Prof.
Lee Couch, Res. Assoc.
Charles Curtin, Res. Asst. Prof. (P-T)
Murray Dailey, Adj. Prof.
William Dunmire, Assoc. in Biology
Michael Folsom, Res. Asst. Prof. (P-T)
Jennifer Frey, Res. Asst. Prof.
K. (Wendy) Fuge, Res. Asst. Prof.
Deborah Goldberg, Univ. of Michigan, Res. Assoc. Prof.
Gregory Glass, Res. Assoc. Prof.
Hernandes Faustino de Carvalho, Res. Asst. Prof.
Lynn Hertel, Res. Assoc.

David Lightfoot, Res. Assoc. Prof. (P-T)
Gary Miller, Visiting Asst. Prof.
Gerald Mkoji, Res. Assoc.
Diana Northup, UNM Centennial Library, Res. Assoc.
Robert Parmenter, Res. Assoc. Prof.
Vicki Peck, Visiting Asst. Prof.
Ana V. Perez, Post-Doctoral Fellow
Luis Ruedas, Post-Doctoral Fellow
Ursula Shepherd, Adj. Asst. Prof.
Felisa Smith, Adj. Asst. Prof.
Kenneth Slyvester, Visiting Asst. Prof.
Scott Snyder, Post-Doctoral Fellow
Carleton White, Res. Asst. Prof.
Patricia Wilber, Adj. Asst. Prof. of Biology

EMERITI:

Oswald Baca
Clifford S. Crawford
William Degenhardt
Howard Dittmer
James S. Findley
William W. Johnson
Paul Kerkof
William Martin
Loren D. Potter
Marvin L. Riedesel
DEPARTMENT OF BIOLOGY
ANCILLARY FACULTY
FY 1997-98

JOINT APPOINTMENTS (with other departments or areas):

Sarah Allen, Internal Medicine
Brian L. Hjelle, Dept. of Medicine
Robert Kelley, Prof., Anatomy
Tokio Kogoma, Prof., Cell Biology
Frederick Koster, Prof., Dept. of Medicine
Miriam Roman, Asst. Prof., Valencia Campus
Sherry Rogers, Assoc. Prof. of Anatomy
Henry Shapiro, Assoc. Prof. of Computer Science
John Trotter, Prof., Anatomy
Robert Waterman, Prof., Anatomy

ADJUNCTS (not on UNM payroll):

Richard Aguilar, Forest Service, Adj. Asst. Prof.
Craig R. Baird, Adj. Prof.
Susan M. Barns, Res. Asst. Prof.
Carlos Blanco-Montero, Colonia Nifios Héroes, Adj. Asst. Prof.
David Bleakley, Assoc.
Michael Bogan, Res. Prof.
Penelope J. Boston, Res. Assoc. Prof.
David Breshears, Res. Asst. Prof.
Ralph T. Bryan, Adj. Res. Prof.
Richard A. Byles, USFWS, Adj. Asst. Prof.
Jack L. Carter, Associate in Biology
Jean-Luc Cartron, Res. Asst. Prof.
David M. Chapin, Univ. of Washington, Res. Asst. Prof.
James Cheek, Res. Asst. Prof.
James Childs, Adj. Assoc. Prof.
Roger Conant, UNM, Adj. Prof.
John O. Corliss, UNM, Adj. Prof.
David Cowley, North Carolina State, Adj. Asst. Prof.
Nancy Cox, Assoc. in Biology
Clifford S. Crawford, Res. Prof.
Harry Crissman, Los Alamos National Labs, Adj. Prof.
David C. Deardorff, Adj. Prof.
Robert Dickerman, Res. Assoc. Prof.
Christopher A. Fields, Res. Prof.
Deborah Finch, Res. Assoc. Prof.
Richard Forbes, Res. Prof.
Jacob Frenkel, Adj. Prof.
Charles Gwo, Res. Prof. of Biology
David Hafuer, NMMNH, Res. Assoc. Prof. & Visiting Scholar
Robert Harrison, Res. Asst. Prof.
Bill Hevron, Associate in Biology
Bruce Hofkin, Adj. Asst. Prof.
David Hsi, NMSU, Adj. Prof.
John P. Hubbard, NMG&F, Adj. Assoc. Prof.
Sorin Ismail, Adj. Assoc. Prof.
Randy Jennings, Adj. Asst. Prof.
Kathryn M. Jacobson, Res. Asst. Prof.
Karl Johnson, Res. Prof.
Mahmood Kassam, Ryerson University (Canada), Res. Prof.
Donald W. Kaufman, Res. Prof.
Glennis A. Kaufman, Res. Asst. Prof.
Claude L. Keenon, Adj. Res. Assoc. Prof.
Timothy Keitt, Visiting Asst. Prof.
Rebecca Kimball, Adj. Lecturer III
Steven Kucera, Post-Doctoral Fellow
William J. Kuipers, Adj. Asst. Prof.
Samuel Kunkle, Adj. Prof.
Juanita Ladyman, Adj. Assoc. Prof.
James Lewis, Res. Prof.
Ronald D. Ley, Lovelace Foundation, Adj. Prof.
Karen Lightfoot, Associate
John E. Lobdell, Univ. of Alaska, Adj. Assoc. Prof.
Jenella Loyo, Res. Asst. Prof.
Lawrence M. Mallory, Res. Assoc. Prof.
Patricia Mehlhop, Nature Conservancy, Adj. Asst. Prof.
Paul J. Polechla, Res. Assoc. Prof. of Biology
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J. Rowland, Adj. Assoc. Prof.
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Roby Wallace, Nature Conservancy, Associate
Paul J. Watson, UNM, Res. Asst. Prof.
John Wiens, Adj. Distinguished Prof.
Stephen Wood, Lovelace Foundation, Adj. Prof.
Marcus I. Yaffee, Res. Assoc. Prof.
APPENDIX H

ALL COURSE OFFERINGS,
FY 1997–98
### COURSE OFFERINGS & SEMESTER CREDIT HOURS, FY 1997-98

#### SUMMER 1997

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**TOTAL, SUMMER 1997**

| 51 | 335 | 900 |

#### FALL 1997

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TOTAL, SPRING 1998  
203  4,316  9,861

TOTALS, FY 1997-98  
526  9,384  21,627
APPENDIX I

DEPARTMENTAL SEMINAR SERIES

Dr. Devendra Singh, Department of Psychology, University of Texas, Austin TX, “Shape and Meaning of Female Beauty: An Evolutionary Approach,” September 4, 1997.


Dr. Janet Oliver, Department of Pathology, The University of New Mexico, “Signaling Through the High-Affinity IgE Receptor of Mast Cells: A Molecular Appreciation of Allergy Season,” October 2, 1997.


Dr. Gilles Seutin, Department of Geography, McGill University, Montreal, Quebec, Canada, “Birds of the Lesser Antilles: Genes, Biogeography and Conservation,” November 6, 1997.

Dr. Donald Natvig, Department of Biology, The University of New Mexico, “It's a Good Thing Mendel Didn't Study Neurospora tetrasperma,” November 11, 1997.


Dr. Mike Snyder, Department of Biology, Yale University, New Haven CT, “Large-scale Functional Analysis of the Yeast Genome,” November 20, 1997.


Dr. Juan Carlos Morales, Center for Environmental Research and Conservation, and Department of Anthropology, Columbia University, New York NY, “Phylogeny and Biogeography of Asian Cercopithecid Primates,” January 22, 1998.

Dr. Michael Kanost, Department of Biochemistry, Kansas State University, Manhattan KS, “Plasma Proteins and Hemocytes in Insect Immune Responses (Biology of Blue Blood),” January 29, 1998.

Dr. Tanya Wolff, Department of Molecular and Cell Biology, Howard Hughes Medical Institute, University of California, Berkeley CA, “A Fly’s Eye View of Polarity: Strabismus, Symmetry and Specifications of Cell Fate in the Drosophila Eye,” February 9, 1998.

Dr. Thomas Turner, Post-doctoral Research Associate, Centers for Biosystematics and Biodiversity, Texas A&M University, College Station TX, “Ecological and Historical Determinates of Gene Flow in Darters,” February 12, 1998.

Dr. Richard Cripps, Instructor, The University of Texas, Southwestern Medical Center, Dallas TX, “Regulation and Function of Myocyte Enhancer Factor-2 during Muscle Development in Drosophila,” February 17, 1998.


Dr. Leslie Sieburth, Assistant Professor, Biology Department, McGill University, Montreal, Quebec, Canada, “Genetic Analysis of Plant Development: From Flowers to Phloem,” February 26, 1998.

Dr. Barry Fox, School of Biological Science, University of NSW, Sydney, Australia, “Long-Term Studies of Small-Mammal Communities in Disturbed Habitats in Eastern Australia,” April 21, 1998.


Dr. Steve Archer, Department of Rangeland Ecology and Management, Texas A&M University, College Station TX, “Patch and Boundary Dynamics in Changing Landscapes,” April 30, 1998.

Dr. Jay Jones, Department of Biological Sciences, University of Nevada, Las Vegas NV, “Large-scale Controls of Ecosystem Metabolism in Streams and Watersheds of Eastern Tennessee,” May 7, 1998.
# Graduate Students and Faculty Advisors 1997–98

<table>
<thead>
<tr>
<th>Student</th>
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APPENDIX K

ANNUAL REPORT:

MOLECULAR BIOLOGY FACILITY
The Molecular Biology Facility, 1 July 1997-30 June 1998

Current Director: Robert D. Miller

Past Directors (through May 31, 1998): Don Natvig and Mary Anne Nelson

The Molecular Biology Facility (MBF) continues to be one of the most heavily used facilities in the Department of Biology. For the past three years, the single most frequently used piece of equipment has been the ABI 377 automated DNA sequencer. This sequencer serves the Neurospora Genome Project (NGP) and approximately ten independent research laboratories in the department. Additional use of the facility includes heavy use of four Macintosh computers, a digital scanner and other equipment items (centrifuges, spectrophotometer, pipettors, etc.). Much of this use is general (i.e. by individuals other than those affiliated with the NGP; see list below).

Until recently, major support for the MBF has come from two successive NSF grants (from the now defunct RIMI program) and the department’s Howard Hughes grant. All of these grants have now expired. These grants provided substantial de facto subsidies of diverse research programs in the department in the form of equipment purchases, supply purchases and payment of service contracts. As a result, this year was pivotal in terms of the long-term health of the facility. Fortunately, during the past year, the department and university made several commitments to the MBF that will help maintain its value for the foreseeable future. Most notably, we were able to hire a full-time Research Scientist to oversee MBF activities and equipment. The facility was also provided with a budget for supplies, equipment and service contracts. A future goal is to increase the operational budget in order to improve resources and maintain modernity.

Activities and users of the past year

Number of sequencing reactions processed on the ABI 377

NGP: 4000
General Users: 7000

Partial list of users of equipment and space


NGP students and post docs: Anne Marie Armijo, Laura Bean, Eldon Blueyes, Edward Braun, Thomas Cushing, Patricia Dolan, Marianita Gorman, Pascale Leonard, Robert Trujillo, Joseph Valentine, Mara Giles, Kate Miska, Veronica Marin, Karla Miller, Harriet Platero, Judy Galbraith, Novaline Wilson, Cory Hillyer, Glenn Rowe, Anver Moxey.

Examples of Grants which depend on the facility:

Reproductive Genetics of *Neurospora tetrasperma*; National Science Foundation (MCB-9603902); $158,701; three years (6/1/97-5/31/00)

The *Neurospora* Genome Project at UNM: A Genome Characterization Training Program; National Science Foundation (HRD-9550649); $366,542; three years (6/1/95-5/31/98) (D.O. Natvig, P.I.; M.A. Nelson, M. Werner-Washburne, and R. D. Miller, Co-P.I.s)

CAREER Award: Immunological Development in a Marsupial, National Science Foundation (MCB-9600875); $331,007; (10/01/96 to 9/30/00) (R. D. Miller, P.I.)

Isolating the scid mouse DNA repair gene, National Institutes of Health, RO1 AI 34945, $346,211 (12/01/95 - 8/30/97) (R. D. Miller, P.I.)

Biology of Trematode-Snail Associations, National Institutes of Health, RO1 AI24340, $821,404 (direct costs), Dec. 1994-Nov. 1999 (Eric S. Loker, P.I.)


Developmental regulation of signal transduction: Bcy1p in stationary-phase yeast, National Science Foundation; $329,785; 06/01/96 to 05/31/99 (M. Werner-Washburne)

Characterization of a novel, stationary-phase gene in the yeast *Saccharomyces cerevisiae*, National Science Foundation; $330,000; 6/95 to 5/98 (M. Werner-Washburne)

**Publications (partial list)**


APPENDIX L

SEVENTH ANNUAL RESEARCH DAY PROGRAM
Seventh Annual
RESEARCH DAY
April 17th, 1998
Department of Biology, University of New Mexico

Keynote Address by:
Dr. David M. Hillis
Alfred W. Roark Centennial Professor in Natural Sciences
Department of Zoology, University of Texas, Austin

"Reconstructing the History of Life"

Presentations of Graduate and Undergraduate Student Research
- All Day -

Keynote Address
4 pm
Northrup Hall
Lecture Room
(Geology 122)
### SCHEDULE OF EVENTS

**THURSDAY, 16 APRIL 1998**

2:00 p.m. - 5:00 p.m.  
Posters displayed, judges preview.

**FRIDAY, 17 APRIL 1998**

<table>
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<th>Event</th>
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<tr>
<td>9:00 a.m. - 5:00 p.m.</td>
<td>Posters displayed in the main hallway of the Biology Building</td>
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<tr>
<td>9:20 a.m. - 11:20 a.m.</td>
<td><strong>Oral Presentations:</strong> Session 1, Room 100. Moderator: William LaRue</td>
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<td>10:00 a.m. - 11:30 a.m.</td>
<td><strong>Judging of Posters 1-21</strong> (odd numbers only)</td>
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<td>11:30 a.m. - 1:00 p.m.</td>
<td>Field trip to The Central Courtyard. Don’t bring a lunch; one will be provided</td>
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<td>1:00 p.m. - 2:30 p.m.</td>
<td><strong>Judging of Posters 2-22</strong> (even numbers only)</td>
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<td>1:10 p.m. - 3:10 p.m.</td>
<td><strong>Oral Presentations:</strong> Session 2, Room 100. Moderator: Tagide N. deCarvalho</td>
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<td>4:00 p.m. - 5:15 p.m.</td>
<td><strong>Keynote Address:</strong> Dr. David M. Hillis. &quot;Reconstructing the History of Life.&quot; Geology, Room 122</td>
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<td>5:15 p.m. - 5:45 p.m.</td>
<td><strong>Awards Ceremony:</strong> Moderator: Dr. Terry L. Yates, Chair</td>
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<td>5:45 p.m. - 7:00 p.m.</td>
<td>Reception in the Conservatory</td>
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RESEARCH DAY ORGANIZATION

COMMITTEE:

Paul J. Watson
William L. Gannon,
Vickie M. Peck
Ken Sylvester
Carol B. Brandt
Randy Thornhill
Kathryn G. Vogel
Jane Mygatt

Kirsten A. Meyer
Felisa A. Smith
Lee Couch
Maggie Werner-Washburne
Bruce Milne
Terry L. Yates
Luis A. Ruedas
Jerry W. Dragoo

JUDGES FOR PRESENTATIONS:

Coen Adema
Matt Crawford
Ann Evans
Kelly Howe
Mark Jordan
Astrid Kodric-Brown
Pat Mehlhop
Gary Miller
Kelly Padilla
Kelli Sapp
Felisa Smith

Ed Braun
Pat Dolan
Mike Friggens
Gordon Johnson
Rebecca Kimball
Larry Li
Kirsten Meyer
Mary Anne Nelson
Kevin Rich
Jorge Salazar
Kathryn G. Vogel
KEYNOTE ADDRESS

DR. DAVID M. HILLIS

Reconstructing the History of Life

We are most fortunate to be joined on research day by Dr. David M. Hillis, a prominent molecular systematist based at the University of Texas. Dr. Hillis will deliver his Keynote Address at 4pm, April 17th, in the Northrup Hall Lecture Room (i.e., Geology 122).

Systematics - the study of evolution of biotic diversity - is the focus of research in the lab of Dr. Hillis. Most of his research concerns use of the techniques of molecular genetics to study relationships among populations, species, and higher taxa. His general areas of interest are phylogenetic relationships, speciation patterns and mechanisms, molecular evolution (including the use of experimental systems), and the consequences of hybridization and hybrid zones. Most of Dr. Hillis' research involves amphibians, reptiles, fishes, molluscs, and viruses. However, graduate students under his direction work on other groups as well.
ORAL PRESENTATIONS

9:20  SNAIL FIBRINOGEN-RELATED PROTEINS (FREPS) COMPRIS THE FIRST INVERTEBRATE DEFENSE-RELATED GENE FAMILY WITH A V-TYPE IG DOMAIN.  
Pascale M. Leonard, Coen M. Adema, David Quintana, and Eric S. Loker

9:40  IDENTIFICATION OF A T1/ST2 HOMOLOG FROM THE COLONIAL TUNICATE BOTRYLLUS SCHLOSSERI: POSSIBLE IMPLICATIONS FOR EVOLUTION OF THE IL-1R SUPERFAMILY  
Kirsten Meyer, Robert D. Miller and Eric S. Loker

10:00  ISOLATION AND CHARACTERIZATION OF THE IG λ GENES FROM THE SOUTH AMERICAN OPOSSUM, MONODELPHIS DOMESTICS  
Julie E. Lucero and Robert D. Miller

10:20  QUANTIFICATION OF ADHESION MOLECULE PROFILE ON ENDOTHELIAL CELLS IN DIFFERENT CYTOKINE MILIEUS.  
Hisashi Tsuji, David Brown, and Richard S. Larson.

10:40  THREE NEW SPECIES OF EIMERIA (APICOMPLEXA : EIMERIIDAE) FROM BOLIVIAN MARSUPIALS (DIDELPHIMORPHIA : DIDELPHIDAE)  

11:00  SPECIES DIVERSITY AND THE PENINSULAR EFFECT: NON-VOLANT MAMMALS IN CHIHUAHUAN DESERT HABITAT PENINSULAS.  

LUNCH BREAK

1:10  DNA FINGERPRINTING OF MOUNTAIN LIONS IN NEW MEXICO  
Sandra B. Legler and Jerry W. Dragoo

1:30  MAMMALS OF THE TOPSY-TURVEY LIFE ZONES OF THE RIO GRANDE CANYON  
Todd R. Meinecke and Paul J. Polechla

1:50  RECOMBINATION ON THE MATING-TYPE CHROMOSOME OF NEUROSPORA TETRASPERMA.  
Alena Gallegos, David J. Jacobson, Marian P. Skupski, and Donald O. Natvig.
2:10  PROTEOGLYCAN SYNTHESIS BY TENDON FIBROBLASTS AND CHONDROCYTES SUSPENDED IN ALGINATE BEADS.
Thomas W. Ehlers and Kathryn G. Vogel

2:30  ECOLOGICALLY RELEVANT ANALYSIS OF HEAT SHOCK PROTEINS THROUGH EXPERIMENTAL TRANSFER OF INTERTIDAL MUSSELS: INTEGRATING ECOLOGY & BIOCHEMISTRY
Amanda Leigh Haag and Gretchen E. Hofmann

2:50  PLANT AND RODENT COMMUNITY RESPONSES TO AN INTRODUCTION OF PRAIRIE DOGS IN NEW MEXICO.
A.D. Davidson, J.R. Gosz, and R.R. Parmenter

POSTER PRESENTATIONS

1. RELEVANCE OF ULTRAVIOLET MARKING IN MATE SELECTION OF GUPPIES (POECILLA RETICULATA)
Sally Johnson and Astrid Kodric-Brown

2. PROTECTIVE EFFECT OF GLUCOSE ON HEMOGLOBIN OXIDATION IN HUMAN ERYTHROCYTES
Sharon Wang, Weihai Ying and W. R. Galey

3. GLUTATHIONE-S-TRANSFERASE OF THE PARASITE ECHINOSTOMA PARAENSEI AND VARIATION IN ITS EXPRESSION IN A COMPLEX LIFE CYCLE
D. J. Edwards, C. M. Adema, L. A. Hertel, and E.S. Loker

4. CHARACTERIZATION OF CENTROMERIC PROTEIN B MUTANT MICE
TyAnna Lovato, Ana V. Perez, and Kathryn G. Vogel

5. DOES CREOSOTE BUSH (LARREA TRIDENTATA) FACILITATE GERMINATION IN BLADDERPOD (LESQUERELLA FENDLERI)?
Roberto G. Lopez and Ann S. Evans

6. GENETIC CONTRIBUTIONS TO DIVERSITY AT THE IGH LOCUS IN A MARSUPIAL.
Michelle Y. Pricer and Robert D. Miller

7. ISOLATION AND CHARACTERIZATION OF THE MHC CLASS I GENES FROM THE SHORT TAILED OPOSSUM MONODELPHIS DOMESTICA.
Katarzyna B. Miska and Robert D. Miller
8. RAPID HOST PREFERENCE EVOLUTION AND POPULATION STRUCTURE IN THE SOAPBERRY BUG.
Kevin Walker and Scott Carroll

9. EFFECT OF NUCLEOTIDE COMPOSITION BIAS ON THE SUCCESS OF PHYLOGENETIC ESTIMATION
Gavin Conant and Paul Lewis

10. NUTRIENT AND CHEMICAL COMPOSITION OF TEN WILD PLANT FOODS OF NIGER
Julia A. Cook, Robert H. Glew, Dorothy J. VanderJagt, and Timothy K. Lowrey

11. SECONDARY METABOLISM IN NEUROSPORA CRASSA
Veronica Marin and Mary Anne Nelson

12. THE SEQUENCING AND CHARACTERIZATION OF A HIGHLY-EXPRESSED GENE OF THE PERITHECIAL (SEXUAL) STAGE OF NEUROSPORA CRASSA
Harriett J. Bowannie Platero, and Mary Anne Nelson

13. DEDUCING THE CONDITIONS FOR ALTRUISM IN A COMPLEX COGNITIVE TASK
Paul W. Andrews, Paul J. Watson, and Randy Thornhill

14. THE SEARCH FOR MOBILE GENETIC ELEMENTS IN BIOMPHALARIA GLABRATA
Daniel Molina, Coen M. Adema, Lynn Hertel, Pascale M. Leonard, David C. Quintana and Eric S. Loker

15. IMMUNOHISTOCHEMICAL IDENTIFICATION OF TENDON EXTRACELLULAR MATRIX COMPONENTS
Julie A. Peters and Kathryn G. Vogel

16. TRANSCRIPTIONAL REGULATION OF THE SNZ1 GENE IN THE YEAST SACCHAROMYCES CEREVISIAE
JoAnna Bemacik, Wendy Fuge, and Margaret Werner-Washburne

17. THE SIGNIFICANCE OF THE THIRD POSITION IN NEUROSPORA CRASSA CODON BIAS
Judith B. Galbraith, Mary Anne Nelson, and Donald O. Natvig

18. FERTILIZATION-INDUCED CALCIUM RESPONSES AND THE ORGANIZATION OF THE ENDOPLASMIC RETICULUM IN IMMATURE VS. MATURE OOCYTES
R. Silva and S. Stricker
19. IS OOCYTE DIAMETER RELATED TO THE VELOCITY AND/OR PERIOD OF FERTILIZATION-INDUCED CALCIUM WAVES?
T. Smythe, J. Allen, and S. Stricker

20. CONSEQUENCES OF BODY SIZE: TOWARD A GENERAL THEORY OF ALLOMETRY
Brian J. Enquist, James H. Brown, and Geoffrey B. West

21. WEATHER CORRELATION WITH THE BUBONIC PLAGUE
Ekta Yadav and Robert Parmenter

22. TAKING TENDON APART TO SEE HOW IT’S PUT TOGETHER
Arthur Meyers and Kathryn G. Vogel

23. THE RELATIONSHIP OF PRECIPITATION AND INSOLATION TO ABOVE-GROUND LEAF LITTER DECOMPOSITION RATES AT THE SEVILLET A NATIONAL WILDLIFE REFUGE, NEW MEXICO.
Luis I. Guzman, C. S. White, and G. J. Johnson

24. SEROPREVALENCE OF HERPES SIMPLEX VIRUS TYPE-2 IN AN ELDERLY NEW MEXICAN STUDY GROUP
Julene Moore, Diane Goáide, Fred Koster, and Terry Yates

25. EFFECT OF LIMITED IRON SUPPLY ON NODULE FUNCTION IN SOYBEAN (GLYCINE MAX L.) INOCULATED WITH BRADYRHIZOBIUM JAPONICUM
Josephine J. Graf, and Gordon V. Johnson

26. THE EFFECTS OF AGING AND REPEATED EXPOSURE TO UV-B OR UV-C ON GENE PROMOTER METHYLATION IN HUMAN FIBROBLAST CELLS
J. Gabaldon, G. B. Tafoya, and J. M. Gale
ORAL ABSTRACTS

9:20. SNAIL FIBRINOGEN-RELATED PROTEINS (FREPS) COMPRIS THE FIRST INVERTEBRATE DEFENSE-RELATED GENE FAMILY WITH A V-TYPE IG DOMAIN.
Pascale M. Leonard, Coen M. Adema, David Quintana, and Eric S. Loker

Although snails lack lymphocytes and antibodies, their internal defense systems (IDS) are capable of self/non-self discrimination. Little is known of the role of humoral IDS factors but previous results have demonstrated that a gene family of fibrinogen-related proteins (FREPs) may be involved. FREPs are upregulated upon exposure of Biomphalaria glabrata to the digenean trematode parasite, Echinostoma paraensei, and react with parasite antigens in a precipitin-like manner. To date, at least 10 different FREP cDNAs have been isolated. FREPs have a deduced C-terminal fibrinogen-related domain. Furthermore, they have an N-terminal immunoglobulin-like domain (lg domain) with at least one internal cysteine loop with homology to variable regions of the immunoglobulin superfamily. The FREP and lg domains are separated by an interceding domain. Analysis of a genomic DNA library is underway to locate the N-terminus and determine the arrangement of these FREP encoding genes. The characterization of this gene family will begin to explain the involvement of these FREPs in snail response to invasion by parasites.

9:40 IDENTIFICATION OF A T1/ST2 HOMOLOG FROM THE COLONIAL TUNICATE BOTRYLLUS SCHLOSSERI: POSSIBLE IMPLICATIONS FOR EVOLUTION OF THE IL-1R SUPERFAMILY
Kirsten Meyer, Robert D. Miller and Eric S. Loker

Clues regarding the origins of complex vertebrate innovations can be investigated among the tunicates. For example, it is still unclear to what extent the anticipatory vertebrate immune system may have arisen among the invertebrates. Automated sequencing technology was used to search in tunicates for genes with homology to vertebrate genes with known immunological relevance. A cDNA library from Botryllus schlosseri, a colonial tunicate, was investigated. Partial sequences from 210 different clones were compared with known sequences in GenBank. Several cDNAs showed homology with known genes of immunological relevance, including a T1/ST2 homolog of 229 amino acids in length. T1/ST2 is a member of the interleukin-1 receptor (IL-1R) superfamily. The homology between mammalian and tunicate T1/ST2 provides suggestive evidence for the existence of cytokines in invertebrates. This is significant because little direct molecular evidence has been provided for the existence of cytokines in invertebrate internal defense systems. Relationships of tunicate T1/ST2 to other members of the IL-1R family will be discussed. Supported by the Howard Hughes grant.

10:00 ISOLATION AND CHARACTERIZATION OF THE IGA GENES FROM THE SOUTH AMERICAN OPOSSUM, MONODELPHIS DOMESTICS
Julie E. Lucero and Robert D. Miller

Very little is presently known about the development of antibody (Ab) diversity in metatherian (marsupial) mammals. This diversity is a contribution by Immunoglobulin (Ig) heavy chains and light chains. Furthermore, light chains in mammals are identified as
either lambda or kappa. Recently our laboratory reported that the Ig heavy chain diversity in the South American opossum was derived from a small set of germline genes. To determine the contribution of light chains in this species we isolated and partially characterized the Ig lambda light chain genes. A 260 bp fragment of an opossum variable region (V\(\lambda\)) was amplified from a spleen cDNA and used to isolate 6 unique full length Ig\(\lambda\) cDNA clones averaging 720 bp in length. Anchored PCR, with a primer which complements all 6 known constant regions (C\(\lambda\)), was used to amplify 45 V\(\lambda\) in an unbiased manner. These have been sequenced and indicate the presence of three families containing <68% homology at the nucleotide level between families. Initial analysis of the these clones indicates specific pairing of the J\(\lambda\) and C\(\lambda\) regions, where V\(\lambda\) seems to be independent of either. These data represent the first analysis of immunoglobulin light chains from a marsupial. It appears that light chain complexity is greater than heavy chain complexity in this species which is in contrast to what has been reported in most eutherian (placental) species.

10:20 QUANTIFICATION OF ADHESION MOLECULE PROFILE ON ENDOTHELIAL CELLS IN DIFFERENT CYTOKINE MILIEUS.
Hisashi Tsuji, David Brown, and Richard S. Larson.

One of the fundamental problems in the investigation of inflammatory and immune mediated diseases such as asthma, arthritis, and injury has been to explain how selected leukocyte populations preferentially accumulate in organs. Most studies have focused on adhesion receptors on leukocytes that allow for their adherence to endothelium. However, leukocyte adherence to endothelium also requires cytokine-modulated expression of adhesion molecules on endothelium. We hypothesized that the cytokine-stimulated endothelial cell (EC) displays an array of different adhesion molecules (an "adhesion molecule profile" (AMP)) that is recognized selectively by different leukocyte subclasses, leading to their selective extravasation from the blood. The purpose of the present study was to determine the AMP in a quantitative and temporal manner on endothelium. The AMP on ECs derived from different vascular beds as well as in response to an inflammatory mediator (LPS) and cytokines that simulate the major types of immune responses (IL-4 and INF\(\gamma\)) was determined. We show that there are distinct differences in the basal expression of at least 5 adhesion receptors (E-selectin, VCAM-1, ICAM-1, ICAM-2 and ICAM-3) among EC derived from either lung, skin, or umbilical cord veins. Although there was characteristic temporal upregulation and downregulation of these molecules on all three types of EC derived from different vascular beds, two significant difference were noted. On each type of EC, VCAM-1 had different rates of downregulation after LPS stimulation, and IL-4 promoted different rates of expression of E-selectin. These results help to explain the differential localization of leukocytes subsets during inflammatory and immune responses.

10:40 THREE NEW SPECIES OF EIMERIA (APICOMPLEXA : EIMERIIDAE) FROM BOLIVIAN MARSUPIALS (DIDELPHIMORPHIA : DIDELPHIDAE)

Fecal samples collected during 1984-1986, 1988, and 1990-1993, from 93 Bolivian marsupials (Didelphimorphia: Didelphidae), were examined for coccidian parasites as a component of a decade-long survey of the mammals of Bolivia. Sporulated oocysts were present in 37 of 93 (40%) marsupials representing 4 genera and 5 species. Of these, 3 new species of *Eimeria* are described and named. Sporulated oocysts of a fourth *Eimeria*
sp. were too few in our samples to permit adequate description. A discriminant analysis was performed on 5 quantitative measurements of the four taxa of *Eimeria* found during this study. *Eimeria* a n. sp. and *E. e* n. sp. clump together because of similar sizes and shapes of the oocysts. *Eimeria* d n. sp. and *E. f* sp. separate well from the other species due to different sizes and shapes of the oocysts and sporocysts.

**11:00 SPECIES DIVERSITY AND THE PENINSULAR EFFECT: NON-VOLANT MAMMALS IN CHIHUAHUAN DESERT HABITAT PENINSULAS.**
Amy M. Ditto and Jennifer K. Frey.

The peninsular effect is a pattern of decreasing species diversity with increasing distance from mainland core populations on a peninsula. In general, previous studies have failed to find this pattern. All of these studies, however, only considered peninsulas that were surrounded by water. We examined the peninsular effect on peninsulas of habitat within a continent. Species diversity as a function of distance from mainland populations and peninsular area was investigated in two peninsulas of Chihuahuan Desert habitat in southern New Mexico. Preliminary results suggest decreases in diversity of New Mexico Chihuahuan Desert endemics from the proximal to the distal ends of the habitat peninsulas, providing evidence for the phenomenon. We will address these findings, as well as other observed patterns of mammalian diversity within the state.

**1:10 DNA FINGERPRINTING OF MOUNTAIN LIONS IN NEW MEXICO.**
Sandra B. Legler and Jerry W. Dragoo

Is it possible to identify the mountain lion responsible for killing a bighorn sheep? Because mountain lions often defecate in close proximity to a kill site, it will be possible, using DNA fingerprinting techniques, to obtain a positive identification of an individual predator from DNA found in sloughed gastro-intestinal cells within the feces. To date, ten microsatellite primer pairs that have been used in the literature to fingerprint mountain lions are in use in the lab. The primers have been tested on nine mountain lion specimens housed in the Museum of Southwestern Biology, Division of Biological Resources, University of New Mexico. In addition, six fecal samples have been collected near bighorn sheep kill sites. DNA has been isolated from these scat samples. Labeled PCR products were run on polyacrylamide gels and scanned using an Applied Biosystems Prism 377 DNA Sequencer. Data were collected on a Macintosh computer using the ABI GeneScan™ software. The overall objective of this study is to analyze the potential use of microsatellite DNA to understand genetic identification of individuals within a population, and to determine the amount of genetic variation within a population. Microsatellite analyses also can be used to understand phylogenetic (evolutionary) relationships among carnivores and can be used in conservation and management strategies for potentially endangered populations.

**1:30 MAMMALS OF THE TOPSY-TURVEY LIFE ZONES OF THE RIO GRANDE CANYON**
Todd R. Meinecke and Paul J. Polechla

C. Hart Merriam's Life Zones remain a useful tool in describing the floral and faunal variation in terms of the changes in latitude and elevation. An exception to these principles is the case of the deep canyons that tend to ameliorate arid conditions. This study of the Rio Grande Canyon near Taos, New Mexico examines the characteristic flora and mammalian fauna from the strata of the sagebrush grasslands down through the piñon-juniper, ponderosa and Douglas fir remnant forests to the riparian zone. To date, a total of 25 species have been tallied within the study area by utilizing various observational techniques such as live-trapping, tracking and scat identification. Details
on the mammals that are restricted to one life zone and those that are ubiquitous will be discussed.

1:50 RECOMBINATION ON THE MATING-TYPE CHROMOSOME OF NEUROSPORA TETRASPERMA.
Alena Gallegos, David J. Jacobson, Marian P. Skupski, and Donald O. Natvig.

Unlike *N. crassa*, which produces eight homokaryotic self-sterile ascospores per ascus, *N. tetrasperma* produces four self-fertile ascospores per ascus each containing nuclei of both mating types (A and a). The self-fertile ascospores of *N. tetrasperma* result from programmed nuclear movement during ascus development, which includes first division segregation of mating type and nuclear spindle overlap at the second meiotic division. Merino et al. presented population-genetic evidence that crossing over is suppressed on the mating-type chromosome of *N. tetrasperma* (*Genetics* 143:789-799, 1996). Given the pattern of ascus development in this species, crossovers between the centromere and the mating locus would allow some second-division segregation of mating type resulting in a proportion of self-sterile ascospores. It appears, therefore, that in reducing crossing over natural selection has worked to prevent the occurrence of such self-sterile ascospores. We have experimentally confirmed suppressed crossing over for most of the mating-type chromosome of *N. tetrasperma* by examining segregation of molecular markers in crosses of wild strains. Surprisingly, our study also revealed a region, located on the far left arm, where recombination is obligatory. This result suggests at least one region, analogous to the pseudoautosomal regions of animal sex chromosomes, that is crossover competent as a result of a need to maintain pairing during meiosis.

2:10 PROTEOGLYCAN SYNTHESIS BY TENDON FIBROBLASTS AND CHONDROCYTES SUSPENDED IN ALGINATE BEADS.
Thomas W. Ehlers and Kathryn G. Vogel.

Bovine deep flexor tendon serves as a model system for studying connective tissue development in response to mechanical load. Cells from the tensional-region of bovine tendon are elongated and produce the small proteoglycan, decorin. Cells from the compressed region become like chondrocytes in vivo, adopting a round morphology and synthesizing the large proteoglycan, aggrecan. This study tests whether fibroblasts from the tensional region of tendon can be induced to make large proteoglycans in vitro if forced to adopt a rounded shape. Fibroblasts from the tensional region of bovine deep flexor tendon and chondrocytes were isolated and cultured in 2 mm diameter alginate beads (10^6 cells/ml). The cells were incubated with \[^{35}\text{S}]\text{O}_4\) for 24 hours at days 6 and 20 of primary culture. Incorporation of \[^{35}\text{S}]\text{O}_4\) into large and small proteoglycans (PGs) was assessed by Sepharose CL-4B chromatography. The ratio of \[^{35}\text{S}]\text{O}_4\) incorporation into large vs. small PGs for chondrocytes was 5:1 at days 7 and 21. For tensional-region fibroblasts this ratio was 1:2 at day 7, 1:1 at day 21, and 1:9 at day 49. These data suggest that tensional-region fibroblasts cannot be induced to become chondrocyte-like simply by adopting a round morphology.
2:30 ECOLOGICALLY RELEVANT ANALYSIS OF HEAT SHOCK PROTEINS THROUGH EXPERIMENTAL TRANSFER OF INTERTIDAL MUSSELS: INTEGRATING ECOLOGY & BIOCHEMISTRY
Amanda Leigh Haag and Gretchen E. Hofmann

This project is a comparative analysis of heat shock proteins (hsp s) within a group of intertidal mussels, Mytilus californianus, which are widely distributed within the rocky intertidal zone of the California coastline. Mussels from the low region of the intertidal were transplanted to the upper region and vice versa. Organisms were collected and the tissues were homogenized and prepared for analysis. We performed Western immunoblot experiments in order to analyze ubiquitin conjugates. This method allowed us to determine whether transplanted mussels underwent protein degradation in response to stressful conditions. In addition, we collected field data for the body size of mussels from each group before and after experimental transfer. Results showed that significant growth occurred in mussels that were transferred to the low zone of the intertidal, in contrast to no growth in mussels transferred to the high zone. Biochemical analysis and field data suggest that mussels transferred to the low zone underwent less environmental stress than mussels transferred to the high zone, and that the decreased stress in the low zone mussels allowed for growth and development.

2:50 PLANT AND RODENT COMMUNITY RESPONSES TO AN INTRODUCTION OF PRAIRIE DOGS IN NEW MEXICO.
A.D. Davidson, J.R. Gosz, and R.R. Parmenter

This study addressed the initial effects of prairie dog reintroduction on local plant and small mammal communities. Vegetation was sampled in the spring and fall using line intercept transects located on both a treatment site (inhabited by prairie dogs) and a control site (uninhabited by prairie dogs). Small mammal species were sampled before and after the prairie dogs were reintroduced on the treatment and control sites using replicate small mammal trapping grids. Most of the plant and small mammal species showed no response to prairie dog reestablishment. The one species significantly influenced by prairie dog reestablishment was the banner-tailed kangaroo rat (Dipodomys spectabilis), which occurred in greater abundance on the treatment site. D. spectabilis, a burrowing desert rodent species, may have favored the treatment site over the control site because of the higher percentage cover of bare ground and the numerous prairie dog burrows that D. spectabilis could potentially inhabit. Although prairie dogs had little influence on this ecosystem in the short-term, their influences may be more evident on a long-term time scale, since ecosystem effects often take time to develop.

POSTER ABSTRACTS

1. RELEVANCE OF ULTRAVIOLET MARKING IN MATE SELECTION OF GUPPIES (POECILLA RETICULATA)
Sally Johnson and Astrid Kodric-Brown

Guppies have trichromatic vision. The part of their vision that we are looking at is their violet cone which peaks at 410 nm. This allows them to see a substantial amount of the near UV(UV-A). Through UV photography of the guppies we have discover that they have
numerous UV markings. The first phase of this project was to develop methods for visualizing the UV markings on the guppies. To do this we modified a method used to look at UV marking in parrot. This method consists of using the tri-color separation filters for photography. These filters are used to brake the visible spectrum in to red(25), green(58), and blue(47) components. We used a special UV transmitting filter (403) to capture the near UV reflectance patterns of the guppies. For the second phase of the project we developed a method of testing to see if the females have a preference for males with UV markings against males without UV markings. Our test tank consists of a ten gallon tank with two glass partitions, and a moveable UV blocking partition. The partition is moved during the experiment so that we are testing the females preference for an individual male with and without the UV partition. The males are grouped in pairs with fairly similar markings. From the preliminary results the females have a strong preference for males with UV markings. In our further tests we will test females preference with males that have very little UV markings and males that have a moderate amount of UV markings.

2. PROTECTIVE EFFECT OF GLUCOSE ON HEMOGLOBIN OXIDATION IN HUMAN ERYTHROCYTES
Sharon Wang, Weihai Ying and W. R. Galey

We have determined the effect of glucose on Hb oxidized by tert-butyl hydroperoxide (tBHP). We found that after a 2 hr incubation at 37C both 5 mM glucose and 10 mM glucose can produce about 40% protection on 2 MmtBHP induced Hb oxidation (P<0.005). It was also found that the erythrocytes treated with both tBHP and glucose have a high level of Hb oxidation after 10 min incubation and a significantly decreased level of Hb oxidation after 30 minutes incubation. Glucose therefore appears to produce a protective effect on Hb oxidation through the reduction of metheinoglobin (oxidized Hb) back to Hb, probably by enhancing the activity of NADH-dependent methemoglobin reductase. There is no glucose produced protection on Hb oxidation when the cells are incubated at 4C, further suggesting that the protective effect of glucose on Hb oxidation results from an enzyme-dependent reaction, instead of directly scavenging hydroxyl free radicals. We are currently investigating the mechanisms responsible for this effect of glucose.

3. GLUTATHIONE-S-TRANSFERASE OF THE PARASITE ECHINOSTOMA PARAENSEI AND VARIATION IN ITS EXPRESSION IN A COMPLEX LIFE CYCLE
D. J. Edwards, C. M. Adema, L. A. Hertel, and E.S. Loker

Little is known about the immunobiologicat interaction between the trematode parasite Echinostoma paraensei and its molluscan host Biomphalaria glabrata. To study factors produced by the parasite a cDNA library produced with mRNA from the intramolluscan sporocyst stage of E. paraensei. Of the approximately 150 sequences that have been analyzed, one displayed high homology with Glutathione-S-Transferase (GST). The 654 nucleotide open reading frame is of the same length as a 26kDa GST from the related parasite Schistosoma mansoni. BLAST analysis shows 53% identity and 68% similarity over 217 deduced amino acids. GST functions in organisms to detoxify damage resulting from oxygen radicals. It has been speculated that GST also plays a role in the protection of trematode parasites from the oxygen radicals generated by host internal defenses. The availability of the E. paraensei sequence allows study of GST expression, and any upregulation present in the intramolluscan stages may indicate that oxygen radicals play a functional role in this parasite/host interaction. RNA is being collected from all life cycle stages, and semi-quantitative RT-PCR will be employed to document the level of GST expression in each stage. Support: Howard Hughes Medical Institute.
4. CHARACTERIZATION OF CENTROMERIC PROTEIN B MUTANT MICE
TyAnna Lovato, Ana V. Perez, and Kathryn G. Vogel

The centromere protein (CENP-B) is a centromere DNA-binding protein. Knockout constructs were made and electroporated to ES cells. ES cells were micro-injected into blastocysts and chimaeric mice were obtained and monitored for germline transmission (Dr. Ana V. Perez, UNM, Dr. Roger Pedersen, UCSF). Chimaeras were mated with wild-type females to generate heterozygous CENP-B mutants and shipped to UNM for breeding analysis and phenotype characterization. The breeding was maintained for four generations and genotypes were determined by Southern Blot analysis. Northern and Western Blot analysis confirmed that neither the mRNA for CENP-B, nor the protein itself was present in the homozygous mutants. These mice were viable and showed no apparent abnormalities. From this analysis, it is concluded that the CENP-B protein is not required for mitosis or meiosis in mice.

5. DOES CREOSOTE BUSH (LARREA TRIDENTATA) FACILITATE GERMINATION IN BLADDERPOD (LESQUERELLA FENDLERI)?
Roberto G. Lopez and Ann S. Evans

Previous experiments have suggested that Larrea tridentata is allelopathic, meaning that it inhibits germination and seedling growth of other plant species. In the field at the Sevilleta National Wildlife Refuge, Lesquerella fendleri is found in higher densities under Larrea bushes than in the open. We wanted to determine if a chemical or physical interaction exists between Larrea and Lesquerella. Lesquerella seeds were germinated under four treatments: Larrea extract spray (chemical), Larrea mulch (chemical & physical), small gravel mulch (physical) and the control (seeds planted on soil with no treatment). All four treatments were applied in full sun and under a 60% shade cloth, to depict an environment under a Larrea bush in the greenhouse and in a growth chamber. For all replicate experiments conducted, germination was highest in seeds that were sprayed with Larrea extract. These results suggest that Larrea may facilitate rather than inhibit seed germination.

6. GENETIC CONTRIBUTIONS TO DIVERSITY AT THE IGH LOCUS IN A MARSUPIAL.
Michelle Y. Pricer and Robert D. Miller

Information on antibody repertoire development in marsupials is limited when compared with placental mammals. To gain a better understanding of the marsupial immune system, we have sought to characterize the contributions to diversity in the Igh repertoire. Using the short-tailed opossum, Monodelphis domestica, as a model marsupial, we have analyzed the contributions of V_H family usage and junctional diversity to the Igh repertoire. There are two known V_H families in the M. domestica germline genome. The V_H1 family contains approximately 12 V_H segments, while the V_H2 family is comprised of only a single germline V_H. We wished to determine the frequency at which these 2 families are used. Using anchored PCR with primers complementary to the M. domestica C_H regions (C_H1, C_H2, and C_C), we amplified V_H sequences from a spleen cDNA library. In addition, we have analyzed the CDR3 regions from 100 independent clones, and found vast junctional diversity. We can identify likely N nucleotide additions from TdT, and possible P nucleotides created from a resolved hairpin structure. We have also been able to conservatively estimate there to be five J gene segments. This analysis will contribute to our understanding of the generation of antibody diversity.
7. ISOLATION AND CHARACTERIZATION OF THE MHC CLASS I GENES FROM THE SHORT TAILED OPOSSUM *MONODELPHIS DOMESTICA*.
Katarzyna B. Miska and Robert D. Miller

Little is presently known regarding MHC polymorphism in metatherian (marsupial) mammals. Here, we report the isolation and characterization of MHC class I gene from *Monodelphis domestica*, an abundant South American marsupial. Serendipitously, a 672bp MHC class I gene fragment was amplified by anchored PCR using *M. domestica* spleen cDNA library. This fragment was used to screen the spleencDNA library by hybridization, and six additional partial or complete class I clones were isolated. These clones were found to have 66% amino acid and 76% nucleotide identity to the MHC class I loci of the red-necked wallaby. The most similar human MHC class I locus is HLA-B with 60% amino acid identity. Many of the canonical amino acids in mammalian MHC class I sequences are conserved in the *M. domestica* sequences, such as the four cysteines used in disulfide bridges in the α2 and α3 domains. Two of the *six M. domestica* class I clones are identical to each other while the other four were found to be 98%-99% similar. The level of MHC class I polymorphism found in captive and wild, Bolivian *M. domestica* was examined using Southern blot analysis. There is surprisingly little MHC polymorphism present between wild, unrelated opossums, sometimes captured from distant locations. This is the first characterization of MHC class I from a non-Australasian marsupial, as the MHC class I genes have been characterized from the koala, red-necked, and tammar wallabies. A phylogeny of mammalian MHC including metatherians will be presented.

8. RAPID HOST PREFERENCE EVOLUTION AND POPULATION STRUCTURE IN THE SOAPBERRY BUG.
Kevin Walker and Scott Carroll

In this study, we used seeds from two sapindaceous plants to test the hypothesis that soapberry bugs (*Jadera haematoloma*) exhibit genetic differentiation in host preference between the native soapberry tree (*Sapindus saponaria* var. *drummondii*) and the recently introduced goldenrain tree (*Koelreuteria paniculata*). These experiments were conducted with two populations from Oklahoma, one from each host species. Host preference was studied with captive hathlings to control effects of experience. Preference was scored as the majority of three observations of individual hathling given access to seeds of both hosts. Preference appeared to be host associated. Individuals preferred seeds from the host species from which they were derived. In addition, variation in preference was observed within some families, which may explain the soapberry bug's colonization of a non-native host and influence gene flow among the genetic differentiating host races.

9. EFFECT OF NUCLEOTIDE COMPOSITION BIAS ON THE SUCCESS OF PHYLOGENETIC ESTIMATION
Gavin Conant and Paul Lewis

Using computer simulations and predictive equations we show that, at least for four-taxon problems, heterogeneity in nucleotide frequencies across lineages do not strongly affect phylogenetic estimates, but that the effects of such heterogeneity can be exacerbated by other conditions such as transition/transversion bias. Lockhart et al. (1994) presented a data set they considered to be a good example of how nucleotide composition heterogeneity can have negative affects on phylogenetic inference methods. We show that this data set presents other complications in addition to nucleotide composition heterogeneity that contribute to the tendency for some methods to be mislead. We consider four methods of estimation: 1)
maximum parsimony; 2) LogDet; 3) maximum likelihood using the HKY model assuming equal rates across sites; and 4) maximum likelihood using the HKY model with rate heterogeneity modeled by a discrete gamma distribution.

10. NUTRIENT AND CHEMICAL COMPOSITION OF TEN WILD PLANT FOODS OF NIGER
Julia A. Cook, Robert H. Glew, Dorothy J. Vander Jagt, and Timothy K. Lowrey

Populations of the western Sahel region of Africa normally depend upon a number of different wild plant foods to satisfy a substantial part of their nutritional requirements, and during times of drought, this dependency increases. The plant foods play an essential role in the survival and health of those who utilize them, yet the database of their nutritional and chemical values is incomplete and fragmentary. We determined the nutrient content of ten wild plant specimens from Niger, using HPLC to analyze amino acid content, GC-MS to analyze fatty acid content, and plasma emission spectroscopy to analyze mineral content. Although none of the plants were of high quality in every area analyzed, some, such as the seed of Parkia biglobosa and the seed and mesocarp of Hibiscus esculentus, contained appreciable levels of particular nutrients. Information on the nutritional values of these foods will be useful in determining which plants should be preferentially developed and stored to benefit the overall nutrition of populations in the Sahel.

11. SECONDARY METABOLISM IN NEUROSPORA CRASSA
Veronica Marin and Mary Anne Nelson

The Neurospora Genome Project (NGP) at UNM has identified many genes expressed specifically at certain stages of the life cycle of this filamentous fungus. Several genes encoding products involved in secondary metabolism were identified, belying conventional wisdom which held that Neurospora does not carry out secondary metabolism. Genes involved in secondary metabolism were found only in the mycelial and perithecial libraries, i.e., tissue grown under starvation conditions. Secondary metabolites are complex, stereospecific molecules made by fungi, bacteria, and plants. The role of these organic molecules in the organism is varied. Some examples of secondary metabolites are antibiotics, toxins, and the active ingredient of herbal medicines. Although some of these molecules clearly have a role in organism protection or communication, many are of unknown function. We report the sequence and analysis of a gene encoding a protein related to granaticin polyketide synthase, putative ketoacyl reductase 2, and describe experiments designed to determine the function of the gene. Interestingly, two cDNAs corresponding to this gene differ in the presence of an intron, suggesting differential splicing occurred.

12. THE SEQUENCING AND CHARACTERIZATION OF A HIGHLY-EXPRESSED GENE OF THE PERITHECIAL (SEXUAL) STAGE OF NEUROSPORA CRASSA
Harriett J. Bowannie Platero, and Mary Anne Nelson

We have identified a novel gene of the filamentous fungus Neurospora crassa that is expressed almost exclusively during sexual development. This gene, which we have tentatively named jun1, is homologous to the mammalian transcription factor, c-Jun. c-Jun plays an important role in activating gene transcription; it is also a proto-oncogene and was the first transcription factor shown to induce cancer. Our hypothesis is that the corresponding N. crassa gene is a novel transcription factor belonging to the same subfamily of transcription factors as c-Jun, the bZIP subfamily. The pattern of expression suggests that the protein
encoded by junl plays a specific role in control of gene expression during sexual development.

13. DEDUCING THE CONDITIONS FOR ALTRUISM IN A COMPLEX COGNITIVE TASK  
Paul W. Andrews, Paul J. Watson, and Randy Thornhill

Previous research indicates that people have difficulty deducing the conditions which violate a conditional rule (i.e., If p, then q). A class of conditional rules involving social contracts (e.g., If you give me your watch, then I'll give you $20) in which a violation constitutes cheating (e.g., watch taken, but $20 not given) have generally elicited high performance. This content effect suggests that the psyche is designed (presumably by natural selection) to solve problems related to cheating, but not problems lacking evolutionary significance. The purpose of this experiment was to determine if people could perform well on a task in which a violation of the conditional rule constituted an act of altruism on a social contract (e.g., $20 given, but watch not taken). 177 subjects were each given a cheating detection task, an altruism detection task, and an abstract detection task. 71% of subjects identified the correct response on the altruism task, 79% on the cheating task, and 18% on the abstract task. When order and possible learning effects were controlled for, 65% identified the correct response on the altruism task compared to the 76% on the cheating task (chi-square = 2.48, df = 1, p > 0.1). Overall, the pattern of results suggest psychological design for solving problems related to altruism in certain evolutionary contexts.

14. THE SEARCH FOR MOBILE GENETIC ELEMENTS IN BIOMPHALARIA GLABRATA  
Daniel Molina, Coen M. Adema, Lynn Hertel, Pascale M. Leonard, David C. Quintana, and Eric S. Loker

The snail Biomphalaria glabrata plays an essential role in the transmission of a widespread parasite of humans, Schistosoma mansoni. One potential means to control this parasite is to develop transgenic snails that are resistant to infection. Mobile genetic elements could serve as a vehicle to deliver resistance genes to snails. With this long-term goal in mind, evidence for the presence of such elements in B. glabrata has been sought. The enzyme reverse transcriptase plays an essential role in the transposition of many such elements. AcDNA with homology to reverse transcriptase was recently found in a library representing genes from B. glabrata. Southern hybridization confirmed the presence of multiple copies of this sequence in the B. glabrata genome, potentially indicative of the presence of retrotransposons. In addition, a PCR based procedure employing primers designed to amplify Tcl transposon sequences was used to search the B. glabrata genome for the presence of transposable elements of the Tcl family. Two bands of expected size were amplified and have since been cloned and sequenced. Future studies will focus on identifying these and other mobile genetic elements in a B. glabrata genomic library, with the eventual goal of determining their utility as vectors for exotic genes. This study was supported by the NIH and its Minority Biomedical Research Support Program.

15. IMMUNOHISTOCHEMICAL IDENTIFICATION OF TENDON EXTRACELLULAR MATRIX COMPONENTS  
Julie A. Peters and Kathryn G. Vogel

Immunohistochemistry is a technique used to localize a particular protein in tissue by visualizing its interaction with a specific antibody. We have used immunohistochemistry to determine the location of several extracellular matrix (ECM) proteins in frozen sections of the compressed region of adult bovine deep flexor tendon. This tendon is a good model system...
for studying mechanical stress because it has a region which experiences tensional stress and also a region which wraps around the bones and is under simultaneous compressive load and tensional pull. Our study has shown decorin to be present in the ECM throughout the compressed region of this tendon, while aggrecan exhibited staining primarily localized at the compressed surface. Biglycan was localized to cells near the surface of the compressed region, while collagen VI was prevalent in the ECM of the compressed region. These results show that matrix composition is different in these distinct regions of the same tendon and suggests unique functions for these proteins.

16. TRANSCRIPTIONAL REGULATION OF THE SNZI GENE IN THE YEAST SACCHAROMYCES CEREVISIAE
JoAnna Bernacik, Wendy Fuge, and Margaret Werner-Washburne

In nature, when microorganisms are starved for nutrients they enter a non-proliferating, arrested state called stationary phase, or G0. As a part of this response, stationary-phase cells exhibit decreased transcription rates and total mRNA levels, although expression of some genes is induced at this time. However, many of the protein factors and transcriptional elements that affect expression of stationary-phase genes are not known. Our lab has previously identified a highly conserved, stationary-phase induced gene, SNZI. We are identifying SNZI transcriptional control elements by selective deletion of the SNZI upstream region and examination of mRNA accumulation by Northern analysis. The study of SNZI transcriptional activating elements will provide an insight into transcriptional control of SNZI as well as stationary phase in general.

17. THE SIGNIFICANCE OF THE THIRD POSITION IN NEUROSPORA CRASSA CODON BIAS
Judith B. Galbraith, Mary Anne Nelson, and Donald O. Natvig

Most amino acids are encoded by two or four different codons, and many organisms show a pronounced preference for using certain codons over the others. Analysis of Neurospora crassa nuclear genes shows significant codon bias in the third position; this bias is not accounted for by amino acid bias based on average amino acid composition in proteins. The bias in the coding region is also distinct from that of noncoding regions. The purpose of this study is to establish whether there is adequate bias in the third position to support a better "gene finder" algorithm to be used in distinguishing protein coding sequences (genes) from noncoding regions. Such an algorithm would greatly facilitate the identification of functional genes in sequenced DNA.

18. FERTILIZATION-INDUCED CALCIUM RESPONSES AND THE ORGANIZATION OF THE ENDOPLASMIC RETICULUM IN IMMATURE VS. MATURE OOCYTES
R. Silva and S. Stricker

Fertilization triggers a transient release of calcium ions from the endoplasmic reticulum (ER) of the oocyte, and such Ca\textsuperscript{2+} transients are required for normal development. To determine if changes in the ER during oocyte maturation affect fertilization-induced Ca\textsuperscript{2+} responses, immature and mature oocytes of the marine worm Cerebratulus lacteus were microinjected with the fluorescent Ca\textsuperscript{2+} indicator CG Dextran and/or the ER-specific probe Dil. Time-lapse confocal microscopy of dye-loaded specimens revealed that immature oocytes failed to develop normally after insemination. Such oocytes also produced non-wavelike Ca\textsuperscript{2+} transients that were lower in amplitude and less persistent than the Ca\textsuperscript{2+} waves of normally developing mature oocytes. Accordingly, the ER of immature oocytes lacked a substructure,
whereas mature oocytes had peripheral ER "microdomains" that were 1-8 \mu m wide. These data suggest the ER must acquire a mature state before fertilization and development can proceed normally.

19. IS OOCYTE DIAMETER RELATED TO THE VELOCITY AND/OR PERIOD OF FERTILIZATION-INDUCED CALCIUM WAVES?
T. Smythe, J. Allen, and S. Stricker

In all species examined, fertilized oocytes must generate a proper set of calcium waves in order for development to proceed normally. To help characterize the patterns of calcium wave propagations, Jaffe (PNAS 88: 9883-9887) and Leung and McCormick (J. Biol. Phys. 23: 67-72) have proposed mathematical models that address the possible relationship between oocyte size and some parameters of calcium waves, such as velocity (\mu m/sec) and period (time between waves). In this study, we provide the first empirical test of these models by using confocal microscopy to monitor fertilization-induced calcium dynamics in three species of marine worms that produce oocytes of divergent sizes. Such analyses reveal that wave velocity is not linearly related to oocyte size, but the period of the calcium waves is directly proportional to oocyte diameter. These results support the basic conclusions of the models and provide insight into the dynamics of calcium wave propagations in living cells.

20. CONSEQUENCES OF BODY SIZE: TOWARD A GENERAL THEORY OF ALLOMETRY
Brian J. Enquist, James H. Brown, and Geoffrey B. West

Variation in body size is a pervasive feature of biological diversity. From microbes to whales to Sequoias body mass of biological diversity varies over 21 orders of magnitude. Nearly all characteristics of organisms, including cellular metabolism, whole-organism resource requirements, life-history attributes, population density, and species diversity, vary with body size as described by the allometric equation: \( Y = Y_o M^b \), where \( Y \) is the variable of interest, \( Y_o \) a normalization constant, \( M \) body mass, and \( b \) a scaling exponent. A longstanding puzzle has been why \( b \) usually a multiple of 1/4, rather than of 1/3 as expected from geometric scaling. We recently developed a general model for the architecture and hydrodynamics of fractal-like biological resource distribution systems. The model predicts numerous empirically observed scaling relationships of mammalian cardiovascular networks, respiratory tree, and plant vascular systems. It explains why whole-organism resource requirements or metabolic rates scale as \( M^{3/4} \). We believe that the model provides the basis, in the structure and function of individual organisms, for understanding other quarter-power biological allometries, including scaling of life history traits, population density, and species diversity.

21. WEATHER CORRELATION WITH THE BUBONIC PLAGUE
Ekta Yadav and Robert Parmenter

The bubonic plague, \textit{Yersinia pestis}, has played a major role in human history, causing millions of fatalities over the last 2,000 years. Now an established component of New Mexico's diseases, human bubonic plague cases occur yearly across the state. Once thought to exhibit a seasonal (summer) peak, bubonic plague may be influenced via precipitation. The different vectors of \textit{Yersinia pestis} (fleas) and their hosts (small mammals) exhibit different population dynamics in dry or wet climates. These dynamics may influence human plague case frequencies. In this study, we correlated human plague cases and precipitation. Three different climate data sets were used: ENSO index (SOI), mean statewide precipitation, and site-specific precipitation. We found no significant correlation of plague cases with ENSO indices or statewide mean precipitation amounts. However, site-specific site
precipitation data, during the winter and spring prior to the reported human plague cases, was associated with higher numbers of plague cases. Awareness of the prior year precipitation, doctors could estimate the intensity of bubonic plague outbreaks for the current year.

22. TAKING TENDON APART TO SEE HOW IT'S PUT TOGETHER
Arthur Meyers and Kathryn G. Vogel

The extracellular matrix (ECM) of tendon contains proteins such as collagen, proteoglycans, and various glycoproteins. Bovine deep flexor tendon was frozen in liquid nitrogen and then powdered. Tissue powder was sequentially extracted in phosphate buffered saline (PBS) at 4°C, in 4M Guanidine-HCl 50mM NaOAc at 4°C, in 4M Gn buffer at room temperature, and finally 4M Gn buffer+10mM dithiothreitol (DTT) at room temperature. The extracts were analyzed by SDS PAGE and Western blot. Some proteins, such as serum albumin, were seen in the PBS extraction, indicating that they are only loosely associated with the ECM. Most proteins (including the proteoglycans) were extracted completely by cold 4M Gn, indicating that they are held in the ECM by high-affinity noncovalent interactions. However, some of the type VI collagen was not extracted until 4M Gn buffer+DTT was used, indicating that it can be linked in the ECM by disulfide bonds. A substantial residue, presumably cross-linked type I collagen, was not soluble under any of the extraction conditions. These results give us some clues as to how the extracellular matrix is organized.

23. THE RELATIONSHIP OF PRECIPITATION AND INSOLATION TO ABOVE-GROUND LEAF LITTER DECOMPOSITION RATES AT THE SEVILLETÁ NATIONAL WILDLIFE REFUGE, NEW MEXICO.
Luis I. Guzman, C. S. White, and G. J. Johnson

The objective of this research was to determine if the above ground leaf litter decomposition rates of Larrea tridentata, Juniperus monosperma, Bouteloua eropida, and Oryzopsis hymenoides differed over one year and two year periods in four neighboring biomes at the Sevilleta National Wildlife Refuge. This study also addressed the role of precipitation and insolation in the regulation of litter decomposition. Above ground decomposition rates were determined by changes in ash-free dry weight of leaf litter material over comparable time periods. Initial results indicate that the two arid land species (Larrea tridentata and Bouteloua eropida) decompose most rapidly at the Chihuahuan desert site. Juniperus monosperma had the highest decomposition rate at the Pinion-Juniper woodland site. Mass loss was found to be a function of cumulative precipitation and insolation. Comparisons of average decomposition rates between species reveal Larrea tridentata as having the highest decomposition rate, followed by Oryzopsis hymenoides, Bouteloua eropida, and Juniper monosperma.

24. SEROPREVALENCE OF HERPES SIMPLEX VIRUS TYPE-2 IN ELDERLY NEW MEXICAN STUDY GROUP
Julene Moore, Diane Goade, Fred Koster, and Terry Yates

A rare sample group consisting of sera obtained from geriatric patients (65 to 98 years old) at the University of New Mexico Hospital was tested for seroprevalence of Herpes Simplex Virus Type-2 (HSV-2). HSV-2 type specific recombinant proteins were generated and used as target antigens in strip Western blot assays. The 796 samples consisted of 469 non-Hispanic white (NHW) patients and 414 Hispanic patients. A total of 36.4% were positive for HSV-2, 31.8% of the NHW patients and 41.1% of the Hispanic patients. Multivariate analysis showed significant correlation (p=0.02) with Hispanic ethnicity, but not with sex,
education level, or income. Hispanic patients were 48% more likely than the NHW patients to have HSV-2.

25. EFFECT OF LIMITED IRON SUPPLY ON NODULE FUNCTION IN SOYBEAN (GLYCINE MAX L.) INOCULATED WITH BRADYRHIZOBIUM JAPONICUM
Josephine J. Graf, and Gordon V. Johnson

Iron is an essential element, functioning as an integral component of plant metabolism. It is also essential in root nodule bacteria development and it therefore plays major roles in nodule function as part of the symbiotic nitrogen fixation process. This research focused on the effects of limited iron supply on nodule function in soybean (Glycine max L.) inoculated with Bradyrhizobium japonicum. Plants were grown hydroponically and supplied with adequate iron until after nodule establishment when the iron supply was adjusted to 0, 1 and 10 (control) micromoles/liter. Iron deficiency resulted in decreased nodule weight and nodule number. A reduction in shoot biomass and chlorophyll content were also seen, although there was no effect on root biomass. The iron deficiency also led to a decrease in leghaemoglobin production and N₂ fixation compared to control plants with adequate iron.

26. THE EFFECTS OF AGING AND REPEATED EXPOSURE TO UV-B OR UV-C ON GENE PROMOTER METHYLATION IN HUMAN FIBROBLAST CELLS
J. Gabaldon, G. B. Tafoya, and J. M. Gale

The purpose of this research is to determine the effects of ultraviolet radiation (UVR) and aging (passages in culture) on gene promoter CpG methylation in seven genes. Non-transformed human fibroblasts obtained after the sixth passage were grown to confluence, split, grown overnight, exposed to different wavelengths of UVR (or sham exposed), and grown to confluence before the procedure was repeated. Genomic DNA was isolated after 3 and 15 exposures/passages, bisulfite modified and sequenced. The data suggested that UVR had two effects depending on the previous methylation state of the gene: 1) In genes that initially had relatively high levels of methylation, an increase in methylation was seen with aging. Repeated exposure to UVR in this group showed a reduction in methylation, therefore keeping levels as low as the young cells. 2) Genes that had lower levels of methylation initially also showed an increase in methylation with age. Unlike the other group, the number of methylated CpG sites increased with the intermittent UVR exposure.
The Department of Biology at the University of New Mexico offers excellent opportunities for education and research in many areas of modern biology: botany, cell biology, evolution, ecology, microbiology, molecular biology, physiology, and zoology. The Department is the largest academic unit on the UNM campus, with 34 full-time faculty members, more than 1100 undergraduates, and approximately 110 graduate students.

Outstanding facilities for undergraduate and graduate research are available on and off campus. The department is housed in three buildings: Castetter Hall, Marron Hall, and the Biology Department Annex. A full range of computer facilities are available for all students, faculty, and staff. The Milne Landscape Ecology Laboratory supports a computer facility for students and faculty who are researching relationships between spatial patterns and processes in ecological systems. A newly remodeled molecular biology laboratory assists teaching and research for faculty, students and staff using state-of-the-art equipment for sequencing and synthesizing DNA. Additional specialized laboratory facilities are found at the University Medical Center and the Lovelace Institute in Albuquerque. The Sevilleta LTER Field Station at the Sevilleta National Wildlife Refuge 80 km south of Albuquerque, includes housing as well as a laboratory and computer facility. A research greenhouse was recently built with funds from the NSF. The Museum of Southwestern Biology has an excellent collection of plants, invertebrates, fish, amphibians, reptiles, birds and mammals. Students and faculty also conduct research at field sites throughout the Southwest and Rocky Mountain Region, and in the Gulf of California. Field projects are often undertaken even further afield, in Latin America, Australia, Africa, and the Antarctic.

Undergraduate Research Programs
We encourage undergraduates to participate in research. The possibilities range from volunteer work, work study, and non-work study jobs, to independent research projects. Students can arrange research projects with individual faculty members or they may participate in one of several research programs. Several of these programs are striving to attract minorities and women in an effort to benefit students of all ethnic backgrounds and underrepresented groups. Independent research through any of these programs can lead into our departmental honors program.

Graduate Programs in Biology
Master's and doctoral degrees are offered at the Department of Biology at UNM with emphases in the areas of arid land ecology, behavior, behavioral ecology, botany, cellular and molecular biology, community ecology, ecosystem ecology, evolutionary biology, invertebrate zoology, microbiology, parasitology, population biology, and vertebrate zoology. The Department offers excellent opportunities for graduate education and research in many areas of modern biology. The research degree is the heart of the graduate program. The department offers the Ph.D., M.S. (I), and M.S. (II) degrees. M.S. (I) is a research degree with the same philosophy as the Ph.D. It is not a prerequisite of the Ph.D., but may lead to work on that degree. The M.S. (II) is not a research degree and normally does not lead to work in the doctoral program. It is intended primarily for individuals who wish to supplement their baccalaureate programs with additional coursework.

Further information about all Biology programs can be obtained from the Departmental Main Office:

Department of Biology
The University of New Mexico
Albuquerque, NM 87131-1091
505/277-3411
http://biology.unm.edu
APPENDIX M

GRADUATING UNDERGRADUATE STUDENTS SURVEY RESULTS
GRADUATING UNDERGRADUATE STUDENT SURVEY RESULTS

During the 1997-98 academic year, the Biology Department surveyed students as they completed their application for degree (required upon reaching 90 credit hours). A total of 125 students completed the survey out of a total of 188 who applied for graduation (survey completion rate of 66%). In this survey we found that 58% of these students were completing their degree in four years and that 58% were transfer students from other colleges or universities. Thirty percent of these students participated in biologically-relevant research projects through a research program, honors or an independent study while undergraduates in our Department. Seventy-four percent of the students completing the survey received advising within the Department, a dramatic increase from previous years. In this survey students indicated their goals following graduation: 28% were planning to pursue a graduate or professional program, while 26% were applying to medical school. Students indicated that they would be pursuing careers in: physical therapy, medicine, pharmacology, neurophysiology, conservation biology, forensic medicine, biomedical research, molecular biology, hospital administration, pathology, ecology, biological anthropology, biophysics, law, dentistry, optometry, radiology, physical assistant, and environmental science.
A. Significant Events During Academic Year 1997-98

The past academic year has been a very busy one for the Department of Chemistry. Continued effort has been directed toward the stabilization of the fragile situation with regard to the faculty which had been identified by the graduate program review team in 1993. This fragility has resulted from the ongoing and impending loss of many of the more senior faculty and the potential loss of some of the faculty hired in the course of building the program which has been underway for the past dozen years. This year the department was pleased to add Dr. James Brozik, a physical inorganic chemist, to the faculty at the junior level. After the cancellation of the faculty search last year and the subsequent recasting of the position as a computational position, we were able to hire Dr. Hua Guo at the Associate Professor level, from the University of Toledo. Dr. Guo joined us this summer.

Continued efforts have also been underway to provide the additional high-quality space which the recent review team also strongly emphasized that the Department needed if the growth pattern of the preceding dozen years is to continue and the gains made to be consolidated. Regrettably, the Science and Engineering Building was not funded by this legislative session. Even more regrettable is that this project has dropped to second priority for next year. The department’s faculty and research programs are now spread out in two buildings.

The department was funded by the National Science Foundation for the purchase of a $500,000, 500 MHz Nuclear Magnetic Resonance instrument. The
instrument is installed in the Riebsomer wing of our facility and is working well. We have submitted a proposal this year for a Fourier Transform Mass Spectrometer.

2. Faculty

Several faculty personnel changes occurred during the course of this past academic year. As noted above, we were able to attract Dr. James Brozik from a postdoctoral position at LANL to our faculty. Jim is an energetic and enthusiastic young person who will bolster our experimental efforts in materials science. Late in the previous year we were able to hire Professor Hua Guo from the University of Toledo. He is half time in the department and half time in the HPCERC. Professor Guo has a distinguished background in computational chemistry. Also this year, Assistant Professor Lorraine Deck was promoted to Associate Professor.

UNM’s Chemistry department continues to have the smallest faculty of any of the UNM peer institutions so the issue of faculty size is of critical import as reported in the latest ACS survey of Chemistry departments. As the first graph below shows, UNM is not only smaller in faculty size that our identified peer institutions but much smaller. Furthermore, our faculty is quite senior and subject to further losses through retirement. If one considers the number of student credit hours taught by the various institutions represented in the first graph below, the picture is also quite grim here at UNM. The SCH generation was reported directly to us last year by the various departments. The second graph shows the student credit hours in chemistry per chemistry faculty member. Once again, UNM is very high in this ranking. We are exceeded only by the faculty at the University of Texas at Austin in credit generation. UT has several very large freshman chemistry sections which generate large amounts of student credit hours from a single faculty member. Fortunately, Michael Fischer the Dean of A&S is aware of our situation and has been helpful with positions and set-up funding to address this
issue. While the hiring of Chemistry faculty is expensive and can only proceed at the pace at which the start-up funding can be located, every effort must be made to continue to increase the department faculty numbers.
With the exception of freshman chemistry which has been impacted by the teaching of these courses at TVI, the demand for chemistry courses continued to grow this past year. Response to this new demand has required the continuing addition of new laboratory sections in Quantitative Analysis, and Organic Chemistry. In Organic laboratory, we are now limited by the number of drawers of glassware which can be checked out to students. Consequently, the department purchased sufficient glassware to outfit another section of the lab at a cost of $10,000. A number of the sections are offered in the evening to make them available to the growing number of non-traditional students who cannot attend the usual weekday/daytime sections. The Saturday sections in Organic
Chemistry Laboratory were deleted last semester to no apparent problem. Nursing has dropped their requirement for Chem 212. We expect this to impact the enrollment of this course quite dramatically.

The faculty of the Chemistry department is engaged in an exhaustive reexamination of our undergraduate curriculum. We plan to restructure the majors curriculum so they take less freshman chemistry and more advanced courses. A typical entering student will take one semester of freshman chemistry and enter directly into the Organic lecture sequence. The content of the first semester of freshman chemistry will be altered to reflect the needs of the student entering into the organic sequence. The credits from the second semester of freshman chemistry will be replaced with course work in the senior year. The American Chemical Society, our accrediting body, has determined that we must offer biochemistry to our B.S. majors. To that end we will offer a new biochemistry course next Spring semester. The course will be more chemically oriented than the course offered in the Medical School. This course and others in the topical areas of chemistry will supply the credits lost by the majors to the Freshman program. For those students seeking to meet group requirements through the freshman chemistry path, we will quite drastically change the content of the second semester of freshman chemistry to more directly reflect the appropriate ideas required for a scientifically literate citizen.

The department has continued to offer an honors track for our B.S. majors. In the 96-97 academic year, Professor Keller will be on sabbatical at Los Alamos Scientific Lab. He has been offering Chem 131L-132L, the honors freshman course. In his absence, Professor James Brozik will give these sections. Professor Holder will once again offer the honors Organic lectures, Chem 307-307. We feel the honors track is an important component of our curriculum. Professors Deck and Hampton-Smith continue to offer the course they began recently, Chem 415L, with excellent success.

All classes offered by the chemistry department are listed in Appendix B.
4. Facilities

The renovation of the heating, ventilating and air conditioning system in the Riebsomer wing of the Chemistry building which was begun in December of 1995 has been completed. The renovation was funded from a proposal to the National Science Foundation along with state matching money. Funding in the amount of $1.3 million was awarded by the NSF with matching funds of $1.7 million required to claim the NSF grant. The project improved the quality and safety of the instructional and research laboratories in that wing. It will also represent a component of the work called for in phase 11 of the programming document for Chemistry space that was completed four years ago. It greatly improved the safety and functionality of our facilities. However, it did not provide the additional space required by the Department. The project was complex and benefited from an excellent Contractor, Shumate Constructors.

The department of Chemistry went through a programming exercise with Facilities Planning in 1989-90 with a view to developing a plan for a Chemistry Addition. Although the program was completed, no building priority was forthcoming and the project was not funded. We were told that the legislative environment was not "right" for a chemistry building. However, during these years, New Mexico State was funded for a Chemistry addition and they are now occupying their new facility. An alternative approach to resolving the space problem was sought through continued consideration of the long-discussed Science and Technology Research Center. An agreement was reached among the chemistry faculty that, since the Research Center was the building the University seemed to be willing to build, we should seek the space we needed in that building. Biology and Earth and Planetary Sciences were contacted and invited to participate in a joint use building providing needed space to those three departments. With this support, a proposal for planning funds for such a building was sought from the 1994 legislative session and $250,000 was provided. The planning so far carried out has led to an agreement with the Provost that these three departments and Computer Science will share
the space created. The size of the budget has also been determined. However, how the space is to be divided amongst these users remains a source of considerable contention. The fact that the building went unfunded last year and has dropped to second priority for next session implies to me that UNM fears the cost of the centralized building. This is especially ridiculous in view of the fact that the Facilities Planning and the central administration asked us to band together and actually enlarged the building by the inclusion of Computer Science. Now, we are surprised that a building of sufficient size for the four departments is large and expensive. Truly, considering UNM's continual lack of focus on this issue which is so critical for the department, I do not expect to see adequate space for the department until long after my retirement.

5. Graduate-Program

The Graduate Recruitment and Selection Committee was again very active under the leadership of Professor Chris Enke, the Associate Chairman for Graduate Recruitment, and succeeded in attracting an average size group of new graduate students to the department for the coming year. The return to a larger class reflects the Committee's efforts to increase significantly the quality of students available to the graduate program. Other methods are being sought to alleviate the on-going problem of needing to use graduate students who are less than fluent in English to teach undergraduate laboratories. Professor Cary Morrow has agreed to serve as Associate Chair for Graduate Recruitment in the 98-99 academic year. Appendix A summarizes the recruiting activities.

There was no increase in the !!!!!!! Dr. Joe Ho, the Laboratory Supervisor has continued his efforts to reduce the average number of laboratories each Teaching Assistant must teach from six per year to five per year. We have continued to guarantee the incoming graduate students a position for the summer. Although our basic offer is still not as competitive as we would like it to be, the recent change in stipend represents major
progress toward building a competitive graduate program. We are grateful to the Dean for his continuing support for our achieving this goal.

This year we reserved a portion of the TA stipends for a reward for a job well done at the end of the semester. The TAs who were well regarded by their students, the lab director, the faculty in charge of the lab and the stock room attendants were rewarded with $1200 at the end of the semester. This program has significantly improved the teaching in the labs.

6. Undergraduate Program

We had our eighth annual departmental commencement following the general commencement ceremonies at the football stadium, followed by an elegant catered buffet luncheon served on our patio. This year again, we were not joined by the department of Biochemistry in our graduation ceremony. Over 100 graduates and guests attended, with Dr. Allen presenting certificates to those receiving the B.S., B.A., M.S. and Ph.D. degrees, and to award winners.

Our own undergraduate program produced a small but well prepared group of graduating majors this year. Several will attend graduate or professional schools this fall. One female and five male students earned a B.S. degree. Three students, two men and one woman, including two Hispanics earned the B.A. degree. In addition to these students who completed chemistry degrees, twenty-three men and twenty-one women earned a minor in chemistry. At the graduate level, four students earned the M.S. degree (all male), and two women and a man, including two Asians, finished the Ph.D. degree. Individuals receiving degrees in Chemistry during the 1995-96 academic year are listed below.
UNDERGRADUATE PROGRAM

STUDENTS RECEIVING THE B.A. DEGREE IN CHEMISTRY 1997-1998

Bruce Carlson
Pilar M. Weiss

STUDENTS RECEIVING THE B.S. DEGREE IN CHEMISTRY 1997-1998

Greg Claycomb
Charles Pacheco
Rodric L. Wampler

April Martinez
Ben Padilla
Michael Williams

STUDENTS COMPLETING THE M.S. DEGREE IN CHEMISTRY 1997-1998

Brian Meyers
Xuebin Yao
Lixin Wu
Steve Meserole

STUDENTS COMPLETING THE DOCTOR OF PHILOSOPHY DEGREE IN CHEMISTRY 1997-1998

Paul Miyares Fall 1997
Aree Hanprasopwattana Spring 1998
Leda Chang Fall 1997

Prof. Christie Enke
Prof. Robert Paine
Prof. David Keller

GRADUATE STUDENTS IN CHEMISTRY 1997-1998

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<thead>
<tr>
<th>Name</th>
<th>Assistantship</th>
<th>Research Director</th>
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<td>Mark Hampden-Smith</td>
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<td>BANJAC, Kathleen</td>
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<td>CAI, Chunai</td>
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<td>Terri</td>
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**APPENDIX A**

APPLICATIONS RECEIVED FOR GRADUATE STUDY IN CHEMISTRY U.S. CITIZENS 1997-1998

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DIS - APPLICATIONS DISAPPROVED  
INC - APPLICATIONS INCOMPLETE  
DEC - APPLICATIONS APPROVED BUT DECLINED OFFER

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GRADUATE STUDY IN CHEMISTRY
U.S. CITIZENS
1997-1998

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APPLICATIONS RECEIVED FOR GRADUATE STUDY IN CHEMISTRY
U.S. CITIZENS
1997-1998

APP - APPLICATIONS RECEIVED
APR - APPLICATIONS APPROVED
DIS - APPLICATIONS DISAPPROVED
INC - APPLICATIONS INCOMPLETE
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1997-1998

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FOREIGN CITIZENS
1997-1998

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FOREIGN CITIZENS
1997-1998

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Sub-Total Undergraduate Lower Division: 2109, 8454
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GRAND TOTAL ALL STUDENTS 4508 14242

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<tr>
<td>Brabson, Dana</td>
<td>09/17/97</td>
<td>Arizona State University</td>
<td>$1,756.00</td>
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<td>Deck, Lorraine</td>
<td>07/01/97</td>
<td>American Heart Association</td>
<td>$70,000.00</td>
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<td>Deck, Lorraine</td>
<td>07/02/97</td>
<td>Arizona State University</td>
<td>$1,753.48</td>
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<td>Deck, Lorraine</td>
<td>09/17/97</td>
<td>Arizona State University</td>
<td>$1,753.48</td>
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<td>Deck, Lorraine</td>
<td>01/16/98</td>
<td>Arizona State University</td>
<td>$1,655.20</td>
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<td>Deck, Lorraine</td>
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<td>02/12/98</td>
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<td>$28,200.00</td>
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<td>$49,420.00</td>
</tr>
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<td>Deck, Lorraine</td>
<td>06/02/98</td>
<td>NSF</td>
<td>$46,450.00</td>
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<td>Dunaway-Mariano, D.</td>
<td>11/18/97</td>
<td>National Institute of Health</td>
<td>$115,967.00</td>
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<tr>
<td>Dunaway-Mariano, D.</td>
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<td>Evans, Deborah</td>
<td>09/19/97</td>
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### SPONSORED RESEARCH

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<td>Guo, Hua</td>
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<td>Paine, Robert</td>
<td>05/13/98</td>
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<td>Shelnutt, John</td>
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<td>Walters, Edward</td>
<td>0731/97</td>
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</table>

### FACULTY AND STAFF OF THE DEPARTMENT OF CHEMISTRY

#### PROFESSORS:

- **ALLEN, Fritz S., Ph.D.**
  - 1969
  - University of Illinois

- **DUNAWAY-MARIANO, Debra, Ph.D.**
  - 1979
  - University of Wisconsin

- **ENKE, Christie, G., Ph.D.**
  - 1959
  - University of Illinois

- **HAMPDEN-SMITH, Mark, Ph.D.**
  - 1984
  - London University

- **HOLDER, Richard W., Ph.D.**
  - 1970
  - Yale University

- **MARIANO, Patrick**
  - 1969
  - University of Wisconsin

- **MORROW, Cary J., Ph.D.**
  - 1970
  - Tulane University

- **NIEMCZYK, Thomas M., Ph.D.**
  - 1972
  - Michigan State University

- **ONDRIAS, Mark R., Ph.D.**
  - 1979
  - Michigan State University

- **PAIN, Robert, Ph.D.**
  - 1970
  - University of Michigan

- **PAPADOPoulos, E. Paul, Ph.D.**
  - 1961
  - University of Kansas

- **WALTERS, Edward A., Ph.D.**
  - 1966
  - University of Minnesota

#### ASSOCIATE PROFESSORS:

- **KELLER, David, Ph.D.**
  - 1984
  - University of California-Berkeley
# APPENDIX C

## FACULTY AND STAFF OF THE DEPARTMENT OF CHEMISTRY

<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>Year</th>
<th>University</th>
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<tr>
<td>MCLAUGHLIN, Donald R., Ph.D.</td>
<td>1965</td>
<td>University of Utah</td>
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<tr>
<td><strong>ASSISTANT PROFESSORS:</strong></td>
<td></td>
<td></td>
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<tr>
<td>DECK, Lorraine, Ph.D.</td>
<td>1989</td>
<td>University of New Mexico</td>
</tr>
<tr>
<td>EVANS, Deborah, Ph.D.</td>
<td>1995</td>
<td>University of Pittsburgh</td>
</tr>
<tr>
<td>HAMPTON, Philip D., Ph.D.</td>
<td>1989</td>
<td>Stanford University</td>
</tr>
<tr>
<td>KIRK, Martin L., Ph.D.</td>
<td>1991</td>
<td>University of North Carolina</td>
</tr>
<tr>
<td>VILLEGAS, Ignacio</td>
<td>1991</td>
<td>University of Georgia</td>
</tr>
<tr>
<td><strong>EMERITUS PROFESSORS:</strong></td>
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<tr>
<td>CATON, Roy D., Ph.D.</td>
<td>1963</td>
<td>Oregon State University</td>
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<tr>
<td>HOLLSTEIN, Ulrich, Ph.D.</td>
<td>1956</td>
<td>University of Amsterdam</td>
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<tr>
<td>LITCHMAN, William M., Ph.D.</td>
<td>1965</td>
<td>University of Utah</td>
</tr>
<tr>
<td>SCHAFFER, Riley, Ph.D.</td>
<td>1967</td>
<td>University of Chicago</td>
</tr>
<tr>
<td><strong>VISITING FACULTY:</strong></td>
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<tr>
<td>NONE</td>
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<td>CHEN, Tuqiang</td>
<td>1995</td>
<td>University of New Mexico</td>
</tr>
<tr>
<td>CHO, Sung Ju</td>
<td>1996</td>
<td>Pusan National University</td>
</tr>
<tr>
<td>CLEMEN, Lucy</td>
<td>1994</td>
<td>University of Pittsburgh</td>
</tr>
<tr>
<td>GAMLIN, Janet</td>
<td>1996</td>
<td>University of British Columbia</td>
</tr>
<tr>
<td>GAN, Xinmin</td>
<td>1995</td>
<td>Kinki University</td>
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<tr>
<td><strong>POSTDOCTORAL AND RESEARCH FELLOWS:</strong></td>
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</tr>
<tr>
<td>GARDNER, Benjamin</td>
<td>1997</td>
<td>Michigan State University</td>
</tr>
<tr>
<td>JACKSON, George</td>
<td>1997</td>
<td>Florida State University</td>
</tr>
<tr>
<td>JASPER, Steve, Ph.D.</td>
<td>1995</td>
<td>Indiana University</td>
</tr>
<tr>
<td>KIM, Hyun-Jin</td>
<td>1997</td>
<td>Pusan National University</td>
</tr>
<tr>
<td>KOESTLER, Wolfgang</td>
<td>1995</td>
<td>University of Munich</td>
</tr>
<tr>
<td>MEDFORTH, Craig</td>
<td>1988</td>
<td>University of Liverpool, U.K.</td>
</tr>
<tr>
<td>SONG, Xingzhi</td>
<td>1996</td>
<td>University of New Mexico</td>
</tr>
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</table>
APPENDIX C

FACULTY AND STAFF OF THE DEPARTMENT OF CHEMISTRY

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>SU, Zhuoyi</td>
<td></td>
<td>1997 University of Maryland</td>
</tr>
<tr>
<td>WOOD, Gary</td>
<td></td>
<td>1987 University of Maryland</td>
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ADJUNCT PROFESSORS:

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>BAKER, Thomas R.</td>
<td>Adjunct Research Professor</td>
</tr>
<tr>
<td>CAMPBELL, David</td>
<td>Lecturer III</td>
</tr>
<tr>
<td>CLARK, David L.</td>
<td>Adjunct Research Professor</td>
</tr>
<tr>
<td>DORKO, Ernest A.</td>
<td>Adjunct Professor</td>
</tr>
<tr>
<td>DUESLER, Eileen</td>
<td>Research Associate Professor</td>
</tr>
<tr>
<td>ELLIOTT, Scott M.</td>
<td>Adjunct Research Professor</td>
</tr>
<tr>
<td>ENGLEMAN, Rolf, Jr.</td>
<td>Adjunct Professor</td>
</tr>
<tr>
<td>HAALAND, David</td>
<td>Adjunct Professor</td>
</tr>
<tr>
<td>HO, Kuangchiu</td>
<td>Lecturer III</td>
</tr>
<tr>
<td>SHELNUTT, John</td>
<td>UNM/SNL Adjunct Professor</td>
</tr>
<tr>
<td>SHREVE, Andrew P.</td>
<td>Adjunct Assistant Research Professor</td>
</tr>
<tr>
<td>SMITH, Karen Ann</td>
<td>Adjunct Assistant Research Professor</td>
</tr>
<tr>
<td>STALLARD, Brian</td>
<td>Adjunct Assistant Professor</td>
</tr>
<tr>
<td>WILKINS, Ralph G.</td>
<td>Adjunct Assistant Research Professor</td>
</tr>
<tr>
<td>TAPSCOTT, Robert</td>
<td>Research Professor</td>
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RESEARCH SCIENTIST:

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
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<tbody>
<tr>
<td>SMITH, Karen Ann, Ph.D., 1984, University of Illinois</td>
<td>Oversees, maintains, and operates the Department's NMR spectrometers, trains students and faculty in their use, and consults with faculty and students concerning the solution of chemistry problems using NMR.</td>
</tr>
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SCIENTIFIC GLASSBLOWER:

<table>
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<th>Name</th>
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<tbody>
<tr>
<td>CAMPBELL, David, R.</td>
<td>(and Part-Time Lecturer III)</td>
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<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
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<tbody>
<tr>
<td>CAMPBELL, David, R.</td>
<td>Manufactures state of the art glassware as requested by faculty and graduate students across the campus.</td>
</tr>
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</table>

RESEARCH ENGINEER I:

<table>
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<tr>
<th>Name</th>
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<tbody>
<tr>
<td>HARTSWICK, Lewis</td>
<td>Electronics Facility Manager, repairs and maintains instrumentation.</td>
</tr>
</tbody>
</table>
APPENDIX C

FACULTY AND STAFF OF THE DEPARTMENT OF CHEMISTRY

RESEARCH ENGINEER II:

SHAHVAR, Hoshang, B.S., 1981, University of New Mexico - Manufactures state of the arts electronic equipment as requested by faculty and graduate students.

OTHER STAFF:

ADAMS, Ron, LAN Administrator: - Performs Local Area Network (LAN), World Wide Web (WWW), and stand-alone PC hardware and software support, and provides DeskTop Publishing (DTP) expertise in graphic design, page layout and Web page authoring.

BAUER, John - Research Tech/Life Sciences: - Performs multi-step tests, analyses, results of experiments, specimens and samples and provides support to students in learning and functional activities within the lab setting.

BUSH, Gary, Research Tech/Life Sciences: - Performs multi-step tests, analyses, results of experiments, specimens and samples and provides support to students in learning and functional activities within the lab setting.

CANO, Daniel, Research Tech/Life Sciences: - Performs multi-step tests, analyses, results of experiments, specimens and samples and provides support to students in learning and functional activities within the lab setting.

CANDELARIO, Ricky, Supply/Stock Clerk: - Assists the Department and UNM personnel with all aspects of ordering, receiving, billing and inventory of chemicals and supplies.

DUNAGAN, Julie, Editorial Tech: - Responsible for transcription, proofreading and typing complex manuscripts and other documents for publication or other distribution for the Department of Chemistry.

GARCIA, Felicia, C.R.L.S. Accountant I: - Coordinates and processes orders and documents to Accounts Payable for payment; audits the FRS and maintains control of all C.R.L.S. accounts.

GILLESPIE, Dorothy, Administrative Assistant I: - Performs tasks and activities related to faculty, staff, undergraduates and graduates.
APPENDIX C
FACULTY AND STAFF OF THE DEPARTMENT OF CHEMISTRY

OTHER STAFF

HILTON, Carl, C.R.L.S. Operations Manager II - Responsible for the overall operation of C.R.L.S. including budget, buying and inventory control and EPA/OSHA regulations and compliance.

HONEY, Donna, Administrative Assistant I: - Responsible for assisting the accountant in verifying accounting data and documents and maintaining accounting documents.

MINSEN, Ovella, Admissions Assistant I: - Responsible for processing student applications for admissions status and residency for foreign and U.S. graduate applicants to the Department of Chemistry, The University of New Mexico.

MORRATO, Anna, Department Administrator III: - Manages, controls and supervises the fiscal system, daily administrative operations and assists the Chairman with departmental matters.

PENHALL, Michele, Storekeeper III - Prepares sale invoices, inventory entries and places orders while overseeing the receiving and proper stocking and delivery of orders.

SOBLICK, Leonard, Accountant II: - Responsible for compiling, analyzing and reviewing data and statistics pertaining to revenues and expenditures; prepares, examines and verifies accounting data and documents and maintains accounting records.

STANLEY, Kriss, C.R.L.S. Systems Analyst III: - Assists Department and UNM personnel with all aspects of ordering, receiving, billing and inventory of chemicals. Responsible for all computer operations in C.R.L.S.

TEWOLDE, Adda, Accountant II: Responsible for compiling, analyzing and reviewing data and statistics pertaining to revenues and expenditures; prepares, examines and verifies accounting data and documents and maintains accounting records for C.R.L.S.

UTTERBACK, Koelle, Coordinator - Graduate Program: - Assists graduate and undergraduate students.
APPENDIX C
FACULTY AND STAFF OF THE DEPARTMENT OF CHEMISTRY

APPOINTMENTS TO STAFF:

TEWOLDE, Adda, Accountant II, C.R.L.S.

CHANGES TO STAFF PERSONNEL:

MINSEN, Ovella: Promoted from Admissions Assistant I to Coordinator, Graduation

SEPARATIONS:

GARCIA, Felicia, Accountant I, C.R.L.S.: Resigned to take an Accountant position in Santa Fe, New Mexico.

GILLESPIE, Dorothy, Administrative Assistant I: Resigned to take Administrative Assistant III position on North Campus.

HARTSWICK, Lewis, Research Engineer I: Retired

UTTERBACK, Koelle, Coordinator, Graduate Programs: Resigned to take Administrative Assistant III position on North Campus.

APPENDIX D
DEPARTMENT OF CHEMISTRY
UNIVERSITY OF NEW MEXICO
SEMINAR SPEAKERS
1997-1998

05 September 1997 Professor Neil Coville, University of Witwatersrand, 
*Isomerisation Reactions of Organometallic Complexes in the Solid State*

12 September 1997 Professor Abe Nitzan, Tel Aviv University, 
*Dynamics of Electron Solvation and Transmission in Water*

19 September 1997 Professor Ann Walker, University of Arizona 
*Novel NO-Releasing Heme Proteins from the Saliva of Blood Sucking Insects*

03 October 1997 Professor Peter R. Griffiths, University of Idaho 
*Low-Resolution Open-Path FT-IR Atmospheric Monitoring*
APPENDIX D
DEPARTMENT OF CHEMISTRY
UNIVERSITY OF NEW MEXICO
SEMINAR SPEAKERS
1997-1998

10 October 1997  Professor Babu George, Sacred Heart University
*Two Decades of Teaching, Administration and Outreach*

31 October 1997  Professor Arlan Norman, The University of Colorado
*Skeletal Stabilization: A Basis for New Classes of Cyclophosphazanes*

07 November 1997  Professor Robert Kuczkowski, University of Michigan
*Structure and Dynamics of Weak Complexes of SO₂*

14 November 1997  Professor Sherwin Singer, Ohio State University
*Domain Patterns in Thin Films and Liquid Crystals: Stripes, Bubbles and What Lies Between*

21 November 1997  Professor John Bradley, Max-Planck-Institut fuer K Kohlenforschung
*Spectroscopic Characterization and Catalytic Properties of Colloidal Transition Metals*

11 December 1997  Professor Anne B. Myers, University of Rochester - Milton Kahn Lecturer
*Hows and Whys of Single Molecule Spectroscopy*

12 December 1997  Professor Anee B. Myers, University of Rochester - Milton Kahn Lecturer
*Resonance Raman Intensities: An Indirect Route to Ultrafast Photochemical Dynamics*

18 December 1997  Professor Jennifer Griffiths, University of Massachusetts, Amherst
*Understanding and Utilizing Microbial Self Assembly: From Energy Conversion to Novel Materials*

23 January 1998  Professor Ralf Reidel, University of Colorado and the University of Darmstadt
*Preceramic Routes to Novel Cermanics*
APPENDIX D
DEPARTMENT OF CHEMISTRY
UNIVERSITY OF NEW MEXICO
SEMINAR SPEAKERS
1997-1998

30 January 1998  Professor Dimitri Coucouvanis, University of Michigan
Synthesis, Characterization and Reactions of a New Class of
Supramolecules Catechol and Cyclic-polyether Functionalized
Tetraazamacrocyclic of Salphen Complexes

05 February 1998  Professor Robert G. Laughlin, Procter & Gamble Company
Phase Studies by Isothermal Swelling

13 February 1998  Professor Gregory H. Robinson, University of Georgia
Gallanes, Gallenes, and Gallynes. Molecular Assembly About
the Metallic Bond

23 February 1998  Professor Christian Farrar, Massachusetts Institute of
Technology
High Frequency EPR and Dynamic Nuclear Polarization NMR
Protein Structure Studies

25 February 1998  Dr. Jim Brozik, Los Alamos National Laboratory
Low Dimensional Inorganic Materials: A Chemical, Structural,
and Spectroscopic Investigation of Mixed Valence Pt(II)-X-
Pt(IV)-X Chains

06 March 1998  Professor Gerald D. Watt, Brigham Young University
Ferritins: Natures Iron Storage Molecules

13 March 1998  Professor Daniel E. Falvey, University of Maryland
Photochemical Electron Transfer in Organic Chemistry.
Applications to DNA Photorepair and Protecting Group
Development

27 March 1998  Dr. Lee Collins, Los Alamos National Laboratory
Quantum Control of Molecular Processes

02 April 1998  Professor James K. Whitesell, The University of Texas at Austin
Organized Thin Polymer Films for Optical Switches
APPENDIX D
DEPARTMENT OF CHEMISTRY
UNIVERSITY OF NEW MEXICO
SEMINAR SPEAKERS
1997-1998

03 April 1998
Professor Heinrich Noth, Institut für Anorganische Chemie, Universität München, München, Germany
Metal Organic Borazines - A New Chapter of Borazine Chemistry

03 April 1998
Professor Hector D. Abruna, Cornell University
Electrochemical and X-ray Scattering Studies

10 April 1998
Professor Dave Waldeck, University of Pittsburg
Experimental Studies in Electron Transfer, Probing Aspects of the Electronic Coupling

16 April 1998
Professor Paris E. Georghiou, Memorial University of Newfoundland, Canada
Chemistry of Calixnaphthalenes: A New Class of Supramolecular Building Blocks

17 April 1998
Professor Richard Givens, University of Kansas
Photoprotecting Groups in Biology and Organic Chemistry. From Caged Compounds to Phototriggers

23 April 1998
Dr. Emil Cordos, Babes-Bolgai University, Cluj, Romania
Poor Man’s Plasma: Lower Power Plasmas for Atomic Spectroscopy

24 April 1998
Professor Gordon Yee, University of Colorado, Boulder
AC Susceptibility Studies of New and Familiar Magnetic Molecular Solids

05 May 1998
Dr. Rossane Bonjaulain, Eli Lilly, Co.
An Anticlotting Cyclic Peptide from a Blue-Green Alga. Adventures in Drug Development in the Real World

06 May 1998
Professor Brian Coppola, University of Michigan
Organic Chemistry as the CornerStone of the Undergraduate Chemistry Curriculum
APPENDIX D
DEPARTMENT OF CHEMISTRY
UNIVERSITY OF NEW MEXICO
SEMINAR SPEAKERS
1997-1998

08 May 1998
Professor Paul F. Cook, University of Oklahoma
O-Acetylserine Sulphydrylase: Transition State Structure of
Alpha, Beta Elimination of Acetate

RESEARCH EQUIPMENT:
Major pieces of equipment (more than $10,000.00 unit price) acquired during the reporting year:

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<td>Nitrogen Gas Flow Detection System</td>
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<td>775596</td>
<td>USTUS-170 Kachina Unistation with Ultra Sparc 170</td>
<td>$10,254.95</td>
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PROPOSALS SUBMITTED FOR FY 97-98

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<td>National Science Foundation</td>
<td>$300,000.00</td>
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<td>Allen, Fritz</td>
<td>Chromex</td>
<td>$9,875.00</td>
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<td>Allen, Fritz</td>
<td>National Science Foundation</td>
<td>$364,000.00</td>
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<td>Chromex</td>
<td>$19,750.00</td>
</tr>
<tr>
<td>Brabson, Dana</td>
<td>Arizona State University</td>
<td>$1,756.00</td>
</tr>
<tr>
<td>Deck, Lorraine</td>
<td>Arizona State University</td>
<td>$1,753.00</td>
</tr>
<tr>
<td>Deck, Lorraine</td>
<td>WAESO/Arizona State University</td>
<td>$1,753.48</td>
</tr>
<tr>
<td>Deck, Lorraine</td>
<td>American Heart Association</td>
<td>$70,000.00</td>
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<td>Dreyfus Foundation</td>
<td>$28,200.00</td>
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<td>Deck, Lorraine</td>
<td>National Science Foundation</td>
<td>$46,450.00</td>
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<tr>
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<td>$1,655.20</td>
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<td>Deck, Lorraine</td>
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## PROPOSALS SUBMITTED FOR FY 97-98

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## CONVOCATION CEREMONY 16 MAY 1998

### UNDERGRADUATE AWARDS

- **Tom Kowoski**  
  **Riebsomer Award**
- **Alisha Ray**  
  **Mozely Award**
- **Susan Sekreta**  
  **Dean Uhl Award**
- **Maria Tapia**  
  **Millican Award**
- **Derek Turner**  
  **Dean Uhl Award**
CONVOCATION CEREMONY 16 MAY 1998
UNDERGRADUATE AWARDS

Pilar Weiss  
Lisa Whalen

Charles Leroy Gibson Award  
Dean Uhl Award

GRADUATE AWARDS

Michael Strunk  
Si Wu

Smith/Dow Award  
Graduate Teaching Award
Department of Communication and Journalism
Annual Report
July 1, 1997 - July 1, 1998

Submitted by
Karen A. Foss, Chair

Significant Developments

The department continues to work toward the remodel of the first floor, vacated by the Printing Plant in spring, 1997. The Building Committee met with UNM consulting architects Isaac Benton and Lee Gamelsky about plans. Karen Foss and Michael Fischer, dean of Arts and Sciences, met with David McKinney about securing funds for the plans and to get the building on the university's priority list for buildings. The C&J faculty will finalize plans at their annual retreat in August.

The Journalism faculty revised the journalism major, reducing the program from five tracks—advertising, broadcast journalism, broadcast/cable management, print journalism, and public relations—to four: advertising, broadcast journalism, print journalism, and public relations. Options were also added to the capstone course in each sequence. These changes were designed to (1) work with the reduced numbers of faculty; (2) provide greater flexibility for students and reduce shutouts in courses; and (3) ensure that students can meet major requirements in a timely fashion.

The department also prepared a three-year schedule of course offerings to ensure regularity and consistency of offerings across years.

The first doctoral class from the new Ph.D. program in intercultural communication graduated in May 1998.

The department decided it could no longer guarantee that all courses in the M.A. in communication could be offered at UNM-North. Courses will be offered in Santa Fe and Los Alamos when faculty members are interested in teaching them; students enrolled through UNM-North will need to come to Albuquerque for some if not most of their coursework. This decision was made because of recent reductions in faculty; faculty members are needed in order to offer the necessary courses on the main campus.
In June, the Department sponsored, with the New Mexico Press Association, a workshop for 33 high-school journalism students from around New Mexico.

Significant Plans

The department will continue to work toward the remodel of the first floor of the building.

The department will embark on a fund-raising effort to help equip the remodeled building and to provide additional funding for other departmental needs.

The department will initiate plans for its 50th anniversary celebration, to take place in 1999.

Appointments

Karen Foss became chair of Communication and Journalism in July 1997, for a four-year term, replacing Everett Rogers, who returned to full-time teaching in the department.

Brad Hall was appointed director of graduate studies, beginning fall 1997.

Two assistant professor appointments were made, effective fall 1998: John Oetzel (Ph.D., University of Iowa) to teach in organizational and intercultural communication, and Michael McDevitt (Ph.D., Stanford University) to teach in print journalism and political communication. Both professors served as visiting professors during the 1997-98 academic year. Michael McDevitt was appointed undergraduate advisor, beginning fall 1998.

Professor Jack Condon, who has been on leave fall semesters, will return to full-time teaching in fall, 1998.

Professors Janice Schuetz and Miguel Gandert were granted sabbaticals for the 1998-99 academic year.

Several individuals served as visiting scholars in the department: Arne Holte, Department of Psychology, University of Tromso, Tromso, Norway; Terry Cox, Department of British and American Studies, Soai University, Osaka, Japan; Setsuko Hisatomi, Department of English Language and Literature, Toyo Women's College, Tokyo, Japan; and Lorna Heaton, post-doc with Mitsubishi International Corporation grant.

A full roster of faculty and staff is attached.
Separations

Tom Jewell, director of forensics, took a leave without pay for the 1998-99 academic year to pursue career opportunities in New York.

Kim Summers, administrative assistant for the graduate program, submitted her resignation, effective July 31, 1998, in order to pursue a graduate degree.

Publications of the Department

The department revised its graduate bulletin and the department video—which is used for recruiting--during the 1997-98 academic year.

For faculty publications, see annual biographical reports.

Professional Activities of Staff

Pat Kiska, broadcasting technician, attended the National Association of Broadcasters, Las Vegas, Nevada, in March 1998.

Sponsored Research

Minority Alcohol and Substance Abuse Prevention. This five-year project, which began in 1994, was funded by the National Institute for Alcoholism and Alcohol Abuse. Nina Wallerstein (School of Medicine) is principal investigator; Gill Woodall is co-principal investigator.

Project SIRVE (Server Intervention Research, Verification, and Evaluation). The National Institute on Alcohol Abuse and Alcoholism funded this three-year grant, which began in 1994. Gill Woodall is principal investigator.

Environmental Health Communication. This 2-year grant, which began in 1995, was funded by the Bernalillo County Department of Environmental Health. Principal investigator is Ev Rogers.

Mitsubishi International Corporation. Sponsors a grant that studies technology transfer through research findings from multi-disciplinary research centers to receptors outside of the university. Everett Rogers is the PI.
United Nations Population Fund. Started in 1993, this grant deals with family planning and with HIV/AIDS prevention in Tanzania. Everett Rogers is the PI.

Environmental Protection Agency. Collaborative research with Mountain View Association, Albuquerque. Principal investigator is Ev Rogers.

The effects of MADD victim impact panels on drunk driving. This grant researches the effects of Mothers Against Drunk Driving (MADD) Victim Impact Panels (VIP) on first-time DWI (Driving while Intoxicated) offenders. Gill Woodall is the PI.

Los Alamos National Laboratory (LANL) works in collaboration with Estelle Zannes to develop methods and processes for disseminating information regarding LANL's nuclear weapons diversification program to various audiences.

Faculty and Staff Roster
Communication and Journalism
1997 - 1998

Faculty
Jean Civikly-Powell, Professor
Jack Condon, Professor
Karen Foss, Professor and Chair
Ken Frandsen, Professor and Associate Dean, Arts & Sciences
Diane Furno-Lamude, Associate Professor
Miguel Gandert, Associate Professor
Bob Gassaway, Associate Professor
Dirk Gibson, Assistant Professor
Brad Hall, Associate Professor
Tom Jewell, Lecturer III
Michael McDevitt, Visiting Assistant Professor
John Oetzel, Visiting Assistant Professor
Everett Rogers, Professor
Janice Schuetz, Professor
Richard Schaefer, Assistant Professor
Gill Woodall, Associate Professor
Estelle Zannes, Professor

Staff
Jenison Klinger, Department Administrator
Dianna Ortiz, Administrative Assistant
Kim Summers, Administrative Assistant
Pat Kiska, Broadcasting Engineer
THE ANNUAL REPORT
OF THE
DEPARTMENT OF EARTH AND
PLANETARY SCIENCES

July 1, 1997 to June 30, 1998
Department of Earth and Planetary Sciences

Annual Report

July 1, 1997 - June 30, 1998

Barry S. Kues, Chair
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I. GENERAL DEPARTMENTAL INFORMATION
FACULTY AND STAFF

PROFESSORS:

Michael E. Campana, Ph.D., University of Arizona, 1975.
John W. Geissman, Ph.D., University of Michigan, 1980.
Karl E. Karlstrom, Ph.D., University of Wyoming, 1981.
Cornelis ("Kase") Klein, Ph.D., Harvard University, 1965.
Albert M. Kudo, Ph.D., University of California, San Diego, 1967.
Barry S. Kues, Ph.D., Indiana University, 1974.
Leisl D. McFadden, Ph.D., University of Arizona, 1982.
James J. Papke, Ph.D., University of Minnesota, 1964. (Regents Professor)

ASSOCIATE PROFESSORS:

David Gutzler, Ph.D., Massachusetts Institute of Technology, 1986.
Stephen P. Huestis, Ph.D., University of California, San Diego, 1976.
Jane Selverstone, Ph.D., Massachusetts Institute of Technology, 1985.
Gary Smith, Ph.D., Oregon State University, 1986.

ASSISTANT PROFESSORS:

Yemane Asmerom, Ph.D., University of Arizona, 1988.
Frank Pazzaglia, Ph.D., Pennsylvania State University, 1993.
Peter Fawcett, Ph.D., Pennsylvania State University, 1994.

SENIOR RESEARCH PROFESSORS:

Wolfgang E. Elston, Ph.D., Columbia University, 1953.

RESEARCH PROFESSORS:

Adrian J. Brearley, (Institute of Meteoritics), Ph.D., University of Manchester, Great Britain, 1984.
Horton Newsom, (Institute of Meteoritics), Ph.D., University of Arizona, 1981.
Charles K. Shearer, Jr., (Institute of Meteoritics), Ph.D., University of Massachusetts, 1983.

PROFESSOR EMERITUS:

Rodney C. Ewing, Ph.D., Stanford University, 1974.
J. Paul Fitzsimmons, Ph.D., University of Washington, 1949.
RESEARCH STAFF:

James Connolly, Research Scientist II, M.S., University of New Mexico, 1981.
John Husler, Research Scientist III, M.S., University of New Mexico, 1968.
Rhian H. Jones, Senior Research Scientist (Institute of Meteoritics), Ph.D., University of Manchester, Great Britain, 1986.
Mark L. Miller, Research Scientist, Ph.D., University of New Mexico, 1992.
Aurora Pun, Post-Doctoral Scientist, Ph.D., University of New Mexico, 1996.
Padinare V. Unnikrishna, Post-Doctoral Scientist, Ph.D., Utah State University, 1995.
Michael Wiedenbek, Senior Research Scientist I, (Inst. of Meteoritics), Ph.D., Australian National University.
Huifang Xu, Research Scientist III, Ph.D., Johns Hopkins University, 1993.

ADJUNCT PROFESSORS:

Warren S. Baldrige, Ph.D., Caltech University, 1978.
M. Susan Barger, Ph.D., Pennsylvania State University, 1982.
Tracey Cascadden, Ph.D., University of New Mexico, 1997.
Robert J. Glass, Ph.D., Cornell University, 1988.
Fraser E. Goff, Ph.D., University of California, Santa Cruz, 1977.
Stephen Harlan, Ph.D., University of New Mexico, 1992.
Grant H. Heiken, Ph.D., University of California, Santa Barbara, 1972.
Spencer G. Lucas, Ph.D., Yale University, 1983.
Sean McKenna, Ph.D., Colorado School of Mines, 1994.
Matthew Nyman, Ph.D., Virginia Polytechnic Institute and State University, 1992.
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.
Daniel B. Stephens, Ph.D., University of Arizona, 1979.
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.
Kenneth Wohletz, Ph.D., Arizona State University, 1980.

STAFF:

Christopher Adcock, Research Technician, Institute of Meteoritics
Mabel T. Chavez, Editorial Technician
Sara Lentz, Administrative Assistant III, Institute of Meteoritics
Grant Fowler, Research Scientist I, Institute of Meteoritics
Yongxiang Guo, Senior Research Technician, STEM lab

2
Gilbert E. Griego, Harding Mine Maintenance Mechanic
Sally E. Hayes, Accounting Technician
Paula Holub, Department Administrator
Cindy Jaramillo, Administrative Assistant II
Robert Macy, Research Engineer
Mary Marcilla, Administrative Assistant I, Institute of Meteoritics
Florine Rietmeijer, Lab Assistant
Anthony Velardez, Facilities Service Technician
Tanya Zar, Administrative Assistant I, Institute of Meteoritics

VISITING SCIENTISTS (in residence, 1996-1997):

Dr. Weiliang Gong, Institute of Geochemistry, Chinese Academy of Sciences
Dr. Boris Burakov, Khlopin Radium Institute, St. Petersburg, Russia, working with R. Ewing, January - March, 1998.
Dr. Young Up Lee, Chonbuk National University, Chonju, South Korea, Jan. - Dec. 1997, working with G. Smith.
Dr. Januez Janeczek, Silesian University of Poland, May, 1998
Dr. Kirsten Menking, Vassar College, June - July, 1998
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APPOINTMENTS AND SEPARATIONS

APPOINTMENTS TO FACULTY

Zachary Sharp, Associate Professor (untenured), January, 1998

SEPARATIONS FROM FACULTY

Rodney C. Ewing, Professor, retired, August 1, 1997
Lee A. Woodward, Professor, retired, December 31, 1997

APPOINTMENTS TO STAFF

Paula Holub, Department Administrator, July 1, 1997
Anthony Velardez, Facilities Service Technician, July 1, 1997
Mary Marcilla, Administrative Assistant I, Institute of Meteoritics, April, 1998
Tracey Cascadden, Natural Science Coordinator, January, 1998

SEPARATIONS FROM STAFF

Dr. Mark Miller, December 1, 1997
Catherine Ratcliff, June 22, 1998
Tanya Zar, Institute of Meteoritics, February, 1998
Grant Fowler, Institute of Meteoritics, May, 1998
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), including the Institute of Meteoritics (IOM), during the 1997-98 academic year. Most details of faculty activities (Part III) are derived from biographical supplements for 1997, whereas the general discussions and information on other aspects of the Department include the period from July 1, 1997 to June 30, 1998. This inconsistency in reporting UNM data (calendar year for individuals; academic year for departments) is unfortunate, and UNM should choose one or the other period for its standardized reports. As this is the only document that comprehensively summarizes the Department's history during the past year, and is used as a source of information by many people both within and outside of the University, we have endeavored to make it as complete as possible.

During the 1997-98 academic year, the faculty of the Department of Earth and Planetary Sciences consisted of 18 regular tenured or tenure-track faculty, 2 Senior Research Professors, and 4 Research Professors. In addition, 8 Ph.D.-level research scientists (2 within IOM) filled a variety of non-faculty positions within the Department. Most were scientific staff with specific responsibilities relating to analytical laboratories and departmental research endeavors; 2 were post-doctoral scientists. The Departmental faculty is thus augmented by a significant number of other doctoral-level geoscientists, who in some cases participate in teaching and advising of graduate students, and add to the research capabilities and scholarly reputation of the Department.

Permanent scientific staff also includes several technicians and Research Associates, and the office administrative, clerical, and support staff also contribute vitally to the functioning of the Department. Several other geoscientists 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 Part I of this report.

FACULTY AND STAFF ACCOMPLISHMENTS

Position Changes in Faculty

One new faculty member joined the Department in 1997-98. Dr. Zach Sharp arrived as an Associate Professor in January 1998 from a previous position as head of the stable isotope facility at the Institut de Mineralogie et Petrographie, University of Lausanne, Switzerland. Dr. Sharp brings to UNM wide experience in the discipline of stable isotope geochemistry, with applications ranging from structural and Precambrian geology and metamorphic rock genesis, to paleoclimatology and paleontology. He is in the process of renovating the Department's stable isotope laboratory, and by the end of the spring semester the lab was functional once again and performing several different types of analyses.

At the end of July 1997 Professor Rod Ewing retired from the E&PS faculty and accepted a faculty position in the Department of Nuclear Engineering and Radiological Sciences at the University of Michigan, Ann Arbor. Professor Ewing came to UNM in 1974, served as Chair of the Department from 1979 to 1984, was a Regents' Professor, and conducted internationally prominent research programs in mineralogy and materials science. For many years his large scholarly productivity, research support, and activities nationally and internationally brought wide positive recognition to the Department of University.

In December 1997, Professor Lee Woodward retired from regular faculty status; he will remain in the Department as a Senior Research Professor. Professor Woodward came to UNM in 1965, and served as Chair of the Department from 1970 to 1976, a period of unusually rapid expansion. While contributing to the fields of structural
geology and tectonics through numerous publications, Lee also served as primary advisor to nearly 50 M.S. and Ph.D. students. He will be honored this Fall by the University of Montana with an "Alumni of the Year" award.

**Impending Faculty Changes**

The Department’s request to quickly search for a successor to Rod Ewing in mineralogy and materials science was approved, and a national search for a new faculty member in this area was conducted successfully during 1997-98. Dr. Adrian Brearley, who received his Ph.D. degree from the University of Manchester (United Kingdom) in 1984, will join the E&PS faculty as an Associate Professor in August 1998. Dr. Brearley is no stranger to the E&PS Department; for many years he was a research scientist in the Institute of Meteoritics, and a Research Professor in the Department. Thanks are due to the search committee (G. Smith, Chair; C. Klein, B. Kudo, J. Papike, J. Selverstone, and graduate student Deb Bergfeld), which devoted much time and effort to the search during the year.

Dr. Moussumi Roy (Ph.D., M.I.T., 1997) will begin a two-year appointment in the Department as Caswell Silver Research Professor (an endowed position) on July 1, 1998. Dr. Roy’s main interests are in large-scale tectonic deformational processes, earthquake nucleation, and the formation of fault systems. She arrives after a year as a post-doctoral research scientist at the Southern California Earthquake Center and the California Institute of Technology.

The Department has formally requested approval from the Dean for a search for a faculty member in volcanology during the 1998-99 year.

**Other Position Changes**

Dr. Mark Miller, research scientist and supervisor of the X-ray diffraction lab, resigned December 1, 1997. Huifang Xu assumed some of the XRD responsibilities on an interim basis for the remainder of the academic year.

Paula Holub became Department Administrator July 1, 1997, following the retirement of Robyn Santillanes.

Anthony Velardez began as Facilities Service Technician on July 1, 1997, following the retirement of George Carnako.

Grant Fowler, research scientist in the Institute of Meteoritics’ SIMS lab, died unexpectedly in May 1998.

**Faculty Advancement**

Associate Professor Mike Campana was promoted to full Professor, effective in Fall 1997. He also continues a half-time appointment as Director of UNM's Masters of Water Resources Administration program.

Laura Crosse was appointed Associate Dean of the College of Arts and Sciences, effective July 1997, and began a 3-year appointment as a Regents’ Lecturer at that time as well.

Effective July 1, 1997, Professor David Gutzler began a full-time appointment in E&PS; previously he had been 0.5 time each in the E&PS and Geography Departments.
The Department conducted annual code reviews of untenured Assistant Professors, including Y. Asmerom (Code 5), F. Pazzaglia (Code 4), and P. Fawcett (Code 1).

Les McFadden was elected to a term on the Faculty Senate, beginning in Fall 1997.

Laura Crossley and Gary Smith served as Assistant Chairs of the Department in 1997-98.

Sabbatical and Other Leaves

Karl Karlstrom was on sabbatical leave during Spring 1998. He spent the leave in Australia, principally at the University of Adelaide, where he worked with several colleagues on the relationships between Proterozoic rocks and history of Australia and western North America. The two terranes, from 1.7 to 0.8 billion years ago, are quite similar, and research has led to the published suggestion that Australia and North America were in fact united during that time, as part of the supercontinent of Rodinia.

During his sabbatical leave, Dr. Karlstrom presented lectures to the University of Adelaide and to the South Australian Geological Society, conducted field research, accompanied an honors geology class on a two-week field trip to Tasmania, began collaborative research with Australian colleagues, arranged for an Adelaide Ph.D. student to visit New Mexico, and completed several publications.

Bert Kudo was on extended sick leave during Spring 1998.

Maya Elrick was on maternity leave during Spring 1998.

Instructional Activities

1. Student enrollments

Student enrollments in Department of Earth and Planetary Sciences courses during the 1997-98 academic year, as indicated by total student credit hours (SCH), totaled 5882 for regular courses, and 6534 counting natural sciences courses (see #5 below). These figures represent a decline of 6.7% for the regular courses, but an overall increase of 3.7% with Natural Sciences, compared to the previous year. These figures include academic year courses plus our three summer field courses (E&PS-319, -420, and -451). The Department's SCH figures for the past 5 years are given below. The recent declines in departmental SCH have to some extent mirrored similar declines in UNM enrollment, and perhaps too, an increase in transfer students who have fulfilled science requirements at other institutions. The decline in regular E&PS courses this past year was also due to the fact that the Department offered fewer courses because a greater than usual number of faculty were not available for teaching (see #3, below).

<table>
<thead>
<tr>
<th>Year</th>
<th>SCH</th>
<th>SCH (with Natural Sciences)</th>
<th>% change from previous year regular</th>
<th>Inc. N.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993-94</td>
<td>7249</td>
<td>-</td>
<td>11.5</td>
<td>-</td>
</tr>
<tr>
<td>1994-95</td>
<td>6763</td>
<td>-</td>
<td>6.7</td>
<td>-</td>
</tr>
<tr>
<td>1995-96</td>
<td>6524</td>
<td>-</td>
<td>3.5</td>
<td>-</td>
</tr>
<tr>
<td>1996-97</td>
<td>6303</td>
<td>-</td>
<td>3.4</td>
<td>-</td>
</tr>
<tr>
<td>1997-98</td>
<td>5882</td>
<td>6534</td>
<td>6.7</td>
<td>+3.7</td>
</tr>
</tbody>
</table>
The number of declared undergraduate E&PS majors stood at 90 during the Spring semester, 1998, up from 71 a year ago. During Fall, 1997, 28 M.S., and 14 Ph.D., students were pursuing degrees in the Department. In Spring, 1998, there were 25 M.S., and 13 Ph.D., students. Additional, more detailed information about the graduate students and their activities is presented in Part IV of this report.

2. Degrees Awarded (Fall, 1997 through Summer, 1998)

18 Bachelors Degrees

B.A. – Zach Bryan, Alisha Foster, Douglas Furcht, Henry Gabaldon, Mark Luongo, Christopher Young.


(* indicates students completing departmental honors).

6 Masters Degrees

Jerry Bird, Laurie Bowman, Sharman Carpenter, Kate Helean, Andrika Kuhle, Eileen Romano.

2 Doctoral Degrees

Ancheng Ma, Nicolaus Hanowski.

3. Adjustments in Normal Course Offerings

The number of courses taught by the Department declined somewhat in 1997-98, as we were hard-hit by several factors that limited faculty course offerings. These include two faculty on 0.5 and 0.67 FTE administrative appointments outside the Department, one faculty vacancy in the Fall and two in the Spring owing to retirements, one faculty on a planned Spring sabbatical, and two other faculty on unplanned extended sick and maternity leaves in the Spring. Not all of the courses normally taught by these faculty could be made up by other faculty members or by part-time instructors. Although regular faculty typically teach 85-90% of the courses the Department offers during a year, this proportion slipped to 80% in 1997-98 because of replacement of regular faculty by part-time instructors in some courses for the reasons noted above. Also, as is our tradition, two Ph.D. students taught sections of E&PS-101 (one at Kirtland AFB) in order to broaden their preparation for academic careers.

Several new courses and seminars were conducted this year. G. Smith offered a topics course on Earth Science and Society for the first time; post-doctoral scientist P. Unnikrishna contributed a new course on physical hydrogeology, M. Campana offered a new graduate course on geological fluid dynamics, and D. Gutzler offered advanced undergraduate and graduate courses on global climate change and physical climatology. Adjunct Professor Dan Stephens conducted a popular graduate seminar on water in the Albuquerque area, and P. Fawcett initiated a seminar on Quaternary paleoclimatology. Fawcett and Z. Sharp offered new versions of our paleoclimatology (E&PS-439) and stable isotope geochemistry (E&PS-505) courses, respectively.
4. Summer Course Offerings

During Summer 1997 the Department conducted its 6-week Beginning and Advanced Field Geology sequence (E&PS-319 and E&PS-420), instructed by J. Geissman and K. Karlstrom, respectively, together with a section of E&PS-101, E&PS-105, E&PS-300 (volcanoes and human affairs, taught by LANL volcanologist Grant Heiken), and E&PS-365 (taught by H. Newsom, of the Institute of Meteoritics).

During Summer 1998 both the field courses, but especially E&PS-319, experienced significant increases in enrollment. E&PS-319 attracted 34 students, nearly double the enrollment of the previous summer, as a result of increasing enrollment by geology students from other universities, notably contingents from Rice, Brown and Wisconsin-Oshkosh. In order to accommodate this increased enrollment but maintain the close, hands-on instructor-student relationships essential to the success of this course, a second faculty instructor, F. Pazzaglia, and a third Teaching Assistant were added, and the Department invested considerably in additional field equipment. Course fees were raised substantially to pay for these additions, but the total cost of our field camps is still considerably less than those conducted by most other universities. The Department also offered E&PS-101, -105, and -365 during summer 1998, with the latter course of special interest to public school teachers and trainees.

During late Summer, 1998, G. Smith and several Los Alamos Lab volcanologists again offered E&PS-451, (field volcanology), based at UNM’s Young Ranch facility near Cochiti. The course was fully enrolled, with a diverse group of students, many from other states and some other countries. This field course, and the volcanology program in general, remain one of the few such programs of its kind in the country.

5. Curriculum Changes

No significant changes were introduced to the regular E&PS curricula during 1997-98. Slight changes were made in the departmental procedures allowing a Masters student to transition quickly into the Ph.D. program.

Effective in January 1998, the Department assumed responsibility for the Natural Sciences Program, which earlier had been transferred to the College of Arts and Sciences from University College. The Natural Sciences Program is important in providing a series of three courses integrating the natural sciences for College of Education students who will become K-9 teachers in New Mexico's public schools. The intent of the program is to provide potential public school teachers with solid training in science and in the effective teaching of science to younger students. Dr. Tracey Cascadden, an alumna of the Department, coordinates the program, with special attention to curriculum refinement and the training of a core group of instructors that conducts the natural science classes. During early Summer 1998, the Natural Science office moved from the Physics/Astronomy Department to E&PS, while the classes for the time being will continue to be taught in P&A’s Regener Hall.

Research and Publication

The faculty, research staff and students of the Department continued their high level of productivity in research in 1997-98. Research, contributing to human knowledge in one's discipline, is an essential and fundamental function of the Department of Earth and Planetary Sciences at UNM. The Department's status and respect within its discipline depends primarily on the quality and quantity of its research, just as a university’s stature depends mainly on the scholarly activities of its entire faculty. In addition, active research programs form an essential teaching tool in keeping 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 1997 members of the Department and Institute of Meteoritics (including faculty, research scientists and students) produced about 240 publications, in the following categories:

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books Edited:</td>
<td>2</td>
</tr>
<tr>
<td>Scholarly Papers</td>
<td></td>
</tr>
<tr>
<td>Refereed Journals</td>
<td>61</td>
</tr>
<tr>
<td>Edited Volumes</td>
<td>26</td>
</tr>
<tr>
<td>Notes Extended Abstracts, etc.</td>
<td>40</td>
</tr>
<tr>
<td>Technical Reports:</td>
<td>6</td>
</tr>
<tr>
<td>Published Abstracts:</td>
<td>106</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>241</td>
</tr>
</tbody>
</table>

As in past years, graduate students and even some undergraduates participated significantly in the Department's publication effort. Some 27% of refereed papers published in 1997 had student coauthors and students contributed to about 37% of the published abstracts based on presentations made at professional meetings; in many cases students were the presenters. These figures testify to the importance the faculty places on involving students in research and in presenting the results of their research through professional talks and publications, an important part of their preparation for careers in the geosciences. All 1997 departmental publications are listed by author in Part III-2 of this report.

Faculty and research scientists also continued their success in attracting external funding to support their research. About 50 different externally funded grants and contracts were in effect among Department scientists in FY 1997-98, (see Part III-3 for a complete list), having a total value of about $5.0 million. At a single representative point in this year (December 31, 1997), the total value of active grants and contracts was about $4.2 million, a figure that provides a snapshot of external funding activity during the year. New grants, worth about $1.8 million, were awarded to Department personnel in FY 1997-98. Total indirect costs returned to the University by departmental grants in 1996-97 were more than $250,000. These figures exclude the Institute of Meteoritics, whose personnel have numerous additional grants.

The great majority of these awards was from Federal agencies, especially the National Science Foundation, Department of Energy, the National Labs, and the National Aeronautics and Space Administration. Competition for these awards with scientists across the country has always been rigorous, but has become increasingly severe in recent years, which makes the success of the Department in 1997-98 all the more noteworthy. The amount of new research funding received each year by the faculty and research scientists exceeds the entire state/university - supported budget of the Department. Not only do these grant and contract funds support a large proportion of departmental research, and benefit the University as a whole through the overhead funds they generate, but many graduate students are supported as research assistants by these funds as well (see Part IV). Also, because most of these external funds are expended in the state, they represent a significant addition to New Mexico's economy.

In addition to publications and grant/contract-supported research, the E&PS faculty and research staff also pursued a wide variety of other research projects during 1997-98 that were not externally funded or published upon during the year (see Part III-4).
Other Scholarly Activities

Most of the faculty and research staff participated widely outside the University in various professional activities at the state, national and international levels. These include service on the committees and 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 are a 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 work of its faculty. This participation is summarized in Parts III-5 and III-6 of this report.

The faculty's involvement in professional activities is too lengthy to completely survey here, but some of these contributions were especially important nationally and internationally, and are worth mentioning. Roger Anderson was a member of the NSF Steering Committee for Earth System Science; Mike Campana was on the Board of Directors of the Association of Groundwater Geologists and Engineers, UNM delegate to the Commission on Food, Energy and Renewable Resources for the National Association of State Universities and Land-Grant Colleges, and was a member of the National Resource Council Water, Science and Technology Board Committee on U.S. Geological Survey Water Resources Research; Kase Klein was Treasurer of the International Mineralogical Association; Les McFadden was Chairman of the Quaternary Geology and Geomorphology Division of the Geological Society of America; Jim Papike had several NASA posts, including Chief of the Cosmochemistry Panel and Chair of the Curation Analysis Planning Team for Extraterrestrial Materials; and Jane Selverstone served on the NSF Tectonics Panel, and was elected Vice-Chair (leading to Chairship) of the Structure and Tectonics Division of the Geological Society of America.

Participation by the faculty and research staff as Editors, Associate Editors, and on Editorial Boards of international journals was substantial in 1997, as indicated by the following list: A. Brearley (American Mineralogist), M. Campana, (Groundwater Publishing Company, which publishes several journals, and Environmental and Engineering Geoscience), L. Crosse (Geology, Geological Society of America Bulletin), J. Geissman (Chief Editor, Geological Society of America Bulletin; also Journal of Geophysical Research, Geology), R. Jones (Meteoritics and Planetary Sciences), L. McFadden (Catena); H. Newsom (Geochimica et Cosmochimica Acta); J. Selverstone (Journal of Metamorphic Geology), G. Smith (Geological Society of America Bulletin, Sedimentology; Journal of Sedimentary Research).

Further, several faculty participated in scholarly and professional activities outside the U.S. during 1997, in the countries of Austria, Canada, Great Britain, Mexico, Poland and Slovenia. Such activities help to advance UNM's reputation world-wide.

University and Public Service

Service to the University and to the public is an important component of the Department's activities. During the past year, E&PS faculty participated on numerous College and University committees (see Part III-7), and on the Faculty Senate (L. McFadden). The faculty also served as a resource of expertise in the geosciences and science in general for individuals, groups and organizations outside the University (see Part III-10). Members of the Department routinely identify rock, mineral, fossil and suspected meteorite specimens for the public, give talks to civic groups and public school classes, judge in science fairs, answer questions for radio, television and newspaper reporters, and participate in socially important issues, such as the selection process for science textbooks in the public schools.

An important resource provided by the Department to the University and the public is maintenance (without specified University support) of two public museums, one devoted to geology (rocks, minerals, fossils, New Mexico geology) and the other to meteorites. These museums are open each weekday, are free, and are visited by thousands of
school children and adults each year. 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.

More than 3500 recorded (group) visitors toured the Geology Museum in 1997-98; unrecorded (individual) visitors probably doubled that number. These visitors include dozens of elementary, middle, and high school classes from around New Mexico, together with teachers and parents (see Appendix 1 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 represented by G. Smith at the Annual Tucson Gem and Mineral Show, the nation's largest, in February 1998.

A large topaz gemstone on display was lost to theft from the museum in Fall 1997; fortunately most of its value was recovered from insurance, and this will be used to augment the museum's collections.

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. Approximately 1700 people visited the Harding property in 1997-98, and they came from all over the country (42 states) and from other countries as far away as Chile, Germany and Great Britain (see Appendix 1). Among the visitors were mineralogy and field geology classes from more than a dozen other universities, in addition to students from UNM. Clearly, the Harding mine is very well known to geologists and amateur rockhounds and mineral collectors, and in maintaining and operating it, the University and Department perform a notable service for the public. The Department welcomes visitors, but permission from the E&PS Chair must be obtained before each visit.

The Department and Institute of Meteoritics faculty and research staff were featured in numerous newspaper and magazine articles during the year. A sampling of such stories, which help to convey the importance of the Department's research effort to the public, include D. Gutzler (on El Nino, USA Today), K. Karlstrom and graduate students Carol Dehler and Mike Timmons (on their large Grand Canyon Precambrian research project, Albuquerque Journal), and Adrian Brearley (several articles and interviews about a meteorite fall in southeastern New Mexico this summer). K. Klein was profiled as an example of faculty excellence in UNM's 1996-97 annual report. The E&PS-LANL volcanology program was the Fall 1997 cover story in Quantum, UNM's research magazine, and J. Geissman's tectonic research in China was featured in the Spring issue of Quantum.

GENERAL DEPARTMENTAL ACTIVITIES

Facilities

1. Capital Improvements

There were no major capital improvements to Northrop Hall in 1997-98. Minor renovation of several offices was completed as was recarpeting of the Geology Museum and main office. Little movement on the proposed new Science and Technology Building, which would provide E&PS badly needed additional space, occurred during the year, although it is said to be the University's highest major capital improvement priority.

2. Analytical Facilities

The Department and Institute of Meteoritics maintains an outstanding array of analytical facilities necessary to advanced research in many areas of the earth sciences. These facilities are also utilized extensively by other departments and high-tech centers on campus, as well as institutions outside UNM (e.g., the national labs, Intel Corp.,

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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 these labs, service contracts and technician salaries is a persistent drain on their budgets, which may be exacerbated by declines in the user base. Relatively little assistance can be provided directly to the Department, and annual University support for the operation of multi-user analytical labs, which are really university facilities, was nil this past year.

Several noteworthy additions to our analytical capabilities occurred during 1997-98. A new JEOL-5800LV Scanning Electron Microscope, purchased with funds from NSF and NASA, with cost sharing from the University, Department, and Institute of Meteoritics, was installed in the basement of Northrop Hall in July, 1997. The new SEM was heavily used during the 1997-98 year. The older Hitachi SEM, dating from the early 1980s, was sold to the Chemistry Department, as insufficient space is available for both instruments in Northrop.

The Transmission Electron Microscope facilities continued successfully this year under the supervision of Dr. H. Xu, with important support from Intel and UNM’s Center for Microengineered Materials. The X-Ray Diffraction Lab operated at a low level following the departure of Dr. M. Miller in November 1997. H. Xu managed this lab for several months, and during summer 1998 J. Connolly assumed these duties. Reconfiguration of the computer software and increasing ease of use of the XRD instruments are priorities for the coming year.

Several new analytical instruments, utilized for precise determination of trace amounts of various elements and ions in geological and water samples, were installed in J. Husler’s chemistry lab. A new Rigaku RIX 2100 X-ray Fluorescence unit was purchased with support from the School of Engineering; it will replace the older Rigaku XRF instrument. The Department also received the donation of a large Inductively Coupled Plasma instrument (Perkin-Elmer Plasma 1000 Emission Spectrograph) from Motorola, which will fill a gap in the range of elements that can be analyzed by other instruments in the Department. Also, a Dionex unit for analysis of anions in water was purchased through a grant to L. Cressey.

Numerous rock crushing and processing equipment, on loan from Sandia Labs for several years and housed in room 110, was formally donated to the Department in Spring, 1998.

A small, computer-linked weather station, primarily for meteorology and climatology classes, was installed on the roof of Northrop Hall. This was made possible by a Teaching Allocation grant to D. Gutzler and F. Pazzaglia.

During the first 6 months of 1998, Z. Sharp made considerable progress in renovating and upgrading the stable isotope lab, which had been essentially unused since the departure of C. Yapp in June, 1995. Sharp’s proposal to NSF for a new mass spectrometer and accessory equipment was funded, and the new instrument will be installed during the 1998-99 year.

A proposal by A. Datye (Center for Microengineered Materials), and J. Papke and H. Xu (IOM and E&PS) for a new field emission gun TEM was also funded by NSF in Spring 1998, with cost sharing by numerous UNM offices and departments. This $1.5 million instrument, the latest generation of TEMs, will be installed in the analytical wing of the Northrop Hall basement this coming year, and will probably replace the older of the two current TEM instruments. Both the stable isotope mass spectrometer and the new TEM are state-of-the-art, and will considerably extend and advance the University’s capabilities in the realm of earth and materials science research.
3. Computing Facilities

After several years of active hardware acquisition for student use, departmental efforts were focused this year on upgrading existing desktop facilities. The Windows NT operating system on the backup file server was upgraded, extra memory was added to the PCs in room 224, word processing and spreadsheet software packages were upgraded and standardized, and the tape backup system was improved. The department's World Wide Web page was substantially upgraded in several ways: curricular and other student information was added, individual pages were set up for all faculty members, and a collaboration with the Albuquerque National Weather Service was initiated in which the Departmental server acts as host for the Weather Service's home page.

The Department's Unix cluster was enhanced by the replacement of the workstation in the Paleomagnetism lab and the purchase of another Sun Ultra workstation whose primary user will be Dr. Mousumi Roy, our incoming Caswell Silver Research Professor. The Unix cluster is now fully established as a departmental analytical facility, and a formal mechanism for covering its operating costs via grant-funded user fees was discussed and approved by the faculty.

Library Journal Cancellations

In what has become almost an annual event, the Department and other science and engineering departments participated in another round of journal cancellations in the Centennial Science and Engineering Library. E&PS trimmed two journals with a combined subscription cost of about $3,000. Continuously escalating journal prices by for-profit publishers, and inadequate library budgets, are the main causes of dwindling library holdings of science department journals. Centennial Library noted this year that the journal holdings were about at the absolute minimum needed to sustain a reasonable research effort by faculty and students in science and engineering. The A&S science and math department Chairs wrote Provost Gordon to ask that improvement in the science journal budget be one of UNM's top priorities for 1998-99.

Recruiting Visits

The Department hosted recruiters from Vastar Resources, Conoco, and Exxon during the past year, resulting in several undergraduate and graduate students receiving offers of summer internships, possibly leading to permanent employment. In addition, Vastar agreed to support the M.S. research expenses of one of our graduate students. Employment opportunities, after more than a decade of low activity, appear to be picking up in the energy industry, and we are pleased that industry companies are looking to UNM to fill some of their open positions.

Outcomes Assessment

The Department completed a second year of undergraduate outcomes assessment, adding to the data base begun last year, and developed and conducted the initial phase of outcomes assessment for graduate students.

Guest Lecturers

Each year the Department invites a large number of earth scientists from other institutions to visit and present lectures based on their research to faculty and students. This very important departmental activity is an essential part of educating E&PS students, widens faculty interactions with colleagues, both nationally and internationally, and offers us the opportunity to inform colleagues about our research and facilities. Many of these visitors speak at the weekly Friday colloquium; before each talk, the graduate students typically provide snacks and an opportunity to informally meet the speakers.
Professional lectures given in the Department during the 1997-98 academic year are listed below:

September 5, 1997; Steven Clemens, Brown University. "Phase Response of the Asian Monsoon to the Initiation of Northern Hemisphere Glaciation"

September 12, 1997; Spencer Lucas, New Mexico Museum of Natural History. "The Tempo and Mode of Dinosaur Origins"

September 19, 1997; Michael Wiedenbeck, University of New Mexico. "Ion Probes in the Earth Sciences: Capabilities and Limitations"

September 26, 1997; Gerhard Einsele, University of Tübingen. "Event Stratigraphy, Depositional Events and Their Control by Sediment Supply and Sea-Level Changes"

October 3, 1997; David Brown, California State University, Chico. "Evaluating the Scientific Basis for Water Quality Protection Regulations"

October 9, 1997; Colin Wilson, New Zealand Institute of Geological and Nuclear Sciences. "The Bishop Tuff: New Insights Form Old Deposits"

October 10, 1997; Robert Downs, University of Arizona. "Mineral Phase Transitions, Mechanisms and Geologic Implications"

October 24, 1997; David R. Veblen, Johns Hopkins University, President of Mineralogical Society of America. "High-Resolution Transmission Electron Microscopy and Making Silk Purses out of Sows' Ears"

October 28, 1997; Rusty Riese, Vastar Resources, Inc. "Characterization of Coal Bed Methane Reservoirs, Ignacio Blanco Fruitland Field, La Plata County, Colorado"

October 31, 1997; Richard Alley, Pennsylvania State University. "We Will be Surprised: Climate-Change Lessons From Ice Cores"

November 14, 1997; Ellen Wohl, Colorado State University. "Bedrock Fluvial Channels"

November 14, 1997; Ellen Wohl, Colorado State University. "Anthropogenic Effects on Flood Hydrology in the Colorado Front Range"

December 5, 1997; Marc Hendrix, University of Montana. "Mesozoic Sedimentary Basin Analysis, Central Asia: Nonmarine Record of Extreme Continental Growth"

December 12, 1997; Durand Smith, Office of the Governor of New Mexico. "Technology Commercialization in New Mexico"

January 23, 1998; Mary Hubbard, Kansas State University. "Origin-parallel Displacement: Examples From the Pakistan Himalaya and the Western Alps"


February 4, 1998; Harrison Schmitt, Apollo 17 Astronaut. "A Fieldtrip to the Moon"

February 6, 1998; Thom Wilch, New Mexico Tech. "Evolution and Stability of the West Antarctic Ice Sheet A Volcanological Perspective"

February 13, 1998; David Rowley, University of Chicago. "Exhumation of the Ultra-High Pressure Rocks in Central China"

February 20, 1998; Phillip Bennett, University of Texas at Austin. "Water Microbes, and Rocks: the Geochemical Ecology of Contaminated Groundwater"

February 24, 1998; Adrian Brearley, University of New Mexico. "Planets Under the Microscope: Mantle Minerals and Martian Microbes?"

February 27, 1998; Peter Heaney, Princeton University. "From Atoms to Agates: Silica Polymers and Crystal Growth"

March 6, 1998; John W. Geissman, University of New Mexico. "Testing Molnar and Tapponnier's Model of Extrusion Tectonics in SE Asia, and Other Musings..."
April 10, 1998; Lang Farmer, University of Colorado. "The Use of Nd Isotopes in Determining the Provenance of Siliciclastic Sediments"
April 17, 1998; Roger Bilham, University of Colorado. "Geodetic Measurements of Past and Future Great Earthquakes in and Near the Himalaya"
April 24, 1998; Thure Cerling, University of Utah. "Global Change in the Neogene: Straight from the Horses' Mouth"
May 1, 1998; George Davis, University of Arizona. "The Structures of Southern Utah"
May 8, 1998; Michael Wyession, Washington University. "Mapping the Base of the Mantle: The Other Half of Plate Tectonics"
ALUMNI PROGRAMS AND SUPPORT

The Department is very fortunate in being supported by a large group of active and enthusiastic alumni. Individually and collectively these graduates provide generous financial, advisory and moral support for many departmental activities, which contribute significantly to our success in our educational and research missions.

Caswell Silver Foundation

First among sources of alumni support is the Caswell Silver Foundation. Funds generated by the investments of the Foundation in 1997-98 provided full-time support for the Leon Silver/Vincent Kelley graduate student Fellows (Colin Shaw and Mike Gaud), and subsidized most of the travel of faculty to professional meetings this past year. The Foundation also supports periodically an endowed faculty chair, the Caswell Silver Research Professor; as noted earlier, the next Silver Professor, Dr. Mousumi Roy, will begin in July, 1998.

The Caswell Silver Foundation also supports the Caswell Silver Distinguished Lecturer series, which allows the Department to bring one or two National Academy of Sciences Members for lectures and visits with faculty and students. This year, the faculty chose Professor Leon Silver, W.M. Keck Foundation Professor for Resource Geology, Emeritus, at the California Institute of Technology, as the Lecturer. Professor Silver gave two talks during a three-day visit from January 29-31, 1998: “Uranium-thorium-helium isotopes in apatites: a thermochronometer with important geological applications,” and “California batholiths: a Cretaceous continental growth spurt?” Professor Silver was honored at a reception in the geology museum and spent much of his visit talking with faculty and students individually. Visits of Distinguished Lecturers are welcomed by the Department both for the opportunities they provide us to interact with some of the most distinguished and influential geologists in the country, and to inform them about our department and the research and other academic activities we are pursuing.

As in previous years, the Silver Foundation made possible two $500 Meritorious Staff Awards, presented to two outstanding non-academic staff members. These awards allow the faculty to express in a tangible way its 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 Commencement Ceremonies, were Sally Hayes, departmental accountant, and Jim Connolly, departmental computer manager.

In addition to these major ways in which the Silver Foundation assisted the Department of Earth and Planetary Sciences during the past year, the Foundation also provided the means to accomplish other important functions, such as advertising and supporting the visits of top potential graduate students to the department, and sponsoring the receptions for the Distinguished Lecturers. Support from the Caswell Silver Foundation benefits the Department in many different ways, and thereby strengthens the Department as a whole, as well as assisting individual faculty and students in their scholarly endeavors. The Department deeply appreciates this support.

Alumni Support

Donations and contributions from alumni, faculty and friends of the Department support about a dozen scholarship funds, mostly managed by the UNM Foundation. The interest generated by these funds annually is utilized to award scholarships to undergraduate and graduate students. Such scholarships are augmented by other scholarships awarded by the Department, scholarships and research grants from institutions outside the University, and occasionally fellowship funds from the University. A full summary of scholarships and fellowships received by Earth and Planetary Sciences students is presented in Part IV of this report. Here we note that in 1997-98, scholarships derived from alumni-supported funds amounted to $21,600 awarded to 20 undergraduate students (Leonard, Campbell and Pfeiffer Scholarships), plus $20,670 awarded to 19 graduate students (Alumni Fellowship, Gratton, Kelley, Miossec, Wanek,
and Wengerd Scholarships; the Rhodes and Vann Scholarships were not awarded this year). Two of these graduate fellowships are new. The Patrick and Jean McKinney Gratton Fellowship alternates between the English and E&PS Departments, and the Vincent C. Kelley Fellowship is derived from funds contributed in memory of V.C. Kelley to the UNM and Silver Foundations.

The Department also maintains contact with its alumni through gatherings at professional meetings, newsletters and many personal and professional contacts. For example, the annual "Rio Rats" Reception for alumni and friends of the Department and Geoscience departments at other New Mexico-west Texas schools was held at the American Association of Petroleum Geologists annual meeting in Salt Lake City, on May 18, 1998; some 60 people attended. This reception is sponsored by UNM E&PS department alumni.

**PLANS AND GOALS**

During the 1998-99 year, the Department of Earth and Planetary Sciences will pursue several goals to increase our ability to carry out our educational and scholarly missions.

1. Assuming approval is received from the Dean, the Department will search for and hire a new faculty member in volcanology, probably at the Assistant Professor level. Volcanology has been an important part of the Department's program since 1957, and we have not had a full-time faculty member devoted to this discipline since Wolf Elston's retirement in 1992. The new volcanologist would be a lead participant in our very successful joint volcanology program with Los Alamos National Laboratory.

2. Continue to press for the addition of two long-needed technical staff lines, as we have been doing for about 5 years now. These include

   a). a 0.50-0.75 FTE line for management of the Department's computer and network facilities. Currently this position, filled by J. Connolly, is being supported mainly from other unfilled staff salary lines and other departmental funds, but our ability to continue this in 1998-99 will be severely curtailed. Additionally, expertise is needed for maintenance of the Department's Unix computer system.

   b). a 0.5 FTE state-funded position for the microprobe/SEM lab manager, a position held by Mike Spilde. This is a full-time position, essential to the operation of these large labs, that is currently supported entirely by the Institute of Meteoritics.

3. Led by Zach Sharp, search for and hire a Ph.D.-level research scientist for the stable isotope lab, a position that has been unfilled for several years.

4. Continue to study and discuss the possible causes for the Department's persistent enrollment declines over the past 5 years, and develop new approaches to attracting more students, especially undergraduates, to our 100-200 level courses, and to majoring in E&PS. This will include monitoring of the E&PS course curriculum to assure that faculty are being utilized efficiently in courses with adequate enrollments, and adjusting the frequency of some classes to optimize the possibility of good enrollments. The impact of Geography-101 courses now being allowed to fulfill Arts and Sciences Group and University core-curriculum requirements should also be examined, as well as the effort needed and possible strategies for mounting an outreach program to local high schools in order to interest students at that level in the earth sciences.
5. As suggested by the University, provide most of our current 400-level courses with dual graduate (500) numbers, so the graduate students enrolled in them, with extra assignments, may count them as legitimate graduate courses. This should help the University receive additional credit for more of the courses graduate students are taking.

6. Encourage the success of, and work for more adequate funding for the three Natural Sciences courses the Department now administers. Refinement of the curriculum and the staff of instructors will continue. After the first semester of N.S. courses in E&PS, it is clear that an increase in the number of sections offered (currently 8 per semester and 3 during the summer) is justified by potential enrollments, and that considerably more salary for the program's coordinator (nearly a full time job) is warranted. The N.S. classes will continue to be taught in the Physics/Astronomy Department's Regener Hall next year, but after that space in Northrop Hall will be needed for these classes.

7. Continue to monitor closely and reallocate space as appropriate in Northrop Hall. Presently, space is very tight and requires juggling of some room uses each year to accommodate changing numbers of graduate students, visiting faculty, research scientists and some lab functions. Expansion space in the proposed new Science Technology building is badly needed, although the building seems to have receded somewhat among the University's major capital priorities. The Department will continue to participate in the planning for a new building, as appropriate. With completion of the construction and beginning of the deployment of the new Dane Smith classroom building, expected by Spring, 1999, the Department will revive its request for return of rooms 114 and 116 in Northrop Hall to its exclusive use.

8. Although funds for capital improvements on Northrop Hall have not been forthcoming for several years, the Department still would benefit considerably from several improvements, including the walling in of the external stairwell along the north basement for a secure storage and work area, installation of a new elevator to replace the one that dates back to the construction of Northrop Hall 45 years ago, renovation of the radioactive minerals storage area in the Collections room, and renovation of one or two teaching labs to broaden their utilization.

9. Upgrade or add new teaching equipment and facilities, as allowed by the departmental budget and the coming year's equipment allocation (if any). High priorities remain a new fully-equipped petrographic microscope with high-resolution video camera and monitor, a new field vehicle, and replacement of the large slab saw and other equipment in the rock-cutting room.

10. Continue to upgrade and maintain the Department's expanding computer facilities. More work stations are needed in or complementary to the student computer pod. Ideally, we would like to place work stations in several of the undergraduate teaching labs, and/or develop and outfit an undergraduate computer room, in order to integrate new instructional software into the curriculum of our undergraduate courses.

11. Continue to expand the database and data gathering for outcomes assessment, both for the undergraduate and graduate programs.

12. Select a new Chair of the Department, who will begin on July 1, 1999.
III. ACTIVITIES OF THE FACULTY AND RESEARCH SCIENTISTS
(Calendar Year 1997)
1. TEACHING ACCOMPLISHMENTS

Yemane Asmerom

Courses taught

Spring:  E&PS 534 - Principles of Radiogenic Isotopes (8 enrolled)
         E&PS 401 - Departmental Seminar 401 (12 enrolled)

Fall:    E&PS 333 - Environmental Geology (13 enrolled)
         E&PS 401 - Fundamentals of Geochemistry (7 enrolled)

Made progress on setting up the lab and training students and colleagues: Dezbah Tso, Sharon Minchak, Tracey Cascadden, Angela McLain, Maya Elrick, Claudia Lewis (Los Alamos), Rhawn Denniston (U. Iowa).

Graduate students supervised: Dezbah Tso, Carter Dunaway.
Graduate student committee: Rebecca Gardner, Sharon Minchak, Angela McLain, Mike Timmons, Adam Read

Faculty Advisor: Association of Black Student Engineers, Peacecraft Student Organization

Adrian Brearley

Courses taught

Fall:    E&PS 365 - Exploring the Solar System, presented two lectures and taught practical class.
         E&PS 518 - Scanning electron microscopy and electron microprobe analysis, cotaught with Mike Spilde (12 enrolled)

Served as Advisor and Ph.D. committee member for Nicolaus Hanowski, Ivan Thorsos and Kate Duke.

Michael Campana

Courses taught

Spring:  E&PS 472 - Subsurface Fate and Transport Processes (14 enrolled) (with Laura Crosse)
         E&PS 552 - Problems (1 enrolled)
         PA 551 - Problems (1 enrolled)
         E&PS 493 - Independent Study (1 enrolled)
Summer: PA - 573 - Interdisciplinary Water Resources III: Field-Based Problems and Communications Laboratory (9 enrolled) (with W. Siembieda).


Developed new course, E&PS 564, Geological Fluid Mechanics.

Graduate students:

Student Advisement/Thesis Supervision, James Brainard, Sharman, Carpenter, Jerry Bird, Robert Gray, (all M.S.); Jeffrey Peterson, Linda I. Gordan, William McDonald (all MWRA).

Theses completed (all M.S. in Earth and Planetary Sciences):


Service on Thesis/Dissertation Committees:

Andrika Kuhle (M.S.), Karen Roche (M.S.), Jerry Bird (M.S.), Robert Gray (M.S.), Sharman Carpenter (M.S.), James Brainard (M.S.), Laura Hagan (M.S.), Claudia Borchert (M.S.), David Mitchell (M.S.), William Hauck (MWRA), Debbie Terry (MWRA), April Fitzner (MWRA), Linda I. Gordan (MWRA), Jeffrey Peterson (MWRA), William McDonald (MWRA), Thomas Krause (MWRA), Armand Groffman (Ph.D.), Drew Baird (Ph.D. in Civil Engineering), John Morrice (Ph.D. in Biology), Michelle Baker (Ph.D. in Biology).

Service on Examination Committees: Anna Snider (M.S.)

Undergraduate Students: (B.S. Honors Thesis Supervision)


Danielle M. Boling (in progress), “Biogeochemical structure of spring environments and macrophyte assemblage controls on nutrient dynamics in a semi-arid montane stream”, (Biology student; co-advisor with C.N. Dahm).
Laura Crossey

Courses taught

Spring: E&PS 472 - Contaminant Hydrogeology (18 enrolled) with M. Campana
E&PS 415 - Geochemical of Natural Waters (10 enrolled)

Fall: E&PS 551 - Advanced Physical Geology for Teachers (12 enrolled)
Dissertation/Thesis Independent Study (4 enrolled)

Ph.D Committees

Chair: Deborah Bergfeld, Armand Groffman, Angela McLain (co-chair)

Committee Member: Michelle Baker (Biology), John Morrice (Biology), Nick Hanowski (E&PS), Christy Fellows (Biology), Diana Northup (Biology).

MS Committees: Rebecca Gardner, Karen Roche, Laura Hagen.

Exam Committee Member: Jerry Bird, Bob Gray (1997), Dezbah Tso, Anna Snider.

Student Grant Support

Graduate: Armand Groffman (full), Karen Roche (partial).
Undergraduate: David Johnson, Michael Henderson, Rick Ortiz.
High School: Nikki Horton (from Detroit, MI: NASA Sharp-Plus Program; summer 1997).

Maya Elrick

Courses taught

Spring: E&PS 102 - Historical Geology (40 enrolled)

Fall: E&PS 304 - Sedimentology-Stratigraphy (26 enrolled)
E&PS 401 - Seminar (7 enrolled)

Graduate Students Advisement: Anna Snider (M.S.), Matt Tremblay (Ph.D.), Carol Dehler (Ph.D.).
Thesis Committee: Ancheng Ma, (Ph.D.), Andy Heckert (M.S.).
Senior Thesis Advisor: Matt Crawford, Leigh Shean.
Coordinator: 401 Seminar Fall 1997.
Wolfgang Elston

Courses taught

Spring:
- E&PS 203 - Earth Resources and Man (23 enrolled)
- E&PS 300 - Volcanoes of North America (50 enrolled)
  (co-taught with K.H. Wohletz, Los Alamos National Labs)

Curriculum Development:

Ongoing development of UNM-LANL Volcanology Program

Department of Foreign Languages and Literature:

Visiting Staff Member, UNM German Summer School (Deutsche Sommerschule von New Mexico), Taos Ski Valley, July 2-5, 1997.

Lecture on Katastrophengeologie: Asteroiden und Kometen prallen auf der Erde ODER Was ist mit den Dinosauriern geschehen? (Catastrophic geology: Asteroids and comets crash into Earth OR What happened to the dinosaurs?).

Led field trip to the Harding Mine.

Peter Fawcett

Courses taught

Spring:
- E&PS 103 - Earth's Environment and Global Change (43 enrolled)

Fall:
- E&PS 547 - Quaternary Paleoclimatology (15 enrolled)
- E&PS 552 - Problems (1 enrolled)

Guest Lecture:
- 5 lectures in E&PS 103 (Fall)
- 1 lecture in E&PS 101 (Fall)

Course Development:

Revised the content of E&PS 103 and developed new lectures
Developed new course, Quaternary Paleoclimatology as a graduate level seminar.
Developed new course with old catalog number (E&PS 439), Paleoclimatology to be taught in Spring 1998.

Graduate Students Supervised: Dale Henderson (M.S., supported with NSF funding)

Graduate Thesis Committees: Tom Loveland (MS), David Mitchell (MS), Anna Snider (MS), Paul Wisniewski (MS), Andy Heckert (Ph.D.), Joel Pederson (Ph.D.).
John W. Geissman

Courses taught

Spring: E&PS 101 - Physical Geology (57 enrolled)

Summer: E&PS 319L - Introductory Field Geology (20 enrolled)

Fall: E&PS 101 - Physical Geology (39 enrolled)

Graduate students supervised: Tim Wawryzniec (Ph.D., co-advised), Tracey Cascadden (Ph.D.), Eileen Romano (M.S.), Mike Petronis (M.S.).

Exam Committees: Colin Shaw (Ph.D.), Mike Petronis (M.S.), Mary Simmons (M.S.).

Graduate Students financially supported: Tim Wawryzniec, Mike Petronis, Gordon Keating, Marlo Mikolas (non-degree, attempting to enter program).

Course Development:

Continued to organize, with Roberto Molina-Garza, a non-credit weekly “seminar” meeting for the users of the paleomagnetism laboratory, focusing on laboratory improvements, current research by users of the laboratory, and controversial research topics in paleomagnetism. Continued to modify/improve undergraduate field geology course (E&PS 319L).

“Guest” lecturer in other E&PS 101 sections.

Graduate Theses Completed:

Ph.D, Tracey Cascadden, Quaternary volcanism in the Colorado Plateau-Basin and Range Transition Zone: Zuni-Bandera and nearby volcanic fields (co-advisor).

MS, Eileen Romano, Late Paleozoic remagnetization of the Cambro-Ordovician Bliss Formation in the Crisotobal Range and Caballo Mountains, Sierra County, New Mexico (advisor).

Reader: Adam Read (MS), Meghan Hodgins (MS).

David Gutzler

Courses taught

Spring: E&PS/Geography 251 - Meteorology (new course; 25 enrolled)
E&PS 493 - Independent Study (1 enrolled)
E&PS 552 - Problems (1 enrolled)
Geography 552 - Problems in Meteorology (2 enrolled)

Fall: E&PS/Geography 251 - Meteorology (28 enrolled)  
E&PS/Geography 351 - Climatology (first time offered in E&PS; 39 enrolled)  
E&PS 495 - Senior Thesis (1 enrolled)

Guest lectures: E&PS 300, 10/2.  
E&PS 333, 12/11

Supervision of undergraduate students: S. Free, independent study for CHNE 494L, Spring 97, N. Brunsell, senior thesis, E&PS 493 (Spring 97) and EPS 495 (Fall 97).

Supervision of graduate students: D. Etheredge, M.S. student (entered program Fall 97) 
Exam committees: D. Tso (M.S.), M Grupé (M.A., Geography).

Stephen Huestis

Courses taught

Spring: E&PS 115 - Geological Disasters (30 enrolled)  
E&PS 225 - Oceanography (33 enrolled)

Fall: E&PS 115 - Geological Disasters (47 enrolled)  
E&PS 225 - Oceanography (14 enrolled)  
EP&S 427 - Geophysics (4 enrolled)

Exam Committees: Karen Roche (MS), Angela McLain (Ph.D).

Thesis Committees: James Brainard (MS), Timothy Wawrzyniec (Ph.D).

Rhian Jones

Courses taught

Fall: E&PS 365 - Exploring the Solar System. Two guest lectures, two lab sessions.

E&PS 518 - Electron microprobe analysis. One guest lecture.

Student advisement: Research advisor for Sharon Feldstein, Ph.D., student of the University of Michigan.

Karl Karlstrom

Courses taught

Spring: E&PS 307 - Structural Geology (16 enrolled)  
E&PS 547 - Tectonics Seminar (9 enrolled)
Summer: E&PS 420 – Advanced Field Geology (14 enrolled)

Fall: E&PS 523 – Topics in Tectonics (5 enrolled)

Undergraduate students supervised: Jake Armour and John Lewis were supported by the USGS statemap project, through the NM Bureau of Mines during summer 1997.


M.S. Thesis Committee Chair or Co-chair: Cynthia Brown, partial support (EDMAP), Mary Simmons, partial support (NSF), Mike Timmons, NSF support for RA

Ph.D. Committee Chair: Colin Shaw – Kelley Silver Fellow and NSF field support

Thesis Committee and Exam Committee Members: Dan Koning, MS, Carol Dehler, Ph.D.

Cornelis Klein

Courses taught

Spring: E&PS 105L - Physical Geology Labs (faculty coordinator; 158 enrolled)
E&PS 204 - Gem Minerals and Gems (49 enrolled; this number includes official auditors)
E&PS 490 - Presentations (did final evaluations of students for outcomes assessment)

Fall: E&PS 301 - Mineralogy (48 enrolled)
E&PS 302L - Mineralogy Labs (37 enrolled)
E&PS 105L - Physical Geology Labs (faculty coordinator; 150 enrolled)
E&PS 402 - Environmental Mineralogy (10 enrolled)
E&PS 490 - Presentations (did final evaluations of students for outcomes assessment)

Additional instruction at UNM:

On August 19, 1997, I gave an invited lecture entitled “Using Interactive Hypermedia (on CD-ROM) in Teaching” as part of “Teaching Wise,” New Faculty Orientation days organized by Professor Jean Civickly-Powell.

Course development:

In the spring of 1997 I taught a new course, E&PS 204, Gem Minerals and Gems (2 cr.) for the first time. This course, with no college prerequisites, was specifically designed for a broad audience, including non-student members of the community at large. The course was given from
6 to 8 p.m., once a week (Tuesday evenings) in the UNM Evening Study Program. The course had great enrollment (49 students including official auditors) and student perception of the course was excellent (global ICES as follows: 1 = 5.8; 2 = 5.9; 3 = 5.8). The reason for the high enrollment is probably a combination of two factors: 1) This was the first time it was offered for people who might have wished to take this for some time; and 2) We did extensive advertising including ads in the Journal and the Lobo.

Graduate students:

Ph.D. dissertation committee members: Al Meldrum, Ivan Thosros.
M.S. thesis committee member: James M. Karner, Kate Helean.
M.S. exam committee member: Thomas A. Loveland.

Albert Kudo

Courses taught

Spring: E&PS 303 - Igneous & Metamorphic Petrology (33 enrolled)
E&PS 405 - Thermodynamics and the Physical Foundations of Geochemistry (8 enrolled)
Natural Sciences 261, Physical Science (22 enrolled)
E&PS 492 - Problems (2 enrolled)
E&PS 491 - Senior Thesis (1 enrolled)
E&PS 552 - Problems (2 enrolled)

Summer: E&PS 101 (42 enrolled)

Fall: E&PS 101 (152 enrolled)
E&PS 263 Geology of National Parks (31 enrolled)

Advisor of Ph.D. student, Tracey Cascadden, defended dissertation
Advisor of M.S. students: Sharon Minchak, defended thesis and graduated Stephanie Machr, defended thesis and graduated

Advisor of Honors B.S. student (directed honors thesis Joshua Ring, defended thesis and graduated Summa Cum Laude

Member of the following committees:

Ph.D. Gordon Keating, Qualifying Exam
MS Jim Karen, defended thesis and graduated
Advisor of Honors BS student (directed honors research): Sheila Hutchinson
Co-advisor for M. S. student, Kate Helean
Barry Kues

Courses taught

Spring: E&PS 101 (125 enrolled)
             E&PS 492 (1 enrolled)
             E&PS 599 (1 enrolled)
             E&PS 699 (1 enrolled)

Fall: E&PS 411 (12 enrolled)
              E&PS 490 (13 enrolled)
              E&PS 699 (1 enrolled)

Guest lecture to Biology Department, REU summer class on New Mexico and Sevilleta area geology, June 6.

Graduate Students

Thesis Completed:

M.S. - Andy Heckert (4/97), title: Litho- and biostratigraphy of the lower Chinle Group, east-central Arizona and west-central New Mexico, with a description of two new theropods (Archosauria: Dinosauria) from the Bluewater Creek Formation” (coadvised, with Dr. S. Lucas).

Ph.D. – Ancheng Ma (12/97), title: Early Eocene micromammals in the San Jose Formation, San Juan Basin, New Mexico” (coadvised, with Dr. S. Lucas).

Coadvised: Casey Cook (with Dr. S. Lucas).

M.S. Exam Committee: Karl Wegmann.

Leslie McFadden

Courses taught

Spring: E&PS 584 - Soil Genesis (6 enrolled)
             E&PS 490 – Geologic Presentations (11 enrolled)

Fall: E&PS 101 – Physical Geology (58 enrolled)
              E&PS 485L – Soil Stratigraphy and Morphology (10 enrolled)

Guest Lecturer:EPS 101: Desert Processes and Landscapes; (2) EPS 300: Soil studies in volcanic materials at the Yucca Mountain site, Nevada; (3) Department of Architecture and Planning – Community and Regional Planning 570: Soil-geomorphic and ecologic studies of arroyos and relationships to grazing, and climate.

Graduate Students Supervised or Co-supervised: Amy Ellwein, (M.S.: Defended February, 1997), Angela McLain (Ph.D.), (Funded, 0.25 R.A., L.A.N.L.).
Thesis Committees: Dan Koning, Karl Wegman, Paul Wisnieski.

Ph.D. Committees: Armand Groffman, Oberling (Dept. of Anthropology), J. Pederson.

Roberto Molina-Garza

Courses taught

Spring: E&PS 102 - Historical Geology at UNM Valencia Campus (10 enrolled)

Fall: E&PS 101 - Physical Geology at UNM Valencia Campus (21 enrolled)
   E&PS 105L - Physical Geology Lab at UNM Valencia Campus (17 enrolled)


Horton Newsom

Courses taught

Summer: E&PS 365 - Exploring the Solar System (26 enrolled)

Fall: E&PS 365 - Exploring the Solar System (Co-taught)

Research advisor for the following students:

M.S. students: Stephanie Maehr
Ph.D. student: Ivan Thorsos
Undergraduates: Justin Hagerty

Students supported by grants:

NSF supported students:

Ms. student: Stephanie Maehr
Undergraduate students: Justin Hagerty

Committee member for the following graduate students:

Masters student: Stephanie Maehr

Thesis read: Stephanie A. Maehr, 1997, M.S. "Trace element geochemistry of arc lavas from volcanoes northwest and southeast of the Quesada Sharp Contortion, the Central American Arc".
Ph.D. student: Ivan Thorsos
Other teaching:

Lecture Institute of Meteoritics Seminar, Mar. 10, 1997, "Impact crater processes on Mars".
Lecture Institute of Meteoritics Seminar, Sept. 15, 22, "Mars exploration in the future".

James Papike

Courses taught

Spring: E&PS 587 - Advanced Mineralogy (4 enrolled)

Fall: E&PS 365 - Exploring the Solar System (37 enrolled)

M.S. Advisor for L. Bowman.
M.S. Advisor for C. Herd.

Student Graduate Committees served on:


Frank Pazzaglia

Courses taught

Spring: E&PS 539 - Advanced Geomorphology (7 enrolled)

Fall: E&PS 103 - Earth's Environment and Global Change (55 enrolled)
E&PS 481 - Geomorphology (11 enrolled)

Student Advising:

I advised four M.S. students, Karl Wegmann, Dan Koning, David Mitchell, and Paul Wisniewski and co-advised (with G. Smith) one Ph.D. student, Joel Pederson. Wegmann and Koning have moved onto RA support and are on schedule to complete their research in the summer of 1998, with a defense to follow in the fall of 1998. Pederson continues on his NSF RA support and is making fine progress towards fulfilling his degree requirements. Mitchell has identified his M.S. research as a field-based investigation of the stream power law. Wisniewski has chosen a M.S. project to be conducted along the Canadian River in New Mexico investigating the processes and rates of canyon incision.

I was a committee member for the following students in 1997: Mr. Tim Wawrzyniec (Ph.D.), Mr. Colin Shaw (Ph.D.), Mr. Steve Dominguez (Ph.D.-archeology), Ms. Rebecca Gardner (M.S.), Mr. Jerry Bird (M.S.), Ms. Amy Ellwein (M.S.), and Ms. Andrika Kuhle (M.S.); Mr. Michael Gaud (M.S.) and Ms. Jessica Moore (M.S.).
I was the undergraduate advisor for Mr. Jake Armour, who completed his senior thesis entitled "Investigation of a high-resolution core from the Pecos Wilderness, NM: Implications for late Holocene climate change.

I am the faculty mentor for a Jemez Pueblo student, Mr. Chris Toya. Chris is a full-time field assistant aiding in our field mapping efforts in and around Jemez Pueblo. Chris was supported financially through the STATEMAP program (see below). He is on schedule to graduate in the spring, 1998.

Support of student research

Wegmann is fully funded under NSF-sponsored research
Pederson is fully funded under NSF-sponsored research
Koning and Pederson have been partially funded under USGS ED MAP support
Armour was partially funded under USGS ED MAP support

Aurora Pun

Courses taught

Fall: E&PS 101-004 - Physical Geology (93 enrolled)
      E&PS 101-005 - Physical Geology (39 enrolled)
Guest Lectures: E&PS 102 - Historical Geology taught by Dr. G. Smith

Jane Selverstone

Courses taught

Spring: E&PS 303 - Igneous and Metamorphic Petrology (with B. Kudo)
      (32 enrolled)
      E&PS 303L - Petrology lab with optical mineralogy (32 enrolled)
      E&PS 547 - Tectonics seminar (with K. Karlstrom) (8 enrolled)
Fall: E&PS 521L - Metamorphism (7 enrolled)

Undergraduates supervised:
Laura Pietsch-Rivera - senior thesis in progress
Aaron Cavosie - senior thesis in progress
Michael Gabora - senior thesis in progress

Graduate students supervised (* supported by my NSF funding):

*Meghan Hodgins, MS 1997, "Proterozoic evolution of the Colorado Front Range"
Mary Simmons, MS in progress (coadvisor with K. Karlstrom)
*Timothy Wawrzyniec, PhD in progress (coadvisor with J. Geissman)
Colin Shaw, PhD in progress (coadvisor with K. Karlstrom)
Thesis and dissertation committees (in addition to students listed):

Adam Read, MS, defended 5/97
Sharon Minchak, MS, defended 4/97
Mike Petronis, MS
Christopher Herd, MS
Cynthia Brown, MS

Exam committees

Mike Petronis, MS exam 3/97
Colin Shaw, PhD exam 11/97

Charles Shearer

Courses taught

Spring: E&PS 517L ICP-MS
Fall: E&PS 365 Exploring The Solar System.

Graduate Student Committees: Laurie Bowman, and Chris Herd.
ICP-MS Instruction: Armando Groffman, Kate Duke, Nick Hanowski, Kate Helean.

Gary Smith

Courses taught:

Spring: E&PS 441 - Advanced Sedimentology (10 enrolled)
Summer: Anth. 375F - Guest lecture in Summer Archeology Field Session
Fall: E&PS 102 - Historical Geology (21 enrolled)
E&PS 300 - Earth Sciences and Society (12 enrolled)
E&PS 101 - Guest lecture in Physical Geology

New Course Development:
Earth Sciences and Society (E&PS 300) developed as a new course

Graduate Students:
* indicates support provided

Ph.D. advisees:
Gordon Keating (co-advised with G.A. Valentine - LANL)
Joel Pedersen* (co-advised with F.J. Pazzaglia)
Service on other Ph.D dissertation or examination committees:
    Philip LeTourneau (Anthropology)
    Thomas Wilch (NMIT)

M.S. advisees:
    Andrika Kuhle*
    Claudia Borchert*
    Jessica Moore*
    Michael Gaud*

Service on other M.S. thesis or examination committees:
    Scott Aby
    Karen Roche
    Karl Wegmann
    Kate Helean

**Mike Spilde**

**Courses taught**

Fall: E&PS 518 - Electron Microprobe Analysis and Scanning Electron Microscopy (12 enrolled)

Tutorial training on the SEM for 3 UNM graduate students.

Tutorial training on the SEM for 2 NM Museum of Nat. History staff members, 2 people from local businesses, and 1 each from Sandia Lab and NM Tech.

Tutorial training on the microprobe for 1 UNM faculty and 1 graduate student.

Tutorial training on the microprobe for 2 UNLV faculty and 1 graduate student.

**Padinare Unnikrishna**

Member of the M.S. Committees of the following students:
    Laura B. Hagan, Department of Earth & Planetary Sciences
    Doug L. Moyer, Department of Biology

**Michael Wiedenbek**

Guest Lecture: E&PS 587 - Advanced Mineralogy (4 enrolled)
Lee Woodward

Courses taught

Spring:  E&PS 101 - Physical Geology (41 enrolled)
        E&PS 428 - Regional Tectonics (11 enrolled)

Fall:    E&PS 25L - NM Field Geology (9 enrolled)
        E&PS 471L - Mineral Deposits (11 enrolled)
        E&PS 551 - Problem Field Geology (1 enrolled)
2. 1997 PUBLICATIONS
(E&PS Faculty are underlined; ** = research scientists; * = students)

Books Edited

Mesozoic Geology and Paleontology of the Four Corners Region
O.J. Anderson, B.S. Kues and S.G. Lucas (editors)

Aqueous chemistry and geochemistry of oxides, oxyhydroxides, and related materials

Refereed Journal Papers

Transmission electron microscopy of native copper inclusions in illite
J.-H. Ahn, H. Xu** and PR. Buseck

Estimating the effect of stochastic wind stress forcing on ENSO irregularity
B. Blanke, J.D. Neelin and D.S. Gutzler

Automated EDS modal analysis applied to the diogenites
L.E. Bowman*, M.N. Spilde** and J.J. Papike

Phyllosilicates in the matrix of the unique carbonaceous chondrite, LEW 85332 and possible implications for the aqueous alteration of CI chondrites
A.J. Brearley**

Disordered biopyrolyles, amphibole and talc in the Allende meteorite: products of nebular or parent body aqueous alteration
A.J. Brearley**

Incorporation mechanisms of actinide elements into the structures of $\text{U}^{6+}$ phases formed during the oxidation of spent nuclear fuel
P.C. Burns, R.C. Ewing and M.L. Miller**
The crystal structure of ianthinite, [U\(_2\)\(^{4+}\)(UO\(_2\))\(_3\)O\(_6\)(OH)\(_4\)]\(_2\)H\(_2\)O\(_5\): a possible phase for Pu\(^{4+}\) incorporation during the oxidation of spent nuclear fuel
P.C. Burns, R.J. Finch, F.C. Hawthorne, M.L. Miller** and R.C. Ewing

Donathite discredited: a mixture of two spinels
P.C. Burns, F.C. Hawthorne, E. Libowitsky, N. Bordes and R.C. Ewing

Characterization and dissolution behavior of a becquerelite from Shinkolobwe, Zaire
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Vitrification of high-level radioactive waste by sintering under pressure
W. Lutze, W.L. Gong, R.C. Ewing and C. Scales

Vegetation responses to late Holocene landscape dynamics in a highly erodable terrain in the Colorado Plateau, northeastern Arizona
J.R. McAuliffe and L.D. McFadden

Desert soil-landscape evolution in basaltic tephra fall deposits
L.D. McFadden, R.G. Amundson, B.M. Crowe, F.V. Perry, S. Forman and S.G. Wells

Heavy-ion-irradiation of barium and strontium titanate: the effects of thermally-induced phase transitions and irradiation temperature
A. Meldrum*, L.A. Boatner and R.C. Ewing

Effects of ionizing and displacive irradiation on several perovskite-structure compounds
A. Meldrum*, R.C. Ewing and L.A. Boatner
Radiation Effects on Insulators - 9, p. 60 (1997)

Paleomagnetism of the Oquirrh Mountains and implications for the Cenozoic structural history of the easternmost Great Basin
M. Melker and J.W. Geissman

Linking atmospheric and paleoclimatic records: Lake Estancia, NM
K.M. Menking**, B.D. Allen, R.Y. Anderson** and T.A. Loveland*
Proceedings, 14th Pacific Climate Workshop, p. (1997)

Comparison of atmospheric and hydrologic estimates of groundwater discharge and evaporation for the Estancia Basin playa complex, Central NM (Part I)
EOS, v. 78, p. 115 (1997)

An autochthonous Jurassic forearc basin in NW Sonora, Mexico

Paleomagnetic data and Ar/Ar age determinations for the late Triassic Acatita pluton, southwest Coahuila, Mexico
R.S. Molina-Garza**, and W.C. McIntosh
EOS, v. 78, p. 190 (1997)
Paleomagnetic emplacement temperature and thermal-profile estimates for nonwelded pyroclastic-flow deposits, Miocene Peralta Tuff, Jemez Mountains, New Mexico
J. D. Moore*, J.W. Geissman and G.A. Smith

Retention of terminal electron acceptors in the surface water - groundwater ecotone of a headwater stream
J.A. Morrice, H.M. Valett, C.N. Dahm, P.V. Unnikrishna** and M.E. Campana

Permeability of the surface water - groundwater ecotone of a headwater stream
J.A. Morrice, H.M. Valett, C.N. Dahm, P.V. Unnikrishna** and M.E. Campana

Hydrothermal environments and chemical transport on Mars
H.E. Newsom**

Composition of the Martian soil
H.E. Newsom** and J.J. Hagerty*

Advanced material science techniques for analysis of prehistoric ceramics
N.H. Olsen, N.A. Creager and M.N. Spilde**

What are the fundamental controls on rates of landscape denudation? Applications of DEM/GLS techniques in geomorphology for the next decade
F.J. Pazzaglia
New Mexico Geology, v. 19, p. 49 (1997)

Orogen exhumation determined by deconvolution of offshore basin sediments: the post-Triassic Appalachian Mountains
F.J. Pazzaglia and M.T. Brandon

Earth's environment and global change: a new course in ESS at the University of New Mexico
F.J. Pazzaglia and P.J. Fawcett

Late Cenozoic large-scale landscape evolution of the U.S. Atlantic passive margin
F.J. Pazzaglia and T.W. Gardner
Supplementi di Geografia Fisica e Dinamica Quaternaria Supplemento III, p. 306 (1997)
Bedrock fluvial incision and longitudinal profile development over geologic time scales determined by fluvial terraces
F.J. Pazzaglia, T.W. Gardner and D.J. Merritts

Paleomagnetic data bearing on vertical-axis rotation within the central Death Valley extended terrane
M.S. Petronis*, J.W. Geissman, D.K. Holm, E. Schauble and B.P. Wernicke

Paleomagnetism and structural history of the Silver Peak Range, west-central Nevada
M. Petronis*, J.W. Geissman and J.S. Oldow

Cluster particles: a unique new class of asteroid debris or a note of caution?
F.J.M. Rietmeijer**

Use of multivariate statistical analysis (Roy’s test, discriminant analysis) in distinguishing different magma sources: an example from the Zuni-Bandera Volcanic Field
J. Ring*, T. Cascadden* and A.M. Kudo

Principal features of a new vertebrate assemblage of Virgilian age (Late Pennsylvanian) from New Mexico
New Mexico Geology, v. 19, p. 55-56 (1997)

Fracture pathways and partial melt compositions: geochemical consequences of melt-induced microcracking
T. Rushmer and A.J. Brearley**

Hydrogeology of the Santa Fe Group aquifer system in the Cochiti Pueblo area based on geologic mapping and airborne geophysics
D.A. Sawyer, V.J.S. Grauch, G.A. Smith, A.J. Kuhle*, D.P. Dethier, B. Rodriguez and M. Deszcz-Pan
Geological Society of America, Abstracts with Programs, v. 29, no. 6, p. 334-335 (1997)

Proterozoic ultramafic bodies in the Grand Canyon
S.J. Seaman, K.E. Karlstrom, M.L. Williams and A.J. Petruski

Xenolithic constraints on Proterozoic subduction polarity beneath the Colorado Plateau
J. Selverstone, A. Pun** and K. Condie

Low-angle versus high-angle normal faulting associated with exhumation of deep-seated rocks
J. Selverstone, T. Wawrzyniec* and G.J. Axen
Heterogenity of 1.7-1.68 Ga deformation in southern Colorado: implications for orogenic province boundaries
C.A. Shaw* and K.E. Karlstrom

Volatile s in planetary mantles, The behavior of sulfur in Lunar picritic magmas and the Moon's mantle

Large field-of-view inorganic mapping using a Mattauch-Herzog geometry secondary ion mass spectrometer
SIMS XI Conference Abstracts, p. 76 (1997)

Rift-basin facies geometry and reservoir heterogeneity: outcrop and subsurface study
G.A. Smith

Late Cenozoic tectonic history of the northern Santo Domingo Basin
G.A. Smith and A. J. Kuhle*
New Mexico Geology, v. 19, p. 54 (1997)

Contemporaneous magmatic and hydromagmatic Pliocene basalt eruptions at the site of Cochiti Dam, Sandoval County, New Mexico
G.A. Smith, M.C. Simmons* and A.J. Kuhle*
New Mexico Geology, v. 19, p. 63 (1997)

Oxy generation cycles observed in Middle Cambrian deep-water carbonates, Marjum Formation, House Range, western Utah
A.C. Snider* and M. Elrick

Riparian ecosystem restoration: quantification of evapotranspiration over tall vegetation in a semi-arid landscape
P.V. Unnikrishna**, C.N. Dahm, T. Mulhern, H.M. Valett and C. Crawford

Seasonal vertical exchange processes and lateral hyporheic zone solute transport in a semiarid montane stream
P.V. Unnikrishna**, J.A. Morrice, M.E. Campana, H.M. Valett and C.N. Dahm

Synthesis of Ce-doped zircon by a sol-gel process
Krypton ion irradiation effects in four sheet silicates: a comparative study

A general model of irradiation-induced amorphization
S.X. Wang*, L.M. Wang** and R.C. Ewing
Annual meeting of the Materials Research Society, Symposium on Nonequilibrium and Thin Film Transformations, Abstracts, p. 672 (1997)

Ion irradiation-induced amorphization of CaAl2O4
S.X. Wang*, L.M. Wang** and R.C. Ewing

An integrated structural and fluid inclusion study of footwall unroofing along the Simplon line, central Alps, Switzerland
T. Wawrzyniec*, I. Selverstone and G.J. Axen

Major Laramide right-slip faults buried beneath the Late Cenozoic fill of the Rio Grande rift—fact or fiction?
L.A. Woodward, O.J. Anderson and S.G. Lucas

Characterization of oxidation status of Fe ion pyroxene and amphibole minerals: transmission electron microscopy and electron energy-loss spectroscopy studies
H. Xu** and L.A.J. Garvie
High Resolution Stratigraphy: Application to hydroclimatic reconstruction in southwestern United States
R.Y. Anderson
National Science Foundation (3-13033)
$71,366, 7/2/96 - 12/31/97

Hydrologically coupled estimates of decadal to millennial climate variability during the Holocene and Late Pleistocene
R.Y. Anderson, B.D. Allen and S. Hostetler
National Science Foundation (3-47281)
$139,281, 1/1/97 - 12/31/98

Geochemistry and hydrology of the Red River stream system before and after open-pit mining, Questa Area, Taos County, New Mexico
R.Y. Anderson, L.J. Cressey and M.E. Campana
New Mexico Energy, Minerals and Natural Resources Department (3-48431)
$78,800, 4/1/97 - 9/30/98

U-series isotope systematics of continental rift basalts: The Rio Grande Rift, USA
Y. Asmerom
National Science Foundation (3-48611)
$127,580, 6/1/97 - 5/31/99

Chronology of submerged speleothems from the Blue Hole, Belize: Implication for sea level and tropical climate change through time
Y. Asmerom
National Science Foundation (3-49941)
$49,957, 11/15/97 - 10/31/98

The role of mantle plumes in formation of new tectonic plates
Y. Asmerom
Los Alamos National Lab (DOE) (3-49871)
$14,438, 10/1/97 - 9/30/98

Acquisition of an analytical scanning electron microscopy
National Science Foundation
$90,000, 1/1/97 - 12/31/97

Subsurface flow and transport – Research Assistant Support
M.E. Campana
Sandia National Laboratories (3-45281)
$27,350, 10/6/95 - 9/30/97
Ecological monitoring: Middle Rio Grande Bosque
C.S. Crawford, M.C. Molles, Jr., P.V. Unnikrishna** and C.N. Dahm
U.S. Fish and Wildlife Service
$24,000, 10/1/97 – 9/30/98

Biogeochemical cycling of redox-sensitive metals during surface-subsurface water exchange in a shallow alluvial aquifer
L.J. Crossey and M. Vallett
National Science Foundation (3-46561)
$290,000, 5/15/96 – 7/31/99

Supplement to Biogeochemical cycling of redox-sensitive metals during surface-subsurface water exchange in a shallow alluvial aquifer
L.J. Crossey
National Science Foundation
$47,000, 7/1/97 – 6/15/99

REU supplement: Biogeochemical cycling of redox-sensitive metals during surface-subsurface water exchange in a shallow alluvial aquifer
L.J. Crossey and M. Valet!
National Science Foundation (3-46569)
$2,000, 4/24/97 – 7/31/99

Petrology and diagenesis of the Ferron Sandstone, Utah
L.J. Crossey
University of Utah, Energy and Geoscience Institute
$7,500, 2/97-10/97

Riparian ecosystem restoration: effects of flooding and vegetation types on annual evapotranspiration in a semiarid landscape
NASA/EPA
$700,000, 09/1/97 – 8/31/2000

Short-term paleoclimate fluctuations expressed in Paleozoic deep-water rhythmites
M. Elrick
National Science Foundation (3-42021)
$93,529, 8/15/94 – 7/31/98

Support for Dr. Boris Burakov to visit the University of New Mexico as part of a program to develop ceramic waste forms for actinides
R.C. Ewing
National Research Council, Office of International Affairs (3-56010)
$12,000, 7/24/96 – 6/1/98
Nested GCM/mesoscale model studies of large, rapid Holocene and late glacial climate changes: Synthesis with the Greenland ice core records
P.J. Fawcett
National Science Foundation (3-48771)
$84,514, 6/1/97 - 5/31/99

Studies of large-magnitude intracontinental extensional tectonism in the Basin and Range, California and Nevada
J.W. Geissman (with B.P. Wernicke, R.K. Dokka)
National Science Foundation (3-40481)
$35,898 (UNM component), 2/15/94 - 7/31/98

Collaborative research: Assessing the style, evolution of large-magnitude intracontinental deformation, and the role of extrusion tectonics, eastern Himalayan Syntaxis, Yunnan, China
J.W. Geissman and C. Burchfiel (MIT)
National Science Foundation (3-49031)
$181,103 (UNM component), 7/1/97 - 7/31/2000

Hydrothermal processes in pyroclastic rocks: Implications for cooling ignimbrites, shallow intrusions and rate of change of geomagnetic field
J.W. Geissman
Los Alamos National Laboratories (3-47451)
$18,322, 10/3/96 - 9/30/98

U-Pb geochronology in marine carbonates: A new approach for age dating in paleoclimate reconstruction
S. Getty** and Y. Asmerom
National Science Foundation (3-48381)
$102,921, 2/15/97 - 1/31/99

An assessment of atmospheric variability during TOGA COARE
D. Gutzler
NOAA Office of Global Programs (3-46631)
$56,471, 5/1/96 - 10/31/97

Observations and modeling of large-scale controls on summer rainfall in southwest North America
D.Gutzler and P.J. Fawcett
National Science Foundation (3-10411)
$130,580, 2/1/98 - 1/31/2000

Nature of middle crust during orogenesis: Thermal mechanical and geodynamic properties inferred from Proterozoic rocks of the Southwest
K.E. Karlstrom
National Science Foundation (3-44071)
$96,437, 5/17/95 - 6/30/98

An integrated study of Late Proterozoic (1.2-0.7 Ga) extensional tectonism, basin evolution, and biological evolution in the Grand Canyon Supergroup and Apache Group during incipient breakup of Rodinia
K.E. Karlstrom, M. Elrick, J.W. Geissman and Y. Asmerom
National Science Foundation (3-49041)
$140, 006, 7/1/97 - 7/31/99
Lithospheric structure and evolution of the Rocky Mountain transect of the western U.S.
K.E. Karlstrom and F.J. Pazzaglia
National Science Foundation (3-48951)
$156,502, 7/1/97 – 12/31/98

Geochemistry, petrology and geologic setting of the Precambrian Carajas and Urucum iron-formation, Brazil
C. Klein
National Science Foundation (3-27372)
$89,900, 6/1/94 – 5/31/99

The crystal chemistry and structural analysis of uranium oxide hydrates
M.L. Miller** and R.C. Ewing
DOE/Basic Energy Sciences (3-43801)
$200,000, 5/15/96 – 12/31/97

Ocean drilling program – Leg 182: The great Australian Bight
R. Molina-Garza**
Texas A&M Research Foundation (3-11641)
$17,254, 6/10/98 – 2/29/2000

Implementation of a computational facility for quantitative geomorphic acquisition, processing, analysis, and display of large data sets
F.J. Pazzaglia
National Science Foundation (3-44481)
$22,846, 6/20/95 - 7/31/97

Albuquerque Basin and Grand Canyon EDMAP proposal
F.J. Pazzaglia
U.S. Geological Survey (3-48719)
$22,029, 6/1/97 – 5/31/98

Fluvial terraces as a record of long-term deformation for the Cascadia forearc high, Olympic Mountains, Washington State
F.J. Pazzaglia
National Science Foundation (3-48741)
$97,958, 6/15/97 – 5/31/99

Rates of geomorphic processes using cosmogenic He and Ne
J. Poths and L.D. McFadden
DOE/DBES
$175,000, 9/95 – 9/98

Mineralogy and fine-grained primitive extraterrestrial materials
F.J.M. Rietmeijer**
NASA (3-16173; 3-16174))
$110,000, 4/1/97 – 3/31/98
PTI and kinematic constraints on Proterozoic tectonism in the northern Colorado Front Range
J. Selverstone
National Science Foundation (3-44871)
$109,306, 8/1/95 – 5/31/98

Collaborative research: Mechanics of footwall uplift during detachment faulting: a field test of kinematic and
dynamic models (renewal)
J. Selverstone, G. Axen and J. Bartley
National Science Foundation (3-45891)
$91,593, 1/1/96 – 12/31/98

Proterozoic assembly of the northern Colorado Front Range
J. Selverstone
National Science Foundation (3-11251)
$128,585, 6/15/98 – 6/14/2000

Outcrop and subsurface study of rift-basin facies geometry and reservoir heterogeneity
G.A. Smith
American Chemical Society, Petroleum Research Fund (3-43251)
$50,000, 3/1/95 – 8/31/97

Outcrop characterization of heterogeneity: Explicit linkage of hydrological and sedimentological properties and
testing of stochastic model performance
G.A. Smith and M.E. Campana
National Science Foundation (3-49111)
$119,991, 8/15/97 – 7/31/2000

The relationship of textures and depositional structures in pyroclastic-flow deposits to paleomagnetically
determined emplacement temperatures
G.A. Smith and J.W. Geissman
National Science Foundation (3-40471)
$94,400.00, 1/1/94 – 9/30/98

Paleofloral and stratigraphic analysis and Eocene-Oligocene climate change in Oregon
G.A. Smith and S.R. Manchester
National Science Foundation (3-43551)
$30,288, 4/1/95 – 9/30/97

Albuquerque Basin and Grand Canyon EDMAP proposal
G.A. Smith
U.S. Geological Survey (3-48711)
$15,471, 6/1/97 – 5/31/98

Variable hillslope processes and sediment delivery to tectonically quiescent basins: A late Miocene to Quaternary
record of buried, relict, and modern hillslopes and their deposits
G.A. Smith and F.J. Pazzaglia
National Science Foundation (3-48981)
$99,960, 7/15/97 – 6/30/99
Geologic mapping of the Sky Village NE, Ojito Springs and Tesuque quadrangles, New Mexico
G.A. Smith and F.J. Pazzaglia
U.S.G. S. (EDMAP)
$35,946, 6/8/97 - 5/31/99

Stream/groundwater ecotones: Hydrology, biogeochemistry and ecology
H.M. Valett (Biology) and M.E. Campana
National Science Foundation
$610,000, 2/1/95 - 1/31/98

REU/RAMHSS Supplement to Stream/groundwater ecotones: Hydrology biogeochemistry and ecology
H.M. Valett (Biology) and M.E. Campana
National Science Foundation
$16,000, 5/15/97 - 8/15/98

Analytical support on microstructure changes of Ti-Ba super conductor under ion-beam irradiation
H. Xu
Sandia Laboratories (DOE) (3-44211)
$9,000, 11/1/97 - 10/31/98
4. RESEARCH PROJECTS IN PROGRESS

Yemane Asmerom

Other on going research activity (unfunded)

Sr isotope systematics of African Lakes
Isotope systematics in Carlsbad speleothems [New seed project]
Tropical paleoclimate reconstruction from speleothem isotopic data, Barbados.
U-series isotope variation in Philippines arc lavas
Nd and Sr isotope composition in Central American arc lavas
New developmental work, Pa Isotopes at the University of Minnesota

Adrian Brearley

Manuscripts in press

Mineralogy of Chondritic Meteorites.
A.J. Brearley and R.H. Jones
Reviews in Mineralogy Chapter 2. Mineralogical Society of America.

Manuscripts in preparation

The effect of cooling rate on the protoenstatite to orthoenstatite inversion: an experimental and transmission electron microscope study (with Rhian Jones).

Aqueous alteration of chondrules in the CM carbonaceous chondrites, Allan Hills 81002 (with Nick Hanowski)

A TEM study of chondrules in the CM carbonaceous chondrites, Lewis Cliff 90500 - new constraints for the aqueous alteration of chondrules (with Nick Hanowski)

Iron-rich aureoles in the CM carbonaceous chondrites, Murray, Murchison and ALH 81002 - Evidence for in situ alteration (with Nick Hanowski).

Chondrule serpentines as indicators of aqueous alteration in CM carbonaceous chondrites (with Nick Hanowski).

Dark inclusions in the Efremovka CV carbonaceous chondrites (with A.N. Krot and K. Keil).
Manuscripts in Press:

Seasonal variation in surface-subsurface water exchange and lateral hyporheic area of two stream-aquifer systems.
G.J. Wroblicky*, M.E. Campana, H.M. Valett** and C.N. Dahm

Water Resources Research (in press)

Unsupported Research Projects:

International Atomic Energy Agency Coordinated Research Programme on Use of isotopes for analyses of flow and transport dynamics in groundwater systems (funding provided only for travel to research group meetings).

Proposals Submitted:

A multi-level approach to modeling ground and surface water exchange in agriculturally-ominated settings
W.A. McKay, Desert Research Institute; M.E. Campana, UNM; J. Warwick and G. Vinyard,
University of Nevada-Reno
U.S. Geological Survey - Western Regional Competitive Grants Program
9/1/97 - 8/31/00; $537,000
Submitted 4/1/97 (unfunded)

Maya Elrick

Manuscripts in preparation:

Depositional interpretation and sequence stratigraphy of the Lower Triassic Sinbad Formation,
San Rafael Swell, east-central Utah

*Goodspeed, T., Elrick, M., and Lucas, S.

Proposals Submitted:

Intergrated basin analysis of Lower Cretaceous platform-to-basin carbonates, northeastern Mexico: Implications into paleoenvironmental and paleoceanographic changes during a cool climate mode
Elrick, M., Asmerom, Y., Montanez, I.P.
National Science Foundation
June '98-June '01; $157,240

Carbonate platform development during the Late Devonian-Early Carboniferous greenhouse-icehouse transition
Whalen, M.A., Elrick, M., and Sharp, Z.
National Science Foundation
June '98-June '01; $360,700
Unsponsored Research:

Petrography and geochemistry
basal Rooiberg Group,
Bushveld Complex, South Africa

Peter Fawcett

Manuscripts in Press:

The role of geography and atmospheric CO₂ in long term climate change: results from model simulations for the Late Permian to the present,
P.J. Fawcett and E.J. Barron.
in T.J. Crowley and K.C. Burke (eds), Tectonic Boundary Conditions for Climate Reconstructions, Oxford Monographs on Geology and Geophysics, in press.

Estuarine circulation in the Turonian Western Interior Seaway of North America, Reply
R.L. Slingerland, L.R. Kump, M.A. Arthur, P.J. Fawcett, B.B. Sageman,
and E.J. Barron
Geological Society of America, Bulletin, in press.

Manuscripts Submitted or In Review:

Abrupt Holocene climate change and the North Atlantic Deepwater formation: Insights from the GENESIS climate model and observed data
A.M. Agustsdottir, R.B. Alley, and P.J. Fawcett
Nature (in review)

Manuscripts in Preparation:

Origin of the Greenland Summit secondary warm peak
P.J. Fawcett, C.A. Shuman, R.B. Alley, and A.M. Agustsdottir
To be submitted to Geophysical Research Letters

Unsuccessful Proposals for Grants:

Modulation of summer season rainfall by anomalous snow cover
D. Gutler and P.J. Fawcett
NOAA
Two Years, $127,299
John Geissman

Proposals in Review:

Dating contractional deformation in the Montana thrust belt and adjacent Rocky Mountain foreland with paleomagnetism and Ar/Ar geochronology
J.W. Geissman, C.J. Schmidt (Western Michigan University), and S.S. Harlan (U.S. Geological Survey, Denver)
National Science Foundation, Tectonics
Two years, $122,795

Manuscripts in Review:

Regional correlations of Mesozoic thrusts in central Nevada and ramifications for the Sevier Orogeny


Manuscripts in Preparation:

Paleomagnetism and rock magnetism of large sandstone pipes in the Middle Jurassic Summerville Formation near Mesita, west-central New Mexico
Geissman, J.W., and S.S. Harlan,
For New Mexico Geology

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
intended for Tectonics

Paleomagnetism of the Mesoproterozoic Pikes Peak batholith, southern Front Range, Colorado,
Feig, A.D., Geissman, J.W., Harlan, S.S.,
intended for Precambrian Research.
Precambrian paleointensity of the geomagnetic field: Examples from the late Archean Stillwater Complex and MesoProterozoic Laramie Anorthosite Complex
C.J. Hale, J.W. Geissman, and S.S. Harlan

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 of the Hamblin-Cleopatra Volcano and related rocks, Lake Mead area, southern Nevada, Revisited.
intended for Tectonics.

An example of interacting magnetite grains carrying a MesoProterozoic magnetization, Laramie Anorthosite Complex, Wyoming,
J.W. Geissman and S.S. Harlan
intended for Geophysical Research Letters

Paleomagnetism of the Latest Archean Stillwater Complex, Beartooth Mountains, southern Montana.
J.W. Geissman
intended for Journal of Geophysical Research

Paleomagnetism and geochronology of Proterozoic mafic dikes, southern Tobacco Root Mountains, southwestern Montana.
S.S. Harlan, J.W. Geissman, L.W. Snee
intended for Journal of Geophysical Research

Tectonic significance of widespread late Paleozoic remagnetization of the western North America miogeocline and platform.
J.W. Geissman and Nesbitt, B.E.
intended for Geology

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
Partial late Paleozoic remagnetization of the Cambro-Ordovician Ignacio Formation, southwest San Juan Mountains, Colorado.
J.W. Geissman

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.

Late Paleozoic magnetizations from Archean and Proterozoic crystalline rocks, Rocky Mountains, and implications for Late Paleozoic remagnetization processes.
J.W. Geissman and S.H. Harlan

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.

Laramide (?) age of remagnetization of Permian and Triassic strata, central and north-central New Mexico.

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

Paleomagnetic and rock magnetic data from plagioclase -- olivine cumulate rocks of the Banded Series, Stillwater Complex, Montana, and their bearing on the age of regional serpentinization and nature of platinum-group element mineralization.
J. Saxton and J.W. Geissman
Econ. Geol.
Unsuccessful proposals for grants:

Paleomagnetic and geochronologic investigations in Sonora, Mexico
R.S. Molina-Garza, and J.W. Geissman
National Science Foundation, Tectonics
Three years, $100,002

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)
Meteorite ejecta blankets (West Germany)
Cenozoic intrusions (Utah, Nevada, New Mexico)
Mesozoic intrusions (Nevada, Colorado, California)

Steve Getty

Manuscripts in press:

U-Pb and Th-Pb Geochronology in Quaternary rocks,
S.R. Getty** and D.J. DePaolo

Manuscripts in preparation:

Chemical Signatures of Epiphytic Lichen in Southwestern North America; Natural versus Anthropogenic Sources for Assimilated Airborne Particulates,
to be submitted to Geochimica et Cosmochimica Acta

Unsuccessful Grant Proposal:

Identifying Sources of Airborne Lead (Pb) and Particulate Pollutants in Southern New Mexico Communities and along the US-Mexico Border
submitted to the Turner Foundation, Atlanta, GA

Currently Unsupported Research:

Epiphytic Lichen Chemistry in Southwestern North America; Natural versus Anthropogenic Sources for Assimilated Airborne Particulate Matter and Pollutants.
funding currently being sought through several agencies with lichenologist colleague Dr. Tom Nash at Arizona State University
Dave Gutzler

Unsuccessful proposals for grants:

Climatic Variability of Summer Rainfall across Southwest North America
National Science Foundation

Modulation of Summer Season Rainfall by Anomalous Snow Cover
NOAA Office of Global Programs

Grant proposals under review:

Observations and Modeling of Large-Scale Controls on Summer Rainfall in Southwest
North America (P. Fawcett, co-PI)
National Science Foundation (to be funded, start date 1 February 1998)

Manuscripts under review in refereed journals:

Estimates of large-scale divergence over the western equatorial Pacific
L.M. Hartten and D.S. Gutzler
submitted to Journal of Geophysical Research-Atmospheres

Manuscripts in preparation:

Chemical signatures of epiphytic lichens in Southwestern North America;
natural vs. anthropogenic sources for assimilated airborne particulates
S. Getty, D. Gutzler, Y. Asmerom, C. Shearer, and S. Free

Stephen Huestis

Manuscript in press:

The continuation inverse problem revisited
S.P. Huestis
Geophysical Journal International, in press

Manuscript in preparation:

Inversion of the cosmic ray solar diurnal variation
I. Sabbah and S.P. Huestis

Rhian Jones

Manuscripts in review:

Chondritic meteorites.
A.J. Brearley** and R.H. Jones**
In: Planetary Materials, Reviews in Mineralogy, Mineralogical Society of America.

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Manuscripts in press:

Rotated and nonrotated porphyroblasts: Keys to reconstructing P-T-t-D paths: Journal of Structural Geology
B.R. Ilg, K.E. Karlstrom and M.L. Williams
in press.

Precambrian of conflicting tectonic models for Proterozoic rocks of northern New Mexico: Journal of metamorphic Geology
J.M. Pedrick*, K.E. Karlstrom and S.A. Bowring

Manuscripts submitted:

Lithospheric structure and evolution of the Rocky Mountains: Rocky Mountain Geology, submitted: a collection of papers from the C.D. Rocky Mountain Projects
K.E. Karlstrom, editor
to be published (August, 1998).

Influence of Proterozoic accretionary boundaries in the tectonic evolution of western North America: Interaction of Cratonic grain and mantle modification events: Rocky Mountain Geology
K.E. Karlstrom and G. Humphreys

Lithospheric structure along longitude 106, Rocky Mountains, Montana to Mexico; Rocky Mountain Geology
K.E. Karlstrom, and R. Keller

Middle crustal cross section from the Rincon Range, northern New Mexico: Evidence for 1.68 Ga pluton-influenced tectonism and 1.4 Ga regional metamorphism: Rocky Mountain Geology, in A. Read and K.E. Karlstrom

New Mexico Middle crustal cross sections: 1.65 Ga macroscopic geometry, 1.4 Ga thermal structure and continued problems in understanding crustal evolution: Rocky Mountain Geology,
M.L. Williams and K.E. Karlstrom

Heterogeneity of the middle crust: implications for nature of the brittle-ductile transition and strength of the lithosphere: submitted to Geology
K.E. Karlstrom and M.L. Williams
Manuscripts in preparation

Nature of the Yavapai-Mozatsu boundary in southern Colorado, Rocky Mountain Geology
C. Shaw* and K.E. Karlstrom

Punctuated mid-crustal tectonism around the 1.42 Ga Sandia pluton, central New Mexico, U.S.A., Regional Aureole Metamorphism, foliation reactivation, and mid-crust flow
C.L. Andronicos**, K.E. Karlstrom, M.W. Nyman and E. Kirby
in prep. for Journal of Metamorphic Geology.

Cornelis Klein

Manuscripts in preparation:

Petrology and geochemistry of selected Proterozoic banded iron-formations of the Quadrilátero Ferrífero, Minas Gerais, Brazil
C. Klein and E.A. Ladeira

Geology and geochemistry of banded iron-formations (BIF) and metacherts at the Morro Velho and Raposos Gold Deposits, Minas Gerais, Quadrilátero Ferrífero, Brazil
C. Klein and E.A. Ladeira

Petrology and geochemistry of high-grade metamorphic archean banded iron-formations of the Guanhães region, Minas Gerais, Brazil
C. Klein, E.A. Ladeira, and J.H. Grossi Sad

Albert Kudo

Writing of manuscripts for publication: with Sharon Minchak and Stephanie Maehr.
Research on East Grants Ridge rhyolite dome: topaz bearing

Barry Kues

Manuscripts in Press:

Permian-Triassic boundary at E. Antimonio, Sonora, Mexico
Symposium volume on geology of E. Antimonio area, Sonora Geological Survey

Dedication to Vincent C. Kelley
B.S. Kues
Revised edition of Albuquerque, Scenic Trips to the Geologic Past (P. Bauer et al., eds.), N.M.
Bureau of Mines and Mineral Resources
Manuscripts in Preparation:

Micromolluscs from the Madera Formation (Late Pennsylvanian), Jemez Springs area, New Mexico
B.S. Kues and T. Yancey
for Journal of Paleontology

Gastropods from the Middle Pennsylvanian Flechado Formation near Taos, New Mexico
B.S. Kues and R.L. Batten
for Journal of Paleontology

New species of Early Permian (Wolfcampian) gastropods from central New Mexico
B.S. Kues
for Journal of Paleontology

Late Cretaceous decapod crustaceans from central New Mexico
E.K. Toolson and B.S. Kues
for Journal of Paleontology

Catalogue and bibliography of New Mexico invertebrate and plant fossils
B.S. Kues
For N.M. Bureau of Mines and Mineral Resources Memoir

Les McFadden

Manuscripts in press or accepted for publication:


Manuscripts Submitted or in Review:

The influence of dust and lithology on the origin and evolution of desert pavements on alluvial fans; E.V. McDonald, L.D. McFadden and S.G. Wells, for Geological Society of America Bulletin (revise and re-submit).

The impact of Pleistocene-Holocene climatic transition and lithologic control on alluvial-fan deposition along a desert piedmont, Mojave Desert, California, for Quaternary Research (E.V. McDonald, L.D. McFadden and S.G. Wells).

Manuscripts in Preparation:

Parent material and grain size controls on carbonate accumulation of desert soils, Sevilleta LTER area, New Mexico, C. Treadwell and L.D. McFadden (for Catena).
Pedogenic iron oxide, clay, organic matter content and accumulation in soils of the Pajarito Plateau, New Mexico: Cation exchange chemist and metal mobility; P. Watt and L.D. McFadden (for Catena).

Roberto Molina-Garza

Manuscripts in review:

Paleomagnetic Data from Triassic Strata, Zuni Uplift, New Mexico: Further Evidence of Large-Magnitude Triassic Apparent Polar Wander of North America
Molina Garza, R.S., J. W. Geissman, A. Gomez, and B. Horton

Carboniferous through Jurassic Paleomagnetic Data and their Bearing on Rotation of the Colorado Plateau
Molina Garza, R.S., J. W. Geissman, and G. D. Acton

Manuscripts in preparation:

Paleomagnetic data for the Caborca terrane, Mexico: Implications for the tectonic evolution of the southern Cordillera
Molina Garza, R.S., and J.W. Geissman

Unsuccessful proposal submitted:

Paleomagnetic and geochronologic investigations in northern Mexico, National Science Foundation, June 1997.

Unsupported research:

Magnetostratigraphy and paleomagnetism of the Moenave Formation, northeast Arizona.

Horton Newsom

Manuscripts submitted:

Acid-sulfate hydrothermal systems and the origin of the Martian Soil
Newsom, H.E., J. J. Hagerty, and F. Goff,
submitted to Science.

A lake in Gale crater and its formation from a possible Amazonian South transgression of the Elysium Basin, Mars
Cabrol, N.A., Grin, E.A., Newsom, H.E., and Landheirn, R.,
submitted to Icarus.
Unsuccessful proposals:

Mars Pathfinder, Hydrothermal Processes and Impact Cratering Deposits, Ares Vallis Region, Mars NASA

Impact crater hydrothermal systems: aqueous processes and volatile transport on Mars
Horton E. Newsom
$149,681, Jan. 1, 1998 - Dec. 31, 2000, 4 per year, Univ. of New Mexico
Principal Investigator: Christopher P. McKay, NASA Ames Research Center

James Papike

Manuscripts in press:

Comparative planetary mineralogy: Chemistry of melt-derived pyroxene, feldspar, and olivine

Lunar samples
Papike, J.J., G. Ryder, and C.K. Shearer
Reviews in Mineralogy, 36, in press. (1998)

The planetary sample suite and environments of origin
Shearer, C.K., J.J. Papike, F.J.M. Rietmeijer, and A. Brearley
Reviews in Mineralogy, 36, in press. (1998)

Manuscripts submitted or in review:

Magmatic Evolution of the Moon
Shearer, C.K., and J.J. Papike
American Mineralogist, in review. (1998)

Manuscripts in preparation:

Systematics of Co and Ni in olivine from lunar mare basalts: An ion microprobe study
Papike et al.

Frank Pazzaglia

Proposals Pending:

U.S. Geological Survey ED MAP
University of New Mexico Albuquerque basin mapping initiative, Sky Village NE quadrangles
$15,000 for one year.
Frans Rietmeijer

Manuscripts in press:


Book Chapter:

Interplanetary Dust.
F.J.M. Rietmeijer
In Advances in Mineralogy, vol. 3, A.S. Marfunin (ed) Springer Verlag

Interplanetary Dust Particles.
F.J.M. Rietmeijer

Planetary Environments Relevant to Sampled Planetary Materials.
C. Shearer, A. Brearley, J. Papike and F.J.M. Rietmeijer

Manuscripts submitted:

Phase equilibrium in a triggered lightning strike experiment
F.J.M. Rietmeijer, J.M. Karner*, J.A. Nuth III and P.J. Wasilewski
European J. Mineral.

Metastable eutectics in the Al2O3 - SiO2 system explored by vapor phase condensation
F.J.M. Rietmeijer, J.M. Karner*

Manuscripts in preparation:

Non-stoichiometric Ca,Mg-pyroxenes: An occurrence in a flash-heated interplanetary dust particle.
F.J.M. Rietmeijer
Am. Mineral.

Basic size of carbon dust of astrophysical interest.
Rotundi, F.J.M. Rietmeijer, L. Colangeli, V. Mennella, P. Palumbo and E. Bussoletti
Unsupported Research:

The origin of color in chrysoprase, in cooperation with Prof. M. Sachanbinski, Institute of Geological Sciences, Wroclaw University, Wroclaw, Poland.

Analytical and Transmission Electron microscope analyses of airborne dust in Silesia, in cooperation with Prof. J. Janeczek, Faculty of Earth Sciences, The Silesian University, Sosnowiec, Poland.

Jane Selverstone

Pending proposals:

Proterozoic assembly of the northern Colorado Front Range
J. Selverstone
National Science Foundation
$128,000; 6/1/98-5/31/00

Manuscripts in review:

Geochemistry, Nd and Sr isotopes, and U/Pb zircon ages of granitoid and metasedimentary xenoliths from the Navajo Volcanic Field, Four Corners area, southwestern United States
Chem. Geol.

Deep burial of the lower plate of the northern Snake Range décollement, Nevada.
Lewis, C., Wernicke, B., Selverstone, J., and Bartley, J.

Xenolithic evidence for Proterozoic crustal evolution beneath the Colorado Plateau.
Selverstone, J., Pun, A., and Condie, K.C.

40Ar/39Ar thermochronology of Mesoproterozoic metamorphism in the Colorado Front Range.
Shaw, C.*, Snee, L., Selverstone, J., and Reed, J.C.
J. Geol.

Manuscripts in preparation:

1.4 Ga contractional deformation and strain partitioning in the northern Colorado Front Range
M. Hodgins*, J. Selverstone, and J. Aleinikoff
To be submitted to Tectonics

Tectonic implications of 1.7 vs. 1.4 Ga polymetamorphism in the northern Colorado Front Range
M. Hodgins* and J. Selverstone
To be submitted to Journal of Metamorphic Geology
Do metamorphic P-T paths place significant constraints on models of crustal exhumation?

J. Selverstone

To be submitted to Geology

Unsuccessful proposals:

Acquisition of digital elevation data for the Simplon region of Switzerland: Interactions between extensional faulting and topographic adjustment to structure

J. Selverstone and F. Pazzaglia

UNM Research Allocation Committee

$5450

Unsupported research projects:

Analysis of vein and fracture patterns in contact aureole surrounding Sandia pluton (with undergraduates Laura Pletsch-Rivera and Aaron Cavosie)

Charles Shearer

Other Research Projects:

Chapter I. The Planetary Sample Suite and Environments of Origin

Shearer, C.K., Papike, J.J., and Rietmeijer, F.J.M.

Reviews in Mineralogy, in press. (1998)

Lunar Samples. Reviews in Mineralogy

Papike, J.J., Ryder, G. and Shearer, C.K.


Models for Lunar Magmatism

Shearer, C.K. and Papike, J.J.

Invited manuscript for American Mineralogist, in press. (1998).

Werdingite from the Urungwe District, Zimbabwe

Grew, E.S., Yates, M.G., Shearer, C.K. and Wiedenbeck, M.


Boralsilite: A new borosilicate mineral intermediate between sillimanite and the alumino-borate Al₂B₁₀O₁₈ and its paragenesis in pegmatites


American Mineralogist. in press. (1997)

The relationship between the carbonate and shock-produced melt in ALH 84001. A high temperature origin for the carbonates is not supported by textural evidence.

Shearer, C.K. and Adcock, C.

Nature. in review. (1998)
Manuscripts in press:

Eocene-Oligocene tectonics, volcanism and floral change near Gray Butte, central Oregon
G.A. Smith, S. Manchester, M. Ashwill, W. McIntosh, R. Conrey
Geological Society of America Bulletin

Field classification and paleomagnetic characterization of lithic and scoriaceous breccias, Pleistocene Broken Top volcano, High Cascade Range, Oregon
M.J. Grubensky*, G.A. Smith, and J.W. Geissman
Journal of Volcanology and Geothermal Research

Geology 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

Geologic map of the Bend 30- by 60-minute quadrangle, Deschutes, Jefferson, Lane, Linn, and Crook Counties, central Oregon
U.S. Geological Survey Miscellaneous Field Investigations Map, scale 1:100,000

Hydrostratigraphic implications of new geological mapping in the Santo Domingo Basin
G.A. Smith and A.J. Kuhle*
New Mexico Geology

Geology along U.S. Highways 197 and 97 between The Dalles and Sunriver, Oregon
G.A. Smith
Oregon Geology

Review of “The Geology of Fluvial Deposits”, by Andrew Miall
G.A. Smith
American Journal of Science

Geologic map of the Opal City quadrangle, Deschutes and Jefferson Counties, Oregon,
G.A. Smith, D.R. Sherrod, M.L. Ferns,
Oregon Department of Geology and Mineral Industries Geologic Map Series, scale 1:24,000

Manuscripts Submitted or in Review:

Sublacustrine-fan deposition in the Oligocene Creede Formation, San Juan Mountains, Colorado
D. Larsen* and G.A. Smith
Journal of Sedimentary Research
Hydrogeologic and tectonic implications of geological mapping in the Santo Domingo Basin and southeastern Jemez Mountains, New Mexico
G.A. Smith, A.J. Kuhle* and W.C. McIntosh

Manuscripts in Preparation:

New 40Ar/39Ar dates for volcanic rocks of the John Day Formation in central Oregon
W. McIntosh and G.A. Smith
to be submitted to Oregon Geology

Geologic map of the Santo Domingo Pueblo quadrangle, Sandoval County, New Mexico
G.A. Smith and A.J. Kuhle*

Geologic map of the Santo Domingo Pueblo Southwest quadrangle, Sandoval County, New Mexico
G.A. Smith and A.J. Kuhle*
New Mexico Bureau of Mines and Mineral Resources Digital Open-File Map OFDM 26, scale 1:24,000.

Sedimentology of a volcaniclastic alluvial fan, Eocene-Oligocene Espinaso Formation, New Mexico
S.B. Taylor*, G.A. Smith and D. Larsen*
to be submitted to Journal of Sedimentary Research

Physical volcanology and paleomagnetism of cone-forming breccias, Te Herenga Formation, Ruapehu Volcano, New Zealand
G.A. Smith, J.W. Geissman, M.J. Grubensky*
to be submitted to Journal of Volcanology and Geothermal Research

Paleomagnetic estimation of emplacement temperature of pumice in the Taupo Ignimbrite, North Island, New Zealand.
J.W. Geissman, G.A. Smith, D. Bahar*
to be submitted to Bulletin of Volcanology

Late Cenozoic tectonics, volcanism and sedimentation along the Rio Grande rift at the margin of the Jemez Mountains volcanic field, New Mexico.
G.A. Smith, A.J. Kuhle*, W. McIntosh
to be submitted to Geological Society of America Bulletin

Physical volcanology and sedimentology of a composite pyroclastic-flow apron/alluvial fan, Jemez Mountains, New Mexico
G.A. Smith
to be submitted to Bulletin of Volcanology
Michael Wiedenbek

Manuscripts in Press:

Werdingite, a borosilicate new to pegmatites

Kornerupine parageneses in whiteschist and other magnesian rocks: is kornerupine + talc a high pressure assemblage equivalent to torumaline + orthoamphibole?

Boralsilite, Al$_{18}$B$_6$Si$_2$O$_{37}$, A new borosilicate mineral related to sillimanite and its paragenesis in pegmatites

Large Field-of-View Inorganic Mapping Using a Mattauch-Herzog Geometry Secondary Ion Mass Spectrometer

Manuscripts in Review:

Precamb. Res.
Schweizerische Mineralogische Petrographische Mitteilung.

Lee Woodward

Manuscripts in preparation:

Emplacement of laccoliths in the Judith Mountains, Montana.

Role of right-slip faulting in the southern Rocky Mountains during the late Paleozoic.
Other Research Projects:

Submitted proposals:

Surface characteristics of microstructures in feldspar minerals and their effects on surface-solution interactions: TEM and AFM studies (a proposal submitted to NSF)

HRTEM study of mineral replacement fronts: a test for the hypothesis of stress-coupled mineral growth and dissolution (a proposal submitted to BES of DOE) (Collaborate with Yifeng Wang of Sandia National Laboratories, and Enrique Merino of Indiana University)

Manuscript in press:

HRTEM investigation of microstructures in a length-slow chalcedony.
H. Xu, P. R. Buseck, and G. Luo
American Mineralogist, 83 (1998)

Manuscripts in preparation:

TEM and EELS study of oxidation states of Fe in pyribole minerals
H. Xu, and L. A. J. Garvie
for American Mineralogist

Electron energy-loss spectroscopy (EELS) of nanocrystals of zirconia and sulfated zirconia strong solid-acid
H. Xu, and X. Song
for Journal of Catalysts

Electron energy-loss spectroscopy (EELS) of Ce-oxides in the CeO2 - Ce2O3 system
H. Xu
for Journal of Solid State Chemistry
5. ACTIVITIES IN PROFESSIONAL SOCIETIES

Roger Anderson

Geological Society of America, member
Geological Society of America, Invited Application for Fellow
American Geophysical Union


Yemane Asmerom

The Geochemical Society Goldschmidt Conference;
Fall AGU

Susan Barger

Professional meetings attended:


The Science and Technology of Environmental Security in Drylands Workshop, Albuquerque, NM, July 8-11, 1997, sponsored by UNEP, Sandia National Laboratories, the City of Albuquerque.

Western Association of Art Conservators, Annual meeting, Phoenix, AZ, October 26-28, 1997.

Committee memberships:

Nominating Committee: Research and Technical Studies Special Interest Group, American Institute of Conservation.
Official liaison from the Photo Materials Group to Research and Technical Studies Special Interest Group, American Institute of Conservation.
Abstractor, Art and Archaeology Technical Abstracts

Adrian Brearley

Professional meetings attended:

60th Meteoritical Society, Maui, Hawaii, 21-25 July, 1997
Talks presented:


Michael Campana

Presented talk:

A deuterium-calibrated compartment model of transient flow in a regional aquifer system, 7th Symposium on Water Tracing, Portoroz, Slovenia, May 1997.

Board of Directors, Association of Ground-Water Scientists and Engineers

Co-Chair, Association of Ground Water Scientists and Engineers Annual Conference, Las Vegas, NV, September 1997

Board of Directors, Ground Water Publishing Company (publishes the journals Ground Water, Ground Water Monitoring and Remediation, and Water Well Journal)

UNM Delegate, Commission on Food, Energy and Renewable Resources, National Association of State Universities and Land-Grant Colleges

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Laura Crossey

Meetings Attended/Talks Presented:


Society Committees:

American Association of Petroleum Geologists, Membership Committee (since 1989)
Association for Women Geoscientists (lecturer (since 1989))
Society for Sedimentary Geology, Academic Liaison (since 1991)
Society for Sedimentary Geology, Research Committee (since 1996)
Clark Medal Selection Committee (1997-99) Geochemical Society

Editorial Boards:


Maya Elrick

Meetings Attended:

Society of Economic Paleontologists and Mineralogists Annual Meeting, June, 1997, Calgary, Canada

Presented Paper:

Chair, Rocky Mountain Section of SEPM Scholarship Committee
Chair, SEPM Carbonate Research Group

Wolfgang Elston


Member, Working Group on Explosive Volcanism, International Association for Volcanology and Chemistry of the Earth's Interior (IAVCEI).

Member, Working Group on Volcanic Data Files (IAVCEI).
Peter Fawcett

American Geophysical Union:

Organized and Convened Special Session OS12, "Paleoceanography and Paleoclimatology: Observations and Models" at the Fall 1997 AGU Meeting (over 80 abstracts submitted), San Francisco, CA

Presented a poster at the Spring 1997 AGU Meeting, Baltimore, MD

Presented two talks, one invited by W.R Peltier for Union Session "Climate System History and Dynamics", at the Fall 1997 AGU Meeting, San Francisco, CA

Co-author of 3 other papers at Fall AGU meeting

Geological Society of America:

Presented one talk, invited by Emi Ito and Jay Banner for Geochemical Society Symposium, "Geochemical Records of Hydrologic Response to Climate Change" at GSA 1997 Annual Meeting, Salt Lake City, UT

Co-author of one other paper presented

New Mexico Geological Society:

Presented one talk at the Annual Meeting, Socorro, NM

Attended NMGS 1997 fieldtrip

John Geissman

Talks Given:

Magnetizations in ash-flow tuffs acquired during high-amplitude, short-lived polarity events/reversals
American Geophysical Union Fall Meeting, San Francisco.

Further paleomagnetic documentation of high-temperature, pre-main stage mineralization and alteration, Butte District, Montana (co-author Mark Reed, University of Oregon
Geological Society of America Annual Meeting, Salt Lake City

The non-marine Perm-Triassic boundary section at Dalongkou anticline, Xinjiang, northwest China: Observations and status [coauthors: Heinze Kozur (Budapest) Roberto Molina-Garza (UNM), and Spencer Lucas (New Mexico Museum of Natural History)
Geological Society of America Annual Meeting, Salt Lake City

Vice President, New Mexico Academy of Sciences
Co-Chairperson, New Mexico Geological Society 1999 (Golden Anniversary) Fall Field Conference
Steve Getty

Meeting Attended:

Attended annual meeting of the American Geophysical Union, San Francisco, California, December 6-12, 1997.

Dave Gutzler

Talks given:

Presentation to American Meteorological Society Meeting, Ft Collins CO:
Precedents to the COARE wind bursts: The historical record at Tarawa

Presentation to NOAA Climate Diagnostics Workshop, Berkeley CA:
Interannual variability of summert precipitation in the American Southwest

Session chair: American Meteorological Society Tropical Meteorology Conference, Ft Collins CO.

Committees:

American Meteorological Society, Standing Committee on Interaction of the Ocean and Atmosphere

John Husler

Geostandards/International Working Group (IWG) round robin:
analysis of geologic rock standards
Member, American Chemical Society

Rhian Jones

Meetings attended


Fellow of Mineralogical Society of America and Meteoritical Society.

Member of Mineralogical Society of Great Britain and American Geophysical Union.

**Karl Karlstrom**

*Fieldtrips attended:*

*Professional meetings attended:*

*Officerships:*
Chairman of "Best Paper Award Committee" of Division of Structure and Tectonics - Geological Society of America

**Cornelis Klein**


Member of the Commission on History and Teaching, International Mineralogical Association, 1985 - present

**Albert Kudo**

Attended and presented paper at the AGU, San Francisco
Member of GSA Partners in Education Program

**Barry Kues**

New Mexico Geological Society: Managing Editor, N.M.G.S. guidebook, attended and gave paper at Spring Meeting, April 18.
Les McFadden

Talks Given:

Desert soil-landscape evolution in basaltic tephra fall deposits: Geological Society of America Annual Meeting, Salt Lake City, Utah, October 20, 1997.

Professional Meetings Attended:

New Mexico Geological Society Field Conference, Four Corners Region, New Mexico and Utah, October 1-3, 1997.

Annual Meeting, Geological Society of America, Salt Lake City, Utah, October 18-26, 1997.

Roberto Molina-Garza

Presented talks:

Paleomagnetic results for the Upper Permian redbeds of the Dewey Lake Formation, southeast New Mexico, USA”, American Geophysical Union, Fall Meeting, December 1997, San Francisco.

Paleomagnetic data and Ar-Ar age determinations for the Late Triassic Acatita pluton, southwest Coahuila, Mexico”, American Geophysical Union, Fall Meeting, December 1997, San Francisco.

An autochthonous Jurassic forearc basin in northwest Sonora, Mexico”, Geological Society of America, Annual Meeting, October 1997, Salt Lake City.

Horton Newsom


James Papike


Frank Pazzaglia

Active member of the American Geophysical Union, Geological Society of America, National Association of Geology Teachers, and New Mexico Geological Society.

Co-chair and co-editor of 1999 NMSG 50th anniversary meeting.
Frans Rietmeijer

Professional Papers Read:

Principal components: Petrology and chemistry of polyphase units in chondritic porous interplanetary dust particles, 28th Lunar and Planetary Science Conference, Houston, Texas.


Professional Meetings Attended

28th Lunar and Planetary Science Conference, Houston, Texas, March 17-21

Fifth School of Mineral Physics, Wroclaw and Sobotka, Poland. September 26-28

Jane Selverstone

Presented invited talk, “Low-angle versus high-angle normal faulting associated with exhumation of deep-seated rocks”, at GSA symposium on Exhumation of High-Pressure Rocks, 10/97

Presented talk, “Xenolithic constraints on Proterozoic subduction polarity beneath the Colorado Plateau” at annual GSA meeting, 10/97

Elected Second Vice-Chair, GSA Structure and Tectonics Division (3-year term, leading to chairmanship)

Charles Shearer

Presentations at Professional Meetings:

28th Lunar and Planetary Science Conference, Houston, TX.


GSA Meeting, Salt Lake City, Utah


Organizer for GSA theme session “Volatile in Planetary Mantles and Basalts”.

Mineralogical Society of America representative to the American Geological Institute.

AGI Ian Campbell Medal Committee.
Gary Smith
Treasurer, New Mexico Geological Society

Padinare Unnikrishna

Talks given:


Elected "Member" of American Society of Civil Engineers (ASCE)
Member of the American Geophysical Union (AGU)
Member of the American Water Resources Association (AWRA)
Professional Engineer (P. E. - Civil), State of Utah.

Lee Woodward

Meetings attended:


Attended New Mexico Geological Society annual spring meeting, April 18, 1997, Socorro, New Mexico, Co-author of paper.


Huifang Xu

Meeting Attended:

Attended and gave a paper at the annual GSA Meeting, Oct. 23.
6. OTHER PROFESSIONAL ACTIVITIES

Roger Anderson

Member, National Science Foundation Steering Committee for Earth System History (ESH), Washington, D. C., 1994-1998.

Invited Speaker: Special Climate Symposium Honoring Wally Broecker, Lamont-Doherty Earth Observatory, 12-13 June, 1997. Title: Submillennial Climate Cycles: Accepting the Inescapable.

Fourteenth Pacific Climate Workshop, Wrigley Marine Institute, Catalina Island, CA., April 6-9, 1997.

American Society of Limnology and Oceanography, Field Trip Leader, Field Trip to Lakes in Estancia Basin, NM., 10-14 February, 1997.

Yemane Asmerom

Proposals reviews: NSF
Manuscript reviews: Geochemica Cosmochimica Acta
Invited presentation: University of Arizona

Susan Barger

Proposals reviewed:

Institute of Museum Services, Conservation Grants, Spring 1997

Publications reviewed:

“Caring for Your Photographs” brochure published by the American Institute for Conservation of Historic and Artistic Works, Washington, D.C.
Melissa Banta, Curious and Ingenious Specimens of Art. The Daguerreotype at Harvard and Radcliffe (University of Iowa Press, in press).

Consultancies:

Acequia Exhibition Advisory Committee for Ghost Ranch Living Museum, Abiquiu, NM.

Work on the Orientation Video, Georgia O’Keeffe Museum, Santa Fe, NM.

Workshop on the Identification of Antique Photographic Processes for the New Mexico State Archives, September 23, 1997, Santa Fe, NM.
Analysis of Oriental bronze artifact for John Barker Asian Arts, Albuquerque, NM.

Analysis of daguerreotypes and/or photographs for Oakland Museum, Oakland, CA; Andrew Smith Gallery, Santa Fe, NM, Linda Wolcott-Moore, Photography and Other Fine Art, Mill Valley, CA.

Completed transfer of papers of Homer Levi Dodge to American Institute of Physics, College Park, PA.

Transferred James D. Barger, MD rare book collections to Harley French Library of the Health Sciences, University of North Dakota, School of Medicine and Health Sciences, Grand Fork, ND.

President (until July 1997), Immediate Past President, and member of the Board of Directors, Graduate and Research Alumni Society, The Pennsylvania State University.

Organized winter board meeting, January 17-18, 1997, Santa Fe, NM, Fall board meeting, November 21, 1997, University Park, PA.


Adrian Brearley

Reviewed scientific papers submitted to Meteoritics (1) and American Mineralogist (4).
Reviewed 2 proposals submitted to NASA Planetary Materials and Geochemistry Program.
Reviewed 1 proposal submitted to NASA Origins of Solar Systems Program.
Reviewed 1 proposal submitted to NASA Ancient Martian Meteorite Program
Reviewed 1 proposal submitted to LLNL IGPP UCR program.

Michael Campana

Presented invited talk, “Stream-groundwater interactions in forested montane catchments”, University of Nevada-Reno Hydrologic Sciences Program seminar, April 25, 1997

Associate Editor, Environmental and Engineering Geoscience

Guest Co-Editor, Hydrogeology Journal - E.S. Simpson Memorial Issue

Reviewed manuscripts for Journal of the North American Benthological Society (2); Water Resources Bulletin (1); Hydrogeology Journal (15); Hydrological Processes (1); Water Resources Research (3)

Member, National Research Council-Water Science and Technology Board Committee on U.S. Geological Survey Water Resources Research

Reviewed textbook A Mathematical Primer on Groundwater Flow, Prentice Hall

Reviewed proposals for: National Science Foundation (3); U.S.-Israel
Binational Science Foundation (1)

Participant, International Atomic Energy Agency Coordinated Research Programme on Use of isotopes for analyses of flow and transport dynamics in groundwater systems

Member, Middle Rio Grande Technical Advisory Committee, NM Office of the State Engineer, 1997-present

Member, Program Review and Development Board, New Mexico Water Resources Research Institute, 1997-present

Instructor, five-day short course on “General Geology and Hydrology of the Eastern Jemez Mountains and Vicinity”, Waste-management Education and Research Consortium (WERC) Program, June 1997

Campus Coordinator, U.S. Environmental Protection Agency National Network for Environmental Management Studies (NNEMS) Fellowship Program


Member, National Water Initiative Committee

Laura Crossey

Invited Lectures:


Guest Lecture, New Mexico Institute of Mining & Technology, Socorro, NM, 2/97

Guest Lecture, Civil Engineering, UNM; April, 1997

Reviews/Manuscripts:

Geology (3)


Proposals:

American Chemical Society/Petroleum Research Fund (1)

National Science Foundation (2)
Maya Elrick

Journal reviews:

Journal of Sedimentary Research (1)
Sedimentology (1)

Proposal reviews:

National Science Foundation (3)
American Chemical Society (2)
RMS-SEPM student scholarships (20)

Wolfgang Elston

Reviews:

Reviewed proposal for National Science Foundation
Reviewed manuscript for Earth and Planetary Science Letters

Off-Campus Activities

March 28, 1997: Conferred with Dr. Gary Lofgren and Dr. Fred Hoerz, NASA Johnson Space Center, on quench and shock textures of the Rooiberg Group, Bushveld Complex, South Africa.

October 30, 1997: Visited Institute of Geochemistry, University of Vienna (Professor Christian Koeberl, post-doc Paul Buchanan), lectured on “The Bushveld Catastrophe: Evidence from basal Rooiberg Group.”

Peter Fawcett

Reviews:

Reviewed scientific manuscripts submitted to Nature (2), Paleoceanography (2), SEPM Special Publication, “Experiments in Numerical Stratigraphy” (1)

Reviewed 1 proposal submitted to the National Science Foundation

Invited Presentations:

The Younger Dryas Termination in Greenland: Insights from Climate Model Results and Ice Cores, Earth and Environmental Science Department, New Mexico Tech, October 16, 1997.
John Geissman

Professional talks:

Creation Science in New Mexico: Affects and Concerns, presented to the Geomagnetism and Paleomagnetism Section of the American Geophysical Union, Fall Meeting, San Francisco

Organized Journal Science Editors forums at the Geological Society of America Annual Meeting (Salt Lake City) and the Fall American Geophysical Union Meeting (San Francisco). Each forum focussed on the manuscript review process and what can be done to improve the timing and overall quality of manuscript reviews.

Disaster at Dalargkon, presented to New Mexicans for Science and Reason, February.

Reviews of manuscripts and proposals:

Reviewed proposals for National Science Foundation (10), American Chemical Society (2), U.S. Geological Survey (1), The Third World Academy of Sciences (2), Lithoprobe, Canada (1), Australian Research Council (1).


Editorial Duties

Editor, Bulletin, Geological Society of America
Member, Publications Committee, Geological Society of America
Associate Editor, Journal of Geophysical Research
Associate Editor, Geology

Consultancies:

Earth Sciences Research Institute, Univ. of Utah, Azerbaijan Magnetostratigraphy project, September, 1995-
Adjunct or associate-type positions at other institutions
Adjunct Full Professor, University of Michigan, Ann Arbor
Member, American Geophysical Union "Committee of 50"
University of New Mexico representative, DOSECC, Inc.
Geoscience "consultant", Albuquerque Petroglyphs, U.S. Park Service
Science Advisor, New Mexicans for Science and Reason
Member, New Mexicans for Science and Reason, and Technical Consultant
Member, Coalition for Excellence in Science Education

Other:

Technician (half-time), UNM Paleomagnetism and Rock Magnetism Laboratory
Steve Getty

University of Florida, Gainesville, March, 1997: to view specimens of invertebrate fauna from Pliocene Pinecrest Beds; host Mr. Roger Portell.
“Creationists’ Misleading Tactics”, Published Editorial in Crosswinds, June, 1997.

Manuscripts Reviewed:

NSF research proposal (1), Science (1), Geochimica et Cosmochimica Acta (1), Geology (1), Journal of Metamorphic Geology (1)

David Gutzler

Invited presentation:

Albuquerque area weather and climate, Bernalillo County Agricultural Extension Service, Master Gardener Course, 1/29.


Numerous interviews for newspaper, television and radio regarding summer rainfall, El Niño, and other weather and climate-related topics.

Reviews:

Journal of Climate: 5 manuscripts
Science: 1 manuscript.
Nature: 1 manuscript.
Tellus: 1 manuscript.
Journal of the Atmospheric Sciences: 2 manuscripts.
Monthly Weather Review: 1 manuscript
Bulletin of the American Meteorological Society: 1 manuscript.
International Journal of Climatology: 1 manuscript.
National Science Foundation: 3 proposals.
National Oceanic and Atmospheric Administration: 1 proposal.

Stephen Huestis

Manuscripts reviewed for Inverse Problems and Journal of Geophysical Research (1 each)
Rhian Jones


Reviewed 1 manuscript for "Geochimica et Cosmochimica Acta".

Associate Editor of the international journal "Meteoritics and Planetary Science".


Karl Karlstrom

Invited Talks:

M.I.T. Crosby Lecturer, Sept. 10, 1997
Princeton University, Oct. 3, 1997
Yale University, Oct. 15, 1997
Brown University, Nov. 19, 1997
University of Massachusetts, Dec. 5, 1997

Review Activities:

Geology – 1
Precambrian Research – 2
Journal of Geology – 1
NSF proposals – 3
Australian Research Council – 1

Cornelis Klein

Consultant, Merriam Webster Encyclopedia on Geology, Mineralogy, Oceanography, and Meteorology, 1977 –

Reviewed research proposals for the National Science Foundation, and the Foundation for Research Development, Johannesburg, South Africa

Reviewed journal articles for: Mineralogy and Petrology, Nature, Sedimentary Geology, and for the Mineralogical Society of America, Reviews in Mineralogy.

Adjunct Curator, New Mexico Museum of Natural History, Albuquerque, NM
Barry Kues


Adjunct Curator, New Mexico Museum of Natural History

Media: Featured in article on New Mexico fossils, Albuquerque Tribune, April 27; Interviewed on loss of faculty at UNM, shown on KOAT-TV, May 16.

Les McFadden

Off-Campus Talks:


Campus Talk:


Peer Reviews of Articles and Proposals
Reviewed 1 paper for Geoderma
Reviewed 2 papers for the Geological Society of America Bulletin
Reviewed 1 paper for Geomorphology
Reviewed 4 papers for Catena
Reviewed 2 papers for Quaternary Research
Reviewed 1 paper for the Journal of Hydrology
Reviewed 2 proposals to the National Science Foundation

Promotion Reviews:

Referee, Promotion to Full Professor, Dept. of Geography, University of California, Santa Barbara, California.
Referee, Promotion to Associate Professor with Tenure, Dept. of Geography, Denver University, Denver, Colorado.

Editorial Board Member, Catena

Roberto Molina-Garza

Reviewed: 2 proposal for the National Science Foundation (EAR-Tectonics); 1 manuscripts for Journal of Geophysical Research; 1 manuscript for Earth and Planetary Science Letters; 1 manuscript for Palaeogeography, Palaeoclimatology, and Palaeoecology.
Horton Newsom

Presentations:

Toxicology of martian soil, NASA Mars soil hazards meeting, Jet Propulsion Laboratory, Pasadena CA, Feb. 27, 28, 1997.


NASA committee meeting: Curation and Analysis Planning Team for Extraterrestrial Materials (CAPTEM), Houston, TX, March 16-17, 1997.


Reviewed grant proposals submitted to NASA (3) and the National Science Foundation (2).

Publicity:


James Papike

Presented a talk at 28th Lunar and Planetary Science Conference, Houston, TX, March 17-21, 1997.

Presented a seminar at the University of Tennessee, Knoxville, TN, April 10-11, 1997.
Attended a NASA Headquarters Committee Meeting to start a new equipment program, Washington D.C., April 16-18, 1997.

Attended NASA Cosmochemistry Review Panel Group Chiefs Meeting Houston, TX, June 24-26, 1997.

Ran NASA Cosmochemistry Review Panel Meeting as Panel Chief, Houston, TX, August 18-22, 1997.


Chaired NASA Meeting of “Curation and Analysts Planning Team for Extraterrestrial Materials” CAPTEM, Houston, TX, October 7-10, 1997.


Attended NASA Committee Meeting of “Mars Sample Handling Requirements Panel” (MSHARP) NASA/AMES, Mountainview, CA, November 23-24, 1997.

National Committees and Offices in Societies:

1997 - 2000 Chair, NASA Curation and Analysis Planning Team for Extraterrestrial Materials (CAPTEM)

1997 - Member, NASA Mars Expeditions Strategy Group (MESG)

1997 - Member, NASA Mars Sample Handling Requirements Panel (MSHARP)

1998 - Member, NASA, Comsmochemistry, Management and Operations Working Group (MOWG)

Reviewed 12 Proposals and 8 Papers

Frank Pazzaglia

Professional (reviews):

Four NSF proposals
Six papers for Geology.
One for Basin Research
One for Journal of Geophysical Research
I am an editor of New Mexico Geology, a publication of the New Mexico Bureau of Mines and Mineral Resources.
Invited presentations:

International Geomorphologic Congress, invited talk at symposia 7, Bologna, Italy.
SMU Department colloquium series

Aurora Pun

Adjunct Assistant Professor, Dept. Earth & Planetary Sciences, University of New Mexico
Reviewer for 1 manuscript, Meteoritics & Planetary Science

Frans Rietmeijer

Papers Read:

Alteration of presolar dust based on transmission electron microscope/analytical electron microscope studies of chondritic interplanetary dust particles and nonequilibrium simulation experiments, Workshop on Parent-body and Nebular Modification of Chondritic Materials, Maui, Hawaii, July 17-19.

Dust in the atmosphere: An overview, Faculty of Sciences, The Silesian University, Sosnowiec, Poland.

Dynamic pyrometamorphism in cosmic dust entering the Earth's atmosphere, Fifth School of Mineral Physics, Wroclaw and Sobotka, Poland.

Peer review Scientific Papers:

Meteoritics and Planetary Science
Geophysical Research Letters

Proposal Review:

National Aeronautics and Space Administration, Cosmochemistry Program (8)

National Aeronautics and Space Administration, Mars Surveyor Program 2001 Orbiter, Lander, Rover Missions Science Review Panel (5)

National Aeronautics and Space Administration, Planetary Instrument Definition and Development Program (2)

National Aeronautics and Space Administration, Exobiology Program (1)
National Aeronautics and Space Administration, Origins of Solar Systems Program (1)

Panel Memberships

National Aeronautics and Space Administration, Cosmochemistry Review Panel
National Aeronautics and Space Administration, Mars Surveyor Program 2001 Orbiter, Lander, Rover Missions Science Review Panel

National Aeronautics and Space Administration, Cosmic Dust Allocation Committee

Professional Services

Volunteer Editor for the American Geophysical Union

Host to Dr. S.L. Hallenbeck, National Research Council Fellow, NASA Goddard Space Flight Center, Greenbelt, Maryland, April, 17, 18

Co-Chairman session “Comets, Dust, and IDPs”, 60th Annual Meteoritical Society Meeting, Maui, Hawaii

Jane Selverstone

Panels and Conferences:

Member of the Tectonics review panel for the National Science Foundation; attended panel meetings in Washington DC in March and September

Attended Gordon Conference on Rock Deformation 8/97, and presented invited keynote talk on “The power and limitations of petrologic techniques for unraveling rock histories”

Presented seminar:

“Proterozoic tectonism in the northern Colorado Front Range and comparisons with younger orogenic belts”, New Mexico Tech, 12/97

Editorial board member, Journal of Metamorphic Geology

Manuscripts reviewed:

Geology (3)
Journal of Structural Geology (2)
Geological Society of America Bulletin (1)
Journal of Metamorphic Geology (3)
Geological Society of London special volume (1)

Proposals reviewed:

NSF Tectonics panel - 210 proposals as a panel member

Reviewed tenure file for Kansas State University
Reviewed tenure file for Rice University
Charles Shearer


Keynote Speaker for Naval Research Lab TEAMs meeting.

Presentations for the following organizations: New Mexicans For Science and Reason, Albuquerque Gem and Mineral Society, Kiwanis Club, UNM Geology Club, Department of Physics and Astronomy, and Albuquerque Geological Society.


Gary Smith

Associate Editor, Geological Society of America Bulletin
Associate Editor, Sedimentology (International Association of Sedimentologists)
Associate Editor, Journal of Sedimentary Research (SEPM, Society for Sedimentary Geology)

Reviewed manuscripts for Geological Society of America Bulletin (5), Journal of Sedimentary Research (2), Sedimentology (1), New Mexico Geology (1), Bulletin of Volcanology (2)

Reviewed proposals for the National Science Foundation (4)
Adjunct Curator, New Mexico Museum of Natural History and Science
Field Geologist, New Mexico Bureau of Mines and Mineral Resources
Presented lecture, “Defining the role of sedimentology in hydrogeological studies”
Sandia National Laboratories, March 1997

Padinare Unnikrishna

Off-campus talks:


Presented talk, “Snowmelt Recharge and Flow Processes in a Semiarid Catchment”, in the Department of Earth and Environmental Science, New Mexico Institute of Mining and Technology, Socorro, New Mexico, November 17, 1997 (short-listed for the Assistant Professor position).
Reviews:

Proposals
National Science Foundation (NSF) (2)

Journal Articles:
Water Resources Research (1)
ASCE Journal of Hydrologic Engineering (1)
American Water Resources Association (AWRA) (1)
Hydrogeology Journal (2)
Journal of the North American Benthological Society (JNABS) (1)
Participation in Hydrogeoecology reading group

Michael Wiedenbek

Review and Site Committee (6 - 8 January 1997): Installation of a Cameca IMS-6f Ion Microscope (University of Western Ontario), National Science and Engineering Research Council of Canada.

Proposal Review: Acquisition of a Thermal Ionization Mass Spectrometer at the Field Museum, National Science Foundation.

Huifang Xu

Reviewed manuscripts for the journal of "American Mineralogist."
7. NON-TEACHING UNIVERSITY SERVICE

Yemanu Asmerom

Department:
Facilities committee
Stable isotope geochemistry search committee

University:
Centennial Library Ad-hoc committee
MEMS

Adrian Brearley

Hosting visitors.

Departmental service

Curator of the Meteorite Museum and Collection, Institute of Meteoritics engaged in cataloging, acquiring and loaning of meteorites. Developed Institute Home Pages and Catalog for the World Wide Web.

Michael Campana

University:
Director, Water Resources Administration Program
Member, Steering Committee, Water Resources Administration (WRA) Program
Chair, Curriculum Committee, WRA Program
Participant, Site Visit for Accreditation and Graduate Review, Community and Regional Planning Program
Member, Faculty Senate Curricula Committee

Departmental:

Committees
Stable Isotope Geochemist Search Committee
Graduate Committee

Other:

Editor, Departmental newsletter
Editor, Departmental brochure
Laura Crossey

Department:
Associate Chairman
Undergraduate Advisor
Alumni Relations Committee
Scholarship Committee
Sigma Gamma Epsilon (National Honorary Geological Society) - Faculty Advisor
Undergraduate Committee
Undergraduate Geology Club - Faculty Advisor
Department Representative to the Minority Engineering, Math, and Science Program

Special Duties:
Search Committee; Stable Isotope Geochemistry

College:
Associate Dean for Student Academic Affairs
Minority Engineering, Math, and Science Coordinating Committee
Senator of the Faculty Senate
Undergraduate Committee
Undergraduate Curriculum Committee

Maya Elrick

Departmental committees:
Co-chair Graduate Committee
Scholarship Committee
Chair Departmental Vehicle Maintenance Committee

University committees:
Chair of KUNM Radio Board
Research Allocations Committee

Wolfgang Elston

Coordinator, UNM-Los Alamos National Laboratory Volcanology Program:
Chair meeting of UNM-LANL Volcanology faculty
Conducted negotiations toward permanent funding and staffing of Volcanology Program
Corresponded with potential graduate students
Co-taught E&PS 300, "Volcanoes of North America" with K.H. Wohletz, LANL.
Recommended Adjunct Professor appointment for Dr. Donald W. Peterson, Scientist Emeritus,
Peter Fawcett

Department:

Member, Computer committee
Member, Graduate committee

John Geissman

University service and activities:

Member, Faculty Senate, 1995-1997
Member, Faculty Senate Budget Committee, 1997-
College of Arts and Sciences Graduate Committee
Provost’s Task Force, Staff and Administrative Structure
Athletic Council, 1997-

Departmental service:

Head, Search Committee, Caswell Silver Research Professor Position
Geology Department Assistant Chair; Fall, 1992-1997
Geology Department Facilities Committee, Chair, Fall, 1996-

Special Projects:

Administrative Positions

Other Service:

UNM One-On-One Program

Steve Getty

Host for departmental visit by Dr. Steven Clemens, Brown University, through Fall speakers’ series - topic: “Phase Shifts and the Asian Monsoon”

David Gutzler

Member of the teaching faculty in both E&PS and (in Spring) Geography Departments.

Departmental committees:

Earth & Planetary Sciences: Computer Committee (Chair), Spring and Fall.
Geography: Graduate Advisor, Spring 1997.

Facilitator, First Assembly for Water Planning in the Middle Rio Grande, UNM, 8/8-8/9.
Stephen Huestis

Invited Participant, UNM panel discussing White House Conference on Global Climate Change, 10/6.

University service and activities

Committees:
- Arts and Sciences Undergraduate Committee
- Arts and Sciences Curriculum Committee
- UNM Scientific and Engineering Computation Program associated faculty
- SEC Program Admissions and Financial Aid Committee

Departmental service:
- Scholarship committee
- Undergraduate committee
- Library liaison
- Undergraduate advisor
- UNM Geology Club – faculty advisor

Other activities:
- Virginia Creepers String Band university performances:
  - UNM Celebration of Differences – April 2, 1997

John Husler

Chemical Safety Officer
United Way Key Person

Rhian Jones

University service.
- Mentor for Women in Science and Engineering Program.

Departmental service:
- Manager of Experimental Petrology Laboratory.
- Assistant Curator of Meteorite Collection.
- Member of Chemical Hygiene Committee, Department of Earth and Planetary Sciences.
Karl Karlstrom

UNM Research Policy Committee (Spring 1997)
Chair EPS Graduate Committee (Spring 1997)

Cornelis Klein

Department:
Chair, search committee for Isotope Geochemistry position, 1995-1997 (2 years)
Member, search committee for Mineralogy/Materials Science position
Member of Collections Committee.

Albert Kudo

Chair of departmental scholarship committee
Member of the Research Allocations Committee (spring term)
Member of departmental search committee for mineralogist/materials (scientist faculty position)

Barry Kues

University:
Faculty Senate Library Committee and its Budget subcommittee
Advisory committee to Office of Research Services
Committee on planning proposed new science–technology building.

Department:
Chair of Department of Earth and Planety Sciences

Leslie McFadden

Chair, Undergraduate Committee of EPS Dept.
Member, Junior Promotion and Tenure Committee, College of Arts and Sciences, UNM

Hosted Visits to Department:
Dr. Eric McDonald, Staff Research Scientist, Desert Research Institute, Nevada.
Dr. Joseph McAuliffe, Director of Research, Desert Botanical Garden, Tempe, Arizona.
Informal on-campus interviews with four prospective students applying to Graduate Program.
Horton Newsom

Member, New Mexico Space Grant Faculty Advisory Board (Facilitated successful application of student Christopher Herd)
Educational Outreach Coordinator, Institute of Meteoritics.
New Mexico MESA Jamboree organizing committee member.
Presenter for UNM Outreach, Star Scholars Program.
Hosted visit of Prof. Bruce Jakosky, University of Colorado, Feb. 5-7, 1997

James Papike

University Service and Activities:

Director, Institute of Meteoritics
Chair, Arts and Sciences Committee “Committee for Analytical Laboratory Coordination” (CALC)
Member, Arts and Sciences Senior Promotion and Tenure Committee

Departmental Service:

Chaired Search Committee for Technical Manager of TEM Lab
Search Committee for Mineralogist Position
Member of EPS Facilities Committee
Member of EPS Graduate Committee through Summer 1997

Frank Pazzaglia

Co-chair of the Department graduate committee
Member, Department computer committees
Chair of newly-formed UNIX computer facility committee.

Aurora Pun

Assisted Geology Museum Curator at Tucson Gem and Mineral Show and Albuquerque Gem and Mineral Show

Jane Selverstone

Departmental committees:

Graduate committee
Stable isotope faculty search committee
Other service:

Hosted visit by 401 speaker Leigh Royden (MIT), 11/97
Compiled report to department on potential recruiting in area of Geodynamics, 12/97

Charles Shearer

University service and activities:
Manager ICP-MS laboratory
Department Facilities Committee
University-New Mexico State Legislature Committee

Gary Smith

Departmental Service:
Assistant Department Chair
Chair, Collections Committee
Chair, Mineralogy/Materials Science Search Committee
Scholarship Committee

Michael Spilde

University and activities:
Manager of the Electron Microprobe and Scanning Electron Microscope Labs.
Performed microprobe analyses for 5 Department and 6 out-of-department faculty, staff, and students.
Performed microprobe analyses for NM Office of Mineral Trustee, NM Tech, Sandia Lab and 2 local businesses.
Performed SEM analyses for 4 Department and 5 out-of-department faculty, staff, and students.
Performed SEM analyses for NM Tech, Sandia and 10 local businesses.

Huifang Xu

Member of the Facility Committee of E&PS.
Assisting graduate students on TEM data collection and interpretation.
Assisting graduate students on XRD data collection and interpretation.
8. SCHOLASTIC HONORS AND FELLOWSHIPS

Adrian Brearley
AGU 1996 Editor’s Citation Award for Excellence in Reviewing

Wolfgang Elston
Reappointed Senior Research Professor, UNM
Relisted in Marquis Who’s Who in the World, 14th Edition

Cornelis Klein

Presented with the Carnegie Mineralogical Award by the Carnegie Museums and Library of Pittsburgh, at the Tucson Gem and Mineral Show, February 15, 1997. The award consists of a bronze medallion, a certificate of recognition and a $2,500 cash prize. It was given “in recognition of internationally recognized scholastic and scholarly achievements in mineralogy and mineralogical education.”

Awarded a certificate by the International Biographical Center, Cambridge, England entitled “2000 Outstanding People of the 20th Century” for outstanding contributions to Mineralogy.

Included in Strathmore’s Who’s Who for demonstrated leadership and achievement in the profession.

Les McFadden
Elected to the University of New Mexico Faculty Senate.
Elected Chairman of the Quaternary Geology and Geomorphology Division, Geological Society of America.

James Paplke
Panel Chief, NASA Cosmochemistry Panel
Chair, NASA CAPTEM Committee

Gary Smith
Short Course, Techniques of geostatistical estimation and simulation applied to environmental geology, Geological Society of America, October 1997.
9. SABBATICAALS AND TRAVEL

Yemane Asmerom

University of Minnesota [to do collaborative research on Pa isotopes].

Adrian Brearley

17-21 March, 1997 - 28th Lunar and Planetary Science Conference, Houston, Texas,
17-19 July, 1997 - Workshop on Nebular and Parent Body Processes, Maui, Hawaii,
11-25 July, 1997 - 60th Meteoritical Society, Maui, Hawaii,
24 October, 1997 - Department of Earth Sciences, University of Manchester, England - visit to
discuss collaborative research.
3-4 November, 1997 - University of Bath, England, Department of Chemistry to discuss
collaborative research with Prof. Stephen Mann.

Michael Campana

Reno, Nevada, to present invited talk at the University of Nevada-Reno and to attend mid-year
Board of Directors Meeting, Association of Ground Water Scientists and Engineers, April 23 –
May 3, 1997
Portoroz, Slovenia, to attend and present paper at the 7th Symposium on Water Tracing, May 23 –
June 4, 1997
Las Vegas, NV, to attend annual meetings, National Ground Water Association and Association
of Ground Water Scientists and Engineers, September 2–7, 1997
Washington, DC, to represent UNM at the National Association of State Universities and Land­
Grant Colleges annual meeting, November 13-18, 1997

Wolfgang Elston

Travel:
Jan. 9-15, 1997, Walnut Creek, CA.
Mar. 25-30, 1997, Houston, TX (including Johnson Space Center).
Aug. 20-Sept. 14, 1997, Seattle, WA. Sudbury, Ontario (including conference on Large Meteorite
Impacts and Planetary Evolution); Madison, WI.
Sept. 30 – Nov. 6, 1997, Austria (including University of Vienna).
Maya Elrick

Northwest Territories, Canada, Field Research, June 15 - July 1, 1997.
Western Utah Field Research, July, 1997.

Peter Fawcett

Professional travel:
April 18, Socorro, NMGS spring meeting
May 23-26, Penn State University, University Park, PA, research
May 26-29, Baltimore, MD, spring AGU meeting
June 25-28, Breckenridge, CO, NCAR CSM workshop
June 30, Chaco Canyon, NM, field research
August 2-16, Canadian Rockies, travel and research
September 23-26, University of Chicago, Chicago, IL, research
October 19-23, Salt Lake City, UT, annual GSA meeting
November 8-9, Chinle AZ, field research
November 22-23, Chaco Canyon, NM, field research
December 7-11, San Francisco, CA, fall AGU meeting

John Geissman

Summer teaching:
University of Michigan Camp Davis, Geological Sciences 440, Advanced Field Geology, June 26-
July.

Travel:
January 8-11, southeast California
late January/February, miscellaneous trips to Santa Fe for lobbying efforts, Senate Bill 155
March 12-March 18, northwest Mexico, field work
April 8-11, western Nevada, field work
April 17-19, Boulder, Colorado, GSA Hq. for Publication Committee meeting
May 8-10, Boulder, Colorado, GSA Hq. For Bulletin planning
May 18-June 7, New Mexico, southern Colorado, UNM Introductory Field Geology course
June 24-July 5, Wyoming, University of Michigan, Field Camp
July 16, field sampling, Jemez Mountains
July 26-July 30 field sampling, south-central Colorado
August 16-August 24, field sampling, central Colorado
September 5, western New Mexico, field sampling
September 11-13, central New Mexico, Penrose conference
September 18-21, Boulder, Colorado, GSA Hq. for Bulletin planning and attending Association of
Earth Science Editor’s Meeting
October 3-4, Houston, Caribbean tectonics project, planning meeting
October 18-23, Salt Lake City, Geological Society of America, Annual Meeting
November 1-4, northeast Arizona, field sampling
November 6-13, north-central Arizona (Grand Canyon), field sampling
December 7-11, San Francisco, AGU Meeting

David Gutzler

Travel:

Attendance at AMS Tropical Meeting, Ft Collins CO, 5/18-5/23.
Visit to NM Tech for discussion with paleoclimatologists and to present seminar, 9/18.
Attendance at NOAA Climate Diagnostics Workshop, Berkeley CA, 10/6-10/9.

Rhian Jones

Travel:


Karl Karlstrom

Travel:

Jan. 14-16, Fieldtrip to Apache Group with Brooke Riley, graduate student
Feb. 1, Fieldtrip EPS 307 (Structural Geology)
March 1, Fieldtrip EPS 307 (Structural Geology)
March 14-30, Research in Grand Canyon
April 5, Structure fieldtrip (EPS 307)
April 19, Tectonics fieldtrip (EPS 547)
May 15,16, Fieldwork with undergraduates
May 19-23, Fieldwork with Ph.D. student Colin Shaw
May 28-30, Fieldwork with MS student Cynthia Brown
June 1,2, Fieldwork with Ph.D. student Jane Pedrick
June 5-28, EPS 420, Advanced field camp
Aug. 11-17, Continental Dynamics workshop and fieldwork, Laramie Wyoming
Aug. 20-Dec. 19, Crosby visiting professor, MIT
Nov. 6-12, Helicopter Research in Grand Canyon
Nov. 20-22, Gold Butte reconnaissance for January field course
Nov. 24,25, Colin Shaw, Ph.D. Exam
Cornelis Klein

Presented two professional talks at the Annual Meetings of the Geological Society of America, October, 1997, Salt Lake City.


Barry Kues

Professional travel

Feb. 1 – Placitas, NM area, paleontological fieldwork
Feb. 21-23 – El Paso, TX, and Lake Valley, NM, areas, paleontological fieldwork
Mar. 21-23 – Lubbock, TX, area, paleontological fieldwork
Apr. 18 – Socorro, NM, presented paper at N.M. Geological society annual spring meeting
July 14 – Taos, NM, area, paleontological fieldwork
July 23 – Aug. 4 – Newfoundland and Labrador, geological observation and fossil collecting
Oct. 12 – Jemez Springs, NM, field research with paleontology class
Oct 16 – Lucero uplift area, field research with graduate student
Nov. 2 – Rio Puerco area, NM field research with paleontology class

Les D. McFadden

Travel:

May 10-13: Fieldwork in the Cima volcanic field and Providence Mountains, California.
July 2-3: Fieldwork in the Chaco Basin, New Mexico.
July 23: Presentation of lecture to Archeology Program students, Ghost Ranch, New Mexico.
August 11: Fieldwork in the Rio Calaveras area, Jemez Mountains, New Mexico.
August 13-16: Fieldwork in northeastern Arizona.
October 1-3: Participant, New Mexico Geological Society Field Conference, NW New Mexico and SE Utah.
October 18-16: Presentation of paper and Field Trip participant, Geological Society of America Annual Meetings, Salt Lake City, Utah.

Horton Newsom

Travel:

Feb. 23, 24, 1997, NASA Mars’ 96 MOX meeting, Jet Propulsion Laboratory, Pasadena CA.
Feb. 27, 28, 1997, NASA Mars soil hazards meeting, Jet Propulsion Laboratory, gave one talk.
March 22-23, 1997, NASA committee meeting: Curation and Analysis Planning Team for Extraterrestrial Materials (CAPTEM), Houston, TX, Houston Texas.
April 23-27, 1997, Conference on Early Mars, Houston, TX, co-organized meeting, presented one poster, and one talk.
May 6, 1997, Star Scholars presentation to graduating high school seniors, UNM outreach, Carlsbad NM, gave one talk.
July 8, 1997, Los Alamos National Laboratory, Institute of Geophysics and Planetary Physics, Los Alamos NM, gave one talk.
May 6, 1997, Star Scholars presentation to graduating high school seniors, UNM outreach, Carlsbad NM, gave one talk.
July 8, 1997, Los Alamos National Laboratory, Institute of Geophysics and Planetary Physics, Los Alamos NM, gave one talk.

Frans Rietmeijer

28th Lunar and Planetary Science Conference, Houston (TX), March 16-20.


NASA Cosmochemistry Review Panel, Houston (TX), August 17-22

Fifth School of Mineral Physics, Wroclaw/Sobotka, Poland. September 24-28

Faculty of Sciences, The Silesian University, Sosnowiec, Poland, September 29-October 4

NASA Mars Surveyor Program 2001 Orbiter, Lander, Rover, Missions Science Review Panel, October 13-16

Jane Selverstone

Travel:

Travel to Washington DC to attend NSF panel meeting, 3/11/97-3/14/97
Several days of fieldwork with undergraduates working in Sandia Mountains, spring '97
Fieldwork in northern Colorado Front Range, 6/4/97-6/18/97
Attended Gordon Conference on rock deformation, New London, NH, 8/10/97-8/15/97
Travel to Washington DC to attend NSF panel meeting, 9/9/97-9/12/97
Attended annual Geological Society of America meeting, Salt Lake City, 10/19/97-10/23/97

Gary Smith

Attended New Mexico Geological Society Annual Meeting, Socorro, NM April 12, 1996
Geologic mapping and field research in the Jemez Mountains and Española Basin, June-July, 1997
Geologic mapping at Santo Domingo Pueblo, July-August 1997
Attended New Mexico Geological Society Fall Field Conference, Los Alamos, NM, September 26-29, 1996
Attended and presented paper at the Annual Meeting, Geological Society of America, Salt Lake City, UT, October 17-22, 1997

Padinare V. Unnikrishna

Spring American Geophysical Union (AGU) Meeting, Baltimore, MD, May 27-30, 1997
Symposium on Evapotranspiration in Southwestern Riparian Ecosystems: Issues and Methods at the University of New Mexico Sevilleta Field Station, Sevilleta National Wildlife Refuge, NM, April 7-8, 1997.

Michael Wiedenbek

Meetings:

Hulfang Xu

Professional travel
Aug. 16 -19 — Tempe, AZ, collecting EELS data
Oct. 20 -23 — Salt Lake City, attending the annual GSA Meeting
10. PUBLIC SERVICE

Roger Anderson

Review of WIPP documents, DOE application to EPA.
Consultation on WIPP, NM. Assist. Attorney General.

Yemane Asmerom

Outside Activity: Amnesty International; The Sierra Club.

M. Susan Barger

Talks given:
   The First Photograph as Object, Museum of Fine Arts, Santa Fe, NM, April 11, 1997.
   What Will I Do with my Family History Archives? Genealogy Club of Albuquerque (NM),

Adrian Brearley

Helped devise, organized and set up meteorite display for Albuquerque Gem and Mineral Club Show,
March 7-9, 1997.

Devised and participated in meteorite display for Astronomy Day at Winrock Mall, Albuquerque, April,
1997.

Identified numerous suspect meteorites and provided information on meteorites for members of the public
from both within and outside New Mexico.

Interviewed twice by John Mason for Channel 4 TV regarding observed fireball over southern New
Mexico and about meteorites in general. Broadcast on 3, October and 7 October, 1997.

Interviewed by John Fleck, Albuquerque Journal, 8 October for article on meteorites.

Michael Campana

Occasionally provided water resources and related information to the general public

Member, ACDI/VOCA (Agricultural Cooperative Development
International/Volunteers in Overseas Cooperative Assistance)
Member, VITA (Volunteers In Technical Assistance)
Member, Partners of the Americas
Co-Chair, First and Second Assemblies for Water Planning in the Middle Rio Grande Valley, 1997

Laura Crossey
Albuquerque North Science Center, Parent Co-ordinator representing Montezuma Elementary

Wolfgang Elston
Responed to requests for information on regional geology, earthquakes, volcanoes resources

Peter Fawcett
Interviewed by Science reporters/editors for the Albuquerque Journal and Salt Lake Tribune on paleoclimate issues.

John Geissman
Geoscience Advisor, Albuquerque Petroglyphs National Monument committee.
Geologic field excursion leader, miscellaneous Girl Scout and Elementary school groups
Participant, Jefferson Middle School, Special Educational Events Day
Three public interest talks, Elks Club, retirement centers
Member, Project Dragonfly, National Forum for Young Investigators

Dave Gutzler
Judge, Northern New Mexico Regional Science Fair, 3/21.
Interview for middle school “Careers” project, 3/26.
Presentation to Manzano Day School 4th graders about Hurricane Nora, 9/25.

Steve Huestis
Virginia Creepers String Band volunteer performances:
Harwood Center open houses — May 9, Nov. 21, 1997
Albuquerque Mennonite Church retreat — Sept. 12, 1997
John Huster

Judged Lew Wallace, East San Jose, and NW Regional Science Fair
Performed three chemical demonstration for outreach program
Analyzed rocks and ores for 8-10 prospectors and rock hounds
Helped coordinate water projects near San Miguel, Mexico.

Rhian Jones

Co-ordinated and gave tours of Meteorite Museum for visiting school students, UNM classes, and community groups.
Identified suspect meteorites and answered enquiries about meteorites for members of the public.
Acted as judge for Sandia Preparatory School Science Fair, Feb. 11, 1997.
Set up and co-ordinated meteorite exhibit at Astronomy Day, Coronado Mall, April 19, 1997.

Karl Karlstrom

Math superstars – Bandelier Elementary School (Spring 1997)
Work with Grand Canyon National Park on Trail of Time exhibit
Talk at Underwood Elementary School, Newton MA.

Cornelis Klein

Served as NM Jewelers Association Design Competition Judge for “All That Glitters”
NM Museum of Natural History special jewelry design exhibit, Oct. 22, 1997
Gave interviews to reporters for UNM Annual Report, Round Table (Rotary Publication), and NM Sports and Wellness. Articles were published as follows:


Introduced Professor Bill Gordon (Provost) for his Rotary Club of Albuquerque talk, UNM at a Crossroads”, Nov. 24, 1997.
Hosted Professor David R. Veblen, past President of the Mineralogical Society of America, Oct. 24, 1997.
Member of the Albuquerque Rotary Club.
Member of the Program/Speakers Committee of the Albuquerque Rotary Club.
Bert Kudo

Member of NW Regional Science Fair Advisor Council
Master Judge Chair NW Regional Science Fair
Gave geology presentations to several elementary school classes

Barry Kues

Identified rocks and fossils, and answered geological questions for the public.

Robert Molina-Garza

Presented a talk at Inez Elementary, Albuquerque, NM, Judge at Inez Elementary Science Fair.

Leslie McFadden

Volunteer Coach, Garfield Middle School, Fall, 1997.

Represented the Dept. of Earth and Planetary Sciences and Geological Society of America at hearings held by the State of New Mexico Board of Education to discuss Science Curriculum Standards for Public Schools of New Mexico.

Participation as member, Coalition for Excellence in Science Education (CESE).

Presented formal testimony to Sub-Committees of Legislature of the State of New Mexico in support of Senate Bill 155.

Organizer of and participant in presentation to the First Unitarian Church of Albuquerque on the origin and purpose of the Coalition for Excellence in Science Foundation.

Responded to several requests for advice and assistance from the public concerning issues related to soils and geology.

Horton Newsom

Developed educational initiatives for the Institute of Meteoritics: We have received funding from the Space Telescope Science Institute, the National Science Foundation through the NM State Systemic Initiative for Math and Science, and Los Alamos National Laboratory.


Space Science Presentations to Students in Grades K-12
March 1, 1997, MESA Jamboree at UNM, 2000 students.
April 19, 1997 Astronomy Day at Coronado Mall.
June 20, 1997 MESA Summer School at Albuquerque High School.
Sept. 23, Wilson Middle School MESA Group, Rocket Launch.
Sept. 24, Wilson Middle School MESA, Star Party.
Oct. 1, 1997, Belen Middle School MESA.
Oct. 30, 1997, Polk Middle School MESA.
Nov. 13, 1997, Wilson Middle School MESA.

James Paplke
Numerous discussions with the media concerning planetary issues.

Frank Pazzaglia

Community:
Continued relationship with Zia and Jemez Pueblo councils.
Mentorship of Chris Toya
Once-a-month geological presentations at APS elementary schools.
Formal participation in the visiting scholars program.

Frans Rietmeijer
Volunteer Exhibit at the “Astronomy Day at the Mall”, April 16.
Consult for a Radio Meteor astronomer, February 5.

Jane Selverstone
Led Manzano Day School kindergarten fieldtrip to UNM Geology Museum, 2/97.
Assisted with 3-day Manzano Day School 4th grade fieldtrip to the Jemez Mountains, 9/97.

Charles Shearer
Coach in Albuquerque Fall Baseball League.
Board of Directors for Eastdale Little League.
Player Agent for Eastdale Little League.

Gary Smith
Identification of mineral and fossil specimens for department visitors.
Provision of rock and mineral specimens to Albuquerque Public Schools teachers.
Michael Spilde
Helped a Boy Scout Den (Pack 356) earn Geology merit badges.
Helped 2 students from Del Norte High School with a science fair project on the SEM.
Conducted Microprobe & SEM lab tours and demonstrations for several elementary and high school groups.

Michael Wiedenbek
Laboratory tour as part of New Mexico Science Teachers Day (1 March 1997)
Judge at the Regional Science and Engineering Fair (21 March 1997)

Lee Woodward

Huifang Xu
Collected pumice pebbles and answered geological questions for the public.
IV. GRADUATE PROGRAMS AND STUDENT SCHOLARSHIPS
SUMMARY OF GRADUATE PROGRAM

Introduction

The Department of Earth and Planetary Sciences regards the education and training of graduate students, as modern geoscientists, 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 geoscientists in a spectrum of employment opportunities, including industry, environmental and geological consulting companies, governmental organizations, and academia. Individualized teaching opportunities in a broad range of undergraduate courses (from introductory physical geology laboratory sections to advanced field geology), participation in graduate level seminars, and the opportunity to present the results of their graduate research at professional geoscience meetings and in numerous publications all further enhance interpersonal skills and abilities of graduate students to discuss their knowledge of and research in geoscience in a range of settings and situations.

During the Fall 1997 term, a total of 42 students (28 M.S., 14 Ph.D.) were working towards graduate degrees in the Department, including 14 new students (Table 1). Of the M.S. students in Fall, 54% were women, and of Ph.D. students, 29% were women. During Spring 1998, the graduate population numbered 25 M.S. and 13 Ph.D. students.

The total number of graduate students, around 40 in 1997-98, is lower than has been typical during much of the past decade; in Fall, 1993, for example, 70 students were pursuing graduate degrees in the Department. Mainly, this is due to an unusually high rate of students completing graduate degrees recently; (15 last year, 21 the year before); and a lower number of new students beginning in the program the past two years. Changes in the admissions procedures, so that we generally admit only those students to whom we can offer 2 years (M.S.) or 3 years (Ph.D.) of financial support, also has played a role in the decline. The present number of graduate students is probably optimal, both from the perspective of quality of attention from advisors and committees, and because there is little additional good office to accommodate many more than the present number.

Graduate Admissions

Twenty five applicants to the graduate program for Fall 1997 and Spring 1998 were offered admission out of 76 total applicants; of these, 15 new students actually enrolled - 10 in the M.S. program and 5 in the Ph.D. program. The stated disciplinary interests of these new students were: Climatology/Paleoclimatology = 4; Stratigraphy/Sedimentology = 2; Geomorphology/Soils = 2; Planetary Sciences = 2; Paleontology = 2; Geochemistry = 1; Tectonics = 1. In addition, 12 new students will be entering our graduate program in Fall, 1998.

Information on graduate admissions for the past 3 semesters is given in Table 2. For several years, the Department has maintained an aggressive recruitment effort involving funding visits to UNM by top applicants, offers of one-time $1,000 scholarships in addition to TA- or RA-ships, and offers of multi-year assistantships to top potential students. Competition for excellent prospective students in the geosciences remains keen across the country. The national visibility and excellence of the faculty and their programs, high admissions standards, and recruitment efforts have successfully attracted many excellent students to the Department this year as in the past, but the relatively low assistantship salaries at UNM have somewhat hindered this effort, although the salary situation has been improving.
TABLE 1. Master’s and Doctoral Students, Fall, 1997 - Spring, 1998.

<table>
<thead>
<tr>
<th>M.S. students</th>
<th>Doctoral Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bird, Jerry</td>
<td>Ma, Ancheng</td>
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<tr>
<td>Borchert, Claudia</td>
<td>McLain, Angela</td>
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<tr>
<td>Bowman, Laurie</td>
<td>Pederson, Joel</td>
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<td>Brown, Cynthia</td>
<td>Rogers, John</td>
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<tr>
<td>Carpenter, Sharman</td>
<td>Shaw, Colin</td>
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<tr>
<td>Cook, Casey</td>
<td>Thorsos, Ivan</td>
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<tr>
<td>Duke, Kate</td>
<td>Wang, Shixin</td>
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<tr>
<td>Etheridge, Devon</td>
<td>Wawrzyniec, Tim</td>
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<td>Gardner, Rebecca</td>
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<td>Gaud, Michael</td>
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<td>Hogan, Laura</td>
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<td>Helean, Kate</td>
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<td>Henderson, Dale</td>
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<td>Herd, Chris</td>
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<td>Koning, Dan</td>
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<td>Kuhle, Andrika</td>
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<td>Loveland, Tom</td>
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<td>Mitchell, David</td>
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<td>Moore, Jessica</td>
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<td>Petronis, Michael</td>
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<td>Roche, Karen</td>
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<td>Romano, Eileen</td>
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<td>Simmons, Mary</td>
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<td>Snider, Anna</td>
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<td>Timmons, Mike</td>
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<td>Tso, Dezbah</td>
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<td>Wegman, Karl</td>
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<td>Wisniewski, Paul</td>
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<td>Bergfeld, Deb</td>
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<td>Dehler, Carol</td>
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<td>Ellwein, Amy</td>
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<td>Eppes, Martha</td>
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<tr>
<td>Groffman, Armand</td>
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<td>Hanowski, Nicolaus</td>
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<tr>
<td>Heckert, Andy</td>
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<td>Keating, Gordon</td>
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<thead>
<tr>
<th></th>
<th>Fall 1997</th>
<th>Spring 1998</th>
<th>Fall 1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Applicants</td>
<td>70</td>
<td>6</td>
<td>61</td>
</tr>
<tr>
<td>Number Admitted</td>
<td>24</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>% of Total Applicants Admitted</td>
<td>34%</td>
<td>17%</td>
<td>36%</td>
</tr>
<tr>
<td>Number Actually Enrolled</td>
<td>14</td>
<td>1</td>
<td>12</td>
</tr>
</tbody>
</table>

Of these enrolled:

<table>
<thead>
<tr>
<th>Average Grade-point Average</th>
<th>Fall 1997</th>
<th>Spring 1998</th>
<th>Fall 1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>(UG)</td>
<td>3.48</td>
<td>3.50</td>
<td></td>
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<tr>
<td>(G)</td>
<td>3.70</td>
<td>3.68</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>GRE score – Verbal (percentile)</th>
<th>Fall 1997</th>
<th>Spring 1998</th>
<th>Fall 1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>82</td>
<td>84</td>
<td>64</td>
<td></td>
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<table>
<thead>
<tr>
<th>GRE score – Quantitative (percentile)</th>
<th>Fall 1997</th>
<th>Spring 1998</th>
<th>Fall 1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>81</td>
<td>51</td>
<td>71</td>
<td></td>
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<thead>
<tr>
<th>GRE score – Analytical (percentile)</th>
<th>Fall 1997</th>
<th>Spring 1998</th>
<th>Fall 1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>81</td>
<td>87</td>
<td>67</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>GRE score – Geology (percentile)</th>
<th>Fall 1997</th>
<th>Spring 1998</th>
<th>Fall 1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>79</td>
<td>21</td>
<td>-</td>
<td>*</td>
</tr>
</tbody>
</table>

*Very few of the enrolled students took the Geology GRE.

<table>
<thead>
<tr>
<th>Type of Support</th>
<th>Amount of Support ($ x 1000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. University</td>
<td></td>
</tr>
<tr>
<td>Departmental Teaching Assistantships (salary*)</td>
<td>$129</td>
</tr>
<tr>
<td>Tuition Waiver (T.A.'s)</td>
<td>25</td>
</tr>
<tr>
<td>TOTAL</td>
<td>154</td>
</tr>
<tr>
<td>2. Department</td>
<td></td>
</tr>
<tr>
<td>Research Assistantships (Salary)</td>
<td>172</td>
</tr>
<tr>
<td>RA Tuition</td>
<td>12</td>
</tr>
<tr>
<td>Silver/Kelley Fellowships and Research Support</td>
<td>49</td>
</tr>
<tr>
<td>Alumni Fund and other Fellowships</td>
<td>22</td>
</tr>
<tr>
<td>TOTAL</td>
<td>255</td>
</tr>
<tr>
<td>3. External Professional awards, Fellowships, etc.</td>
<td>22</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$431</td>
</tr>
</tbody>
</table>
Support for Graduate Students

Over the past decade, the Department has considerably increased its ability to provide support for students enrolled in its graduate program. In 1997-98, nearly all active graduate students in residence were supported to some extent, mainly through research and teaching assistantships and by fellowships from various sources. Salaries for full-time TAs were $9,629 for the academic year. Total University support for E&PS graduate students amounted to an equivalent of 13.5 students fully supported by TA-ships each semester, and full-time Departmental support (RA-ships and Silver/Kelley Fellowships) was provided equivalent to an additional 21 students.

Table 3 indicates the sources and approximate amounts of support that were provided to graduate students during the past year; such support totalled about $430,000. Of this, about 59% was derived from the Department (faculty grants and contracts and departmental fellowships), 36% from University sources (mainly TA-ships), and 5% from external sources (e.g., awards from professional organizations). Of the 15 entering new students in 1997-98, 6 were supported by RA-ships, 8 by TA-ships, 1 by a Silver/Kelley Fellowship. Strong support is not only essential in providing graduate students the means to pursue and complete their studies in a timely manner, but also is instrumental in attracting excellent students into our program.

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 1997-98:

Ph.D.
Ancheng Ma
Nicolaus Hanowski
M.S. Program in Computer Sciences, Oklahoma City University
Post-doctoral Scientist, German Space Agency

M.S.
Jerry Bird
Laurie Bowman
Sharon Carpenter
Kate Helean
Andrika Kuhle
Eileen Romano
Ph.D. Program, University of Oregon
Housewife
Scientist/Technician, Sandia National Labs
Ph.D. Program, University of Calif. at Davis
Unemployed
Instructor, UNM Natural Science Program
Graduate Degrees Awarded

The following students received M.S. and Ph.D. degrees in Earth and Planetary Sciences, between Fall 1997 and Summer 1998. Thesis/dissertation titles and faculty advisors are also indicated.

Master of Science


Sharman Lee Carpenter, Fall, 1997 – Numerical Simulation of Density Dependent Contaminant Transport in Ground Water Near Lake Karachai, Russia. (Dr. Michael E. Campana, Advisor).

Kate B. Helean, Spring, 1998 – Zircon Dissolution. (Dr. Rodney C. Ewing and Dr. Albert M. Kudo, Advisors).


Eileen M. Romano, Fall, 1997 – Late Proterozoic Remagnetization of the Bliss Formation in the Fra Cristobal Range and Caballo Mountains, Sierra County, New Mexico. (Dr. John W. Geissman, Advisor).

Doctor of Philosophy

Ancheng Ma, Fall, 1997 – Early Eocene Micromammals in the San Jose Formation, San Juan Basin, New Mexico. (Dr. Barry S. Kues and Dr. Spencer G. Lucas, Advisors).

Nicolaus Peter Hanowski, Spring, 1998 – The Aqueous Alteration of CM Carbonaceous Chondrites – Petrographic and Microchemical Constraints. (Dr. Adrian Brearley and Dr. James J. Papike, Advisors).
STUDENT SCHOLARSHIPS AND OTHER AWARDS

Many Graduate and Undergraduate students were supported by scholarships, fellowships, and other awards during the 1997-98 year. 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. Recipients of such awards are listed below.

**Undergraduate Scholarships and Awards**

*Harry and Mabel Leonard Scholarships*
- Aaron Cavosie - $1340
- Alex Castronius - $1240
- Catalina Bryant - $1140
- Christopher Purcell - $540
- Dave Johnston - $1740
- Diana Strickland - $1240
- Emily Chavez - $540
- Ivan Erchak - $1540
- James Ashby - $1340
- Jessie Preston - $1540
- Leigh Shean - $1540
- Linda Brown - $840
- Meagan Duran - $540
- Nancy Nateck - $1140
- Sheila Hutcherson - $1600

*General Thomas Campbell Scholarships*
- Anders Lundahl - $600
- Angie Smigelski - $600
- Elizabeth Langenburg - $750
- Kathleen McLeroy - $800
- Matt Crawford - $700

*James Drew Pfeiffer Scholarship*
- Sheila Hutcherson - $290

*Outstanding Student of Year Awards*
- Stuart A. Northrop, Outstanding Senior – Justin Hagerty
- Sherman A. Wengerd Award – Sheila Hutcherson
- J.P. Fitzsimmons Award – Ivan Erchak
- V.C. Kelley Outstanding Field Geologist – Aaron Cavosie
Department Travel and Equipment use Award

Sheila Hutcherson - $324

Other Undergraduate Student Awards

Albuquerque Gem and Mineral Club: Sheila Hutcherson and Dave Johnson ($500 each)
NMGS Lucille Pipkin Book Award: David Johnson, Justin Hagerty, Sheila Hutcherson ($100 each)
NMGS Lucille Pipkin Scholarship: David Johnson ($500)
Los Alamos Geological Society-NMGS Field Conference Award: Jake Armour and John Lewis ($150 each)

Several undergraduate students graduated with departmental Honors, which requires original research, an Honors thesis on this research, and a presentation to the Department. These students are:

Jake Armour – Sedimentological and Climatic Investigations of an Alphine Bog Deposit, Pecos Wilderness, New Mexico: Preliminary Results (Dr. Frank J. Pazzaglia, Advisor).

Nate Brunsell – The Effects of Topography on Precipitation. (Dr. David Gutzler, Advisor).

Michael Gabora – Comparative Petrology of Amphibolites Across Proterozoic Shear Zone in the Northern Colorado Front Range. (Dr. Jane Selverstone, Advisor).

Justin J. Hagerty – The Origin of the Martian Soil and Geochemical Constraints From Terrestrial Impact. (Dr. Horton Newsom, Advisor).

Kerim Martinez – X-ray Characterization of Small Scale Hydrology of the Natural Nuclear Reactors, Bangombe’ Gabon. (Dr. Rodney C. Ewing and Dr. V.C. Tidwell, Advisors).

Laura Pletsch-Rivera – Fluid Inclusion Analysis in the Testing of a Fracture Propagation Model, Sandia Mountains, New Mexico (Dr. Jane Selverstone, Advisor).

Graduate Student Scholarships and Awards – Departmental

Caswell Silver Foundation V.C. Kelley/L.T. Silver Fellowship and Research Support

Colin Shaw - $23,709
Michael Gaud - $25,406

Geology Alumni Fund Scholarship:

Andy Heckert - $300
Angela McLain - $1100
Claudia Borchert - $1050
Cynthia Brown - $850
Dale Henderson - $1000
Dan Koning - $300
David Mitchell - $1000
Jessica Moore - $1000
Karl Wegmann - $850
Laura Hagen - $800
Martha Eppes - $800
Mary Simmons - $500
Michael Petronis - $850
Michael Timmons - $500
Paul Wisniewski - $1000

Jean-Luc Miossec Memorial Scholarship:
Dan Koning - $770

Vincent C. Kelley Scholarship
Tim Wawrzyniec - $3000

Patrick Gratton and Jean McKinney Gratton Scholarship
Karen Roche - $1000

Alexander and Geraldine Wanek Scholarship
Carol Dehler - $1500
Anna Snider - $1500

Sherman and Florence Wengerd Travelling Fellowship
Andy Heckert - $1000

Department Travel and Equipment use Scholarships
Kate Duke - $250
Mike Petronis - $600
Tim Wawrzyniec - $600
Jessica Moore - $100

Graduate Student Awards – Professional Organizations

Albuquerque Petroleum Association
Karen Roche - $750
Anna Snider - $250

New Mexico Geological Society Kottlowski Award
Andy Heckert - $1000
New Mexico Geological Society Robert Wellnitz Scholarship

Dan Koning - $1000

New Mexico Geological Society Grant-in Aid

Cynthia Brown - $350
David Mitchell - $300
Jessica Moore - $400

New Mexico Geological Society Fall Field Conference Scholarship

Andy Heckert - $325
Anna Snider - $325

New Mexico Space Grant Consortium Fellowship

Chris Herd - $2000

Sigma Xi, UNM Chapter, Excellent Graduate Research Award

Gordon Keating

Geological Society of America, J. Hoover Mackin Award for Best Dissertation Proposal

Joel Pederson - $1500

Geological Society of America, Arthur D. Howard Award for Best Master’s Thesis Proposal

Dan Koning - $1200

Geological Society of America, Research Grants

Carol Dehler - $2000
Angela McLain - $2000
Mike Petronis - $1000
Dan Koning - $2000
Jessica Moore - $2600
Paul Wisniewski

Sigma Xi, Grant-in-Aid of Research

Jessica Moore

Colorado Scientific Society Research Grant

Paul Wisniewski

Edwin D. McKee Research Award, Rocky Mountain Section of SEPM (Society for Sedimentary Geology)

Jessica Moore - $1000
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<td>Mr. and Mrs. Robert Suda</td>
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**DONATIONS TO DEPARTMENT, 1997-98 FISCAL YEAR**
APPENDIX I

MUSEUM AND HARDING PEGMATITE LOG

1997-1996
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JANUARY, 1998 TOTAL

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University of New Mexico
Department of Earth and Planetary Sciences
HARDING PEGMATITE MINE
Visitors
The Annual Report Of

THE INSTITUTE OF METEORITICS

July 1, 1997 through June 30, 1998

James J. Papike, Director
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VII. PUBLICITY .................................................................................................. 48
The Institute of Meteoritics (IOM) was founded in 1944, and is one of the oldest institutions of its kind in the world. The Institute continues its role as a leading center in research relating to planetary materials and processes. Charter goals of the IOM are:

1. To carry out research in the detailed laboratory analysis of meteoritic and other planetary materials and in other fields of planetary and geologic sciences.

2. To provide materials, facilities, and supervision for research by candidates for advanced degrees in geology and in other fields. To offer instruction in these areas as may be approved through the appropriate academic procedures and channels.

3. To promote the identification and acquisition of meteorites. To participate in exchange programs as may enhance the representative scope and scientific value of the Institute's collections of meteorites. To preserve and place on public exhibition both meteorites and related meteoritic materials and to make these materials available to scientists working in fields closely allied to meteoritics.

Research at the Institute of Meteoritics covers a wide range of problems, including studies of geological processes on meteorite parent bodies (asteroids), the Moon, Mars, and Earth. Our research is aided by collaborations with investigators at other universities and at national laboratories. Microbeam analytical techniques, including electron microprobe (EMP), scanning electron microscope (SEM), transmission electron microscope (TEM), and ion microprobe (SIMS) constitute the most important tools for this research and state of the art facilities are available at UNM. Another technique for bulk trace element geochemical analyses, supported by IOM, is inductively coupled plasma-mass spectrometry (ICP-MS).

Teaching activities of the staff of IOM consist of both formal courses and informal meetings with graduate and undergraduate students. We emphasize the direction and supervision of both graduate and undergraduate student research and encourage presentation and publication of the results of this research at national and international levels. The Meteorite Museum continues to play an important role in our educational efforts, including organized programs for school groups with tours of the Museum and research laboratories.
INSTITUTE OF METEORITICS FACULTY AND STAFF
(FY 97-98)

Director, Institute of Meteoritics
Dr. James J. Papike, Regents' Professor of Earth & Planetary Sciences

Research Professors
Dr. Adrian Brearley
Dr. Horton Newsom
Dr. Frans Rietmeijer
Dr. Charles Shearer

Senior Associates
Dr. Rhian Jones
Dr. Michael Wiedenbeck

Research Associates
Grant Fowler
Michael Spilde

Support Personnel
Christopher Adcock, Laboratory Technician
Sarah Lentz, Administrative Assistant III
Tanya Zar, Staff Assistant
Mary Marcilla, Administrative Assistant I

Graduate Students
Laurie Bowman
Catherine Duke
Christopher Herd
Nicolaus Hanowski
Ivan Thorsos

Undergraduate Students
Justin Hagerty

Additions to Staff
Mary Marcilla, April 1, 1998

Separations from Staff
Adrian Brearley, August 16, 1998
Grant Fowler, May 4, 1998
Tanya Zar, February 20, 1998
In Memory of

GRANT FOWLER
Research Scientist I

Grant Fowler came to the Institute of Meteoritics as a Masters student in the summer of 1992 under the advisement of Dr. James J. Papike. After the completion of his M.S. degree, he was hired on July 1, 1994, by the Institute to help operate the UNM/SNL Ion Microprobe Facility.

Grant died on May 4, 1998, from a severe asthma attack. His death was a terrible shock and a tremendous loss to his family and friends. Grant will be remembered for dedication, loyalty, sense of humor, and for the professional contributions he made to the Institute. He was a colleague and a friend, and the impact of his death deeply affected all of us here at the Institute of Meteoritics.
SECTION I
RESEARCH
I. RESEARCH

Research activities of staff and students of the Institute of Meteoritics cover a wide range of topics, mostly aimed at understanding the origin and early history of our solar system and the evolution of the planets. More specifically, we have major research initiatives to investigate the igneous evolution of chondrite meteorites, Martian meteorites, and the Moon, and research into an understanding of early solar system processes through the study of interplanetary dust particles (IDPs) and chondritic meteorites.

The mechanisms and kinetics of aqueous alteration in carbonaceous chondrites are being investigated by experimental methods in an effort to constrain the duration and locations of hydrous alteration reactions in these meteorites. Two projects are currently in progress to address the question of whether carbonates and associated minerals in Martian meteorite, ALH 84001 were formed at low temperatures and hence could be biogenic in origin. Research into the effects of melting rates and transport paths on the geochemistry of granitic crustal melts is being carried out using experimental methods coupled with secondary ion mass spectrometry studies of trace elements.

Our research during the report period has resulted in the publication of 27 scientific articles in major national and international journals (p. 17), as well as in the publication of 37 abstracts of papers presented at national and international conferences (p. 19). The extensive involvement of students in original research projects in the Institute of Meteoritics is particularly important for their education and advanced training.

We continue to be very successful in attracting research grants and contracts to the Institute of Meteoritics in support of the research activities of staff and students. Details are provided in Tables I-II (pp. 15-16). Funding was provided by the National Aeronautics and Space Administration (NASA), and the National Science Foundation (NSF).

1. Specific Projects

a. Microbeam Studies of Planetary Materials (Funded by NASA)
Chondritic Meteorites

Over the past year we have continued to address a number of questions relating to the aqueous alteration of chondritic meteorites. We have examined the detailed alteration behavior of olivines and pyroxenes in Type IIA and Type IAB chondrites in the Antarctic CM chondrite, LEW 90500 (Hanowski and Brearley, 1997a). In this study we showed that alteration of these phases involves the formation of a transient metastable phase
consisting of amorphous material and very poorly crystalline serpentine adjacent to the olivine or pyroxene interface. As alteration proceeds this poorly crystalline material recrystallizes to form coarser-grained serpentine. Having identified distinct reaction aureoles around large metal grains in the Murray CM chondrite (Hanowski and Brearley, 1997b), we extended our observations to several other CM chondrites and have now identified them in Murchison, and ALH 81002 as well. These reaction aureoles, which we have termed iron-rich aureoles (Hanowski and Brearley, 1997c), provide unambiguous evidence that alteration occurred in-situ within a parent body. Finally, we have studied the matrix of the unique carbonaceous chondrite, LEW 85332, which has an hydrous matrix consisting dominantly of serpentine and saponite and appears to represent a less altered type of matrix than is observed in the CI chondrites (Brearley, 1997a). Using the cathodoluminescence (CL) capabilities on our new JEOL SEM, purchased in part with funds from NASA, we have studied the CL characteristics of calcite grains in the Murchison CM chondrite. We have found that CL reveals a remarkable diversity of textures in the carbonates on the microscale including grains with concentric banded zoning, ghost crystals, and grains with corroded cores overgrown by later rims with different CL characteristics. Grains with uniform CL also occur (Brearley, 1998a). With Jeff Grossman (USGS) we have examined differing styles of aqueous alteration of porphyritic and cryptocrystalline chondrules in Semarkona, using TEM techniques. (Grossman and Brearley, 1997).

In our continuing studies of dark inclusions, we have investigated the mineralogy and microstructural characteristics of dark inclusions in the reduced CV3 chondrites Leoville and Efremovka. In Leoville, two inclusions have been studied which exhibit very different degrees of alteration (Brearley, 1998b). One inclusion shows only minor evidence of oxidation, indicated by the presence of magnetite, whereas a second inclusion has clearly suffered complete aqueous alteration of matrix and chondrules, followed by metamorphic recrystallization. A similar history appears to have been experienced by dark inclusions in Efremovka (Krot et al., 1998). In addition, during our studies of chondrules in Allende we have found considerable evidence of aqueous alteration. In porphyritic pyroxene bearing chondrules, clinopyroxene has been extensively replaced by fayalite. Using TEM techniques, we have found that talc, calcic amphibole, and disordered biopyrubes are widespread in the enstatite, although they are only present in low abundances (Brearley, 1997b). We have also reviewed the characteristics of fine-grained matrices in CV chondrites (Brearley, 1997c) and what evidence is present for nebular and parent body processes in matrix materials. We have also written a
comprehensive review of the mineralogy of chondritic meteorites (Brearley and Jones, 1998).

We have continued our study of chondrules and other primitive components in unequilibrated chondrites. Trace element data from pyroxene-rich chondrules in Semarkona was published (Jones and Layne, 1997). LREE concentrations in pyroxene are higher than expected for equilibrium crystallization, consistent with the rapid cooling rates inferred for chondrules. “Dusty”, relict olivine grains in chondrules from unequilibrated chondrites are probably derived from previous generations of chondrules (Jones and Danielson, 1997). This provides additional evidence for chondrule recycling. Plagioclase-pyroxene-rich chondrules in CO3 chondrites show evidence for an episode of late-stage Fe and Na metasomatism prior to accretion that was not experienced by ferromagnesian chondrules (Jones, 1997a). Many Type I chondrules in CO chondrites contain primary plagioclase which has several important implications for chondrule formation (Jones, 1997b). Oxygen isotopic compositions (determined by ion microprobe analysis) of chondrule and isolated olivine grains in the CO3.0 chondrite, ALHA77307, have shown that extremely forsteritic olivine is enriched in $^{18}O$ relative to more FeO-rich grains from all occurrences in the same chondrite (Jones et al., 1998). O isotopic compositions of isolated olivine grains and their chondrule counterparts are similar for all olivine compositions.

**Lunar Studies**

In our lunar studies, we investigated the behavior of volatile elements in volcanic glasses, the partitioning behavior of trace elements between immiscible rhyolite-basalt melts in melt inclusions, the behavior of Ni-Co in olivine from lunar basalts, and the early evolution of mare basalt source regions. In addition to these studies and in collaboration with Dr. G. Ryder, we wrote the chapter on “Lunar Samples” for the Reviews in Mineralogy volume on Planetary Materials (Papike et al., 1998).

In our study of S in picritic glasses, we concluded that the variability in S in the various suites of glasses was a result of either the reduction of FeO and NiO with a more efficient loss of both C and S during the various stages of fire-fountaining or the effect of both the eruptive history and mantle source characteristics (Shearer et al., 1997a, 1998). We have continued our study of immiscible melt inclusions. Our studies have shown that minor elements such as S, P, Ti, and Mn are partitioned into the high-Fe basalt component; whereas, K and Na are partitioned into the rhyolite component. Trace elements such as Zr, U, Nb, and REE are partitioned into the high-Fe basalt component; whereas, Ba is
partitioned into the rhyolite component. Ni and Co in olivine from A12 olivine basalts exhibited contrasting behavior for compatible elements. Ni decreased substantially from core to rim; whereas, Co exhibited very little variation. The behavior of Co was attributed to the interaction between the extent of Co depletion in the melt and the increasing $D^{\text{Co}}$ (Papike et al., 1998). We have also reinterpreted Hf-W isotopic systematics for mare basalts (Shearer and Newsom, 1998a,b) and initiated Re-Os analyses of picritic glasses (Walker et al., 1998). An important finding in our analysis of Hf-W isotopes is that ilmenite may control Hf-W isotopic variability in the lunar mantle. If true, this sets a very limited time over which the lunar magma ocean may have crystallized.

**Diogenites**

Our continuing work on achondrites has focused upon petrogenetic models for magmatism on the eucrite parent body. Using the trace element data that we have derived from orthopyroxenes in diogenites, we were able to model possible magmatic relations among diogenites and between diogenites and eucrites. It appears likely that the suite of diogenites represents small to moderate degrees of crystallization of distinct batches of parental basaltic magmas (Shearer et al., 1997b).

b. **Mechanisms and Kinetics of Aqueous Alteration Reactions in Chondritic Meteorites (Funded by NASA)**

Many chondritic meteorites contain clear evidence that they have interacted with hydrous fluids at an early stage in their history. Although the mineralogical characteristics of these meteorites have become increasingly well known, the mechanisms and rates of the alteration reactions are still poorly understood. In order to understand these alteration processes we are carrying out experimental studies of specific mineral-fluid reactions pertinent to chondrites. The objectives of the study are to understand the behavior of chondritic materials during aqueous alteration in order to put constraints on the locations and timescales of alteration and the sequence of progressive alteration reactions which may have occurred within a parent body environment. The study will examine the reaction behavior of different types of chondritic precursor material which could potentially have been present in the matrices of chondritic meteorites. These include crystalline phases, such as olivine, pyroxene and metal, as well as amorphous materials, such as glasses and amorphous condensates. The experimental run products will be studied by SEM and TEM techniques and we will also examine the evolution of the cation content of the fluid as a function of time, using ICP-MS analysis.
c. Geochemical Signatures of Melt Segregation in Static vs. Dynamic Environments (Funded by NSF)

Geoscientists concerned with crustal evolution are currently debating both the rates of melt segregation and the nature of pathways for melt transport. In particular, focus has been placed on magma geochemistry because these processes determine the extent to which the extracted melts are in equilibrium with their source rocks. It is very likely that melt segregation rates and melt transport paths are dependent on tectonic setting and vary according to the presence or absence of deformation. At this point, determining how the mechanics of melt segregation influence the melt chemistry would greatly enhance our understanding of the range of compositions observed in anatectic granitic terrains and of the evolution of the crust in general. In this project, in collaboration with Dr. Tracy Rushmer (University of Vermont), we are experimentally testing the hypothesis that the physical processes of melt segregation leaves a distinct chemical signature that can be observed and quantified in anatectic melts. Two different types of experiments are planned to effectively link melt composition to melt segregation processes active in static (hydrostatic) and dynamic (non-hydrostatic) environments. This will help tie tectonic environment to source melt geochemistry. The study will involve SEM, EMP, and ion microprobe studies of melt produced in the experiments in order to determine how melt geochemistry evolves as a function of time and degree of melting.

d. Circumstellar and Interstellar Dust in Primitive Solar System Materials (Funded by NASA)

Interplanetary Dust Particles (IDPs) are routinely collected in the Earth’s stratosphere between 17-19 km altitude using high-flying NASA aircraft. The 2-40 micrometer sized objects survived atmospheric entry with recognizably low-levels of thermal alteration. These IDPs include both chondritic aggregates and non-chondritic material, including iron-nickel sulfide-rich and Mg,Fe-silicate rich particles. Both particle types are related to each other and could be debris of asteroids and short-period comets. The unique aggregate IDPs still show the original accretion texture acquired 4.56 Gyrs ago. The IDPs are typically 10-15 micrometers in size and consist of a matrix of principal components with embedded iron-nickel sulfides, Mg,Fe-silicates, Ca,Al(Ti)-phases and iron oxides. These constituents are < 5 micrometers in size and show considerable manometer-scale detail that is studied by transmission and analytical electron microscope techniques. The chemical and mineralogical properties of principal components indicate that they are among the most primitive or least altered solar system materials currently
under investigation. Experimental analog studies that are part of this study show that these properties are a fundamental property of solids produced by vapor phase condensation in circumstellar and interstellar environments. The study of IDPs not only provides a unique window to the materials and processes that occurred in the early solar system, they also offer opportunities for fundamental research in petrology.

e. Impact Cratering, Volcanism, and Volatile Transport on Mars (Funded by NASA, JPL)

This project will provide support for the further development of the Mars Oxidation Experiment. This experiment consists of thin-film sensor assemblies that will provide unique information about the chemistry and the reactivity of the Martian atmosphere and soil and is being developed for further flight opportunities. Extensive work on volatile transport involving volcanic and impact crater processes suggests that the Martian soil may be a sink for a large number of volatile elements, including trace metals of great health concern to future human exploration. On Mars, hydrothermal systems driven by heat from impacts and volcanism will concentrate volatile elements at the surface. In contrast to the Earth, these enriched elements will not be transported to the oceans by extensive fluvial action and erosion. This project involves creating a model of the expected enrichments of minor elements in the Mars soil from impact and volcanic processes. The different components include chondritic material, fumarolic deposits, and mobile elements released by chemical alteration and transported into the Martian surface. This approach will allow the use of the available Martian and terrestrial analog data to constrain the abundance of elements not directly measured.

f. “Exploring the Solar System” Course for Teachers (Funded by NASA, Space Telescope Science Institute)

The major focus of this proposal is in the category of Teacher Resources and Training. We will present and develop a course entitled “Exploring the Solar System for Teachers.” The course will be a partnership between a planetary scientist with educational outreach experience, Dr. Horton E. Newsom, and a professional educator, Dr. Kathryn Powell. The audience for the course is pre-service and in-service science teachers. The course will be presented in the summer, which will allow in-service teachers to easily attend. The goals of the project are to provide both content regarding planetary science, and curriculum materials in the form of active learning activities which emphasize investigation and inquiry. We will evaluate the success of this project by using pre- and
post-tests of science knowledge and knowledge of activities appropriate for a K-12 audience. The results of the project will be disseminated through the Institute of Meteoritics education web page.

g. Development of Advanced SIMS Techniques - Ion Microprobe Facility (Funded by NSF)

One of the main franchises of the Ion Microprobe Facility is the development of new and innovative applications of Secondary Ion Mass Spectrometry (SIMS) to the analysis of natural materials. Two main initiatives have occupied the bulk of technique development time.

The first is the optimization of the instrument for small, high current primary microbeams. This development has become essential for a number of projects involving quantitative trace element analysis of objects smaller than the traditional 25-30 μm lateral resolution of the ion microprobe. A number of optical and electronic modifications have been completed, allowing substantial primary beam currents to be focused routinely to diameters of less than 10 μm.

The second major development initiative has been in the area of Stable Isotope Ratio Analysis (SIRA). Optimization of a new detector and counting electronics has allowed the microbeam analysis of sulfur isotope ratios in sulfides to precisions approaching those of conventional gas source SIRA instruments (which require much larger samples). This new capability will be applied to isotopic investigations of both meteoritic and terrestrial materials in the coming year.

h. Deciphering S Isotopic Systematics as Biogenic Markers in Martian Meteorites (Funded by NASA)

Understanding the development, sequence, and setting of the precipitation of carbonate and sulfide in fracture-filling lithologies is critical to interpreting potential biomarkers in Martian meteorites. Shearer et al. (1996) and Shearer and Papike (1996) pointed out in their evaluation of sulfur isotopic systematics in ALH84001 as a potential biomarker, the final heavy sulfur isotopic enrichment in the fracture-filling pyrite could be a function of numerous mechanisms. To properly interpret S isotopes as a potential marker for biogenic activity (Shearer et al., 1996), it is important to understand in the relative precipitation sequence of carbonate and sulfides, the conditions of precipitation (temperature, pH), the sulfur isotopic signature of the "aqueous solutions", and the
open-closed system behavior of S species during precipitation. Without a detailed understanding of these different variables, the sulfur isotopic values determined by Shearer et al. (1996) and other measurements made in the future do not have a unique interpretation that is useful as a biomarker. Therefore, the initial focus of this study has been to decipher the chemical and thermal evolution of the carbonates and sulfides in ALH 84001. Initial observations indicate that the sulfides were formed during several different thermal episodes and that the sulfides and the low-temperature carbonates experienced a rapid, high-temperature thermal event.

i. Mechanisms of High Pressure Phase Transformations Involving Olivine, \( \beta \)-phase and Spinel in the Mantle Transition Zone: Experimental Studies of Transformation Mechanisms in Mg\(_2\)SiO\(_4\) and (Mg\(_{\text{Fe}}\))\(_2\)SiO\(_4\). (Funded by NSF).

The importance of the phase transformations of the polymorphs of Mg\(_2\)SiO\(_4\) on the geophysical properties of the upper mantle has been widely recognized over the last 20 years. Olivine, the most volumetrically important phase in the Earth's upper mantle, undergoes a series of transformations as a function of increasing depth in the mantle, which result in the formation of modified spinel (\( \beta \)-phase) and finally, spinel (g). Transformations of olivine to \( \beta \)-phase are widely regarded as being responsible for the seismic velocity variations in the transition zone of the mantle in the 370-420 km range in the Earth. The mechanisms of the transformations have major implications for several important aspects of the behavior of the mantle in the transition zone, the dynamics of subduction zones and mantle convection. In particular the olivine-spinel transformation may provide one of the major forces for subduction, be one of the causes of deep focus earthquakes, and may significantly affect the rheology of subducting oceanic lithosphere.

The principal objective of this project is to study in detail the mechanisms of these high pressure mantle phase transformations over a wide range of pressure/temperature conditions relevant to the model mantle geotherm and subducting oceanic lithosphere. This study is the first to try and delineate the pressure/temperature regimes over which different transformation mechanisms may operate in the Earth's mantle and identify what factors may cause changes in the transformation mechanism. The research is a collaborative project involving high pressure experimental work coupled with transmission electron microscope characterization of the products of the experiments. Experimental work is carried out by Professor David Rubie on a multianvil press at the Bayerisches Geoinstitut, Germany, whilst transmission electron microscopy and subsequent interpretation are carried out in the Institute of Meteoritics.
j. Microstructural Studies Bearing on the Origin of Carbonates and Associated Minerals in Martian Meteorite, ALH 84001 (Funded by NASA)

This research project involves microstructural studies of the carbonates and associated minerals in the martian orthopyroxenite ALH 84001, the carrier of the putative evidence for bacterial life proposed by McKay et al. (1996). The research tasks are intended to address several key questions regarding the formation conditions of the carbonate minerals which host the proposed bacterial structures, in addition to attempting to constrain the origin of the magnetites and sulfide minerals which are themselves entrained in the carbonates. Four specific research tasks are proposed: a) a search for evidence of low temperature hydrous phases such as phyllosilicates, which may only be present in low abundances and hence have not yet been identified, b) examine the microstructures of the carbonates to help constrain their formation history, c) further investigate the morphological and microstructural characteristics of the magnetite and sulfides which are of putative biogenic origin to try and place better constraints on how they formed, and d) examine the mechanism of the formation of carbonate by replacement of maskelynite. The proposed studies of magnetite (Task c) will involve a collaborative study with Professor Stephen Mann of the University of Bath, England, an internationally recognized expert on the formation of biogenic minerals, especially iron oxides.

2. Grants and Contracts

Table 1 documents that IOM was well funded by NASA and NSF during FY 97/98. Grant contract expenditures totaled $508,000. Table 2 lists grants and contracts that are already in effect or have already been approved; $1,918,300 remains in these grants and contracts.

In summary, IOM continues to enjoy healthy grant/contract support in these times of rigorous competition and limited budgets in the major funding agencies.
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<td>NASA</td>
<td>Petrology of Presolar Dusts and Alteration in Chondritic IDPs. (NAGS-4441)</td>
<td>F. Rietmeijer</td>
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<td>SANDIA</td>
<td>Geologic Support for SNL activities for the Yucca Mountain Site Characterization Project. (AB-1106)</td>
<td>J. Connolly</td>
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<td>JPL/NASA</td>
<td>Impact Cratering, Volcanism and Volatile Transport on Mars. (961100)</td>
<td>H. Newsom</td>
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<td>NASA</td>
<td>Hands on the Solar System: Workshops for Under-Represented Midschool Students from Under-Represented Groups and their Teachers in New Mexico. (ED-90101.01-96A)</td>
<td>H. Newsom</td>
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<td>NSF</td>
<td>Siderophile Elements and the Origin of the Continental Crust. REU Supplement. (EAR-9543543)</td>
<td>H. Newsom</td>
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<td>NSF</td>
<td>Geochemical Signatures of Melt Segregation in Static vs. Dynamic Environments. (EAR-9706041)</td>
<td>A. Brearley</td>
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<td>NASA</td>
<td>Microbeam Studies of Planetary Materials. (MRA 97-282)</td>
<td>Papike, Brearley, Jones, Shearer</td>
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<td>NASA</td>
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<td>Deciphering Sulfur Isotopic Systematics as a Potential Biomarker in ALH 84001. (NAG5-6105)</td>
<td>C. Shearer/Papike</td>
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<td>Impact Cratering, Volcanism, and Volatile Transport on Mars. (961100)</td>
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<td>NSF</td>
<td>Geomicrobiological Interactions of Microbial Communities in Cave Deep Subsurface Environments: A Novel Extreme Environment</td>
<td>Dahm, Crossey, Northup, Spilde, Boston</td>
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3. **Papers Published (and in Press) in Peer Reviewed Journals and Books (1997-1998)** Staff members of IOM in **bold** print. *Student authors.


4. Travel

During the period of the report, IOM Personnel attended 10 international and national meetings. Twenty-four papers were presented orally, and seven papers were presented as posters. Seven were presented as "print only" abstracts. Four of the talks and one of the posters were presented by students. Abstracts of all presentations were published in abstract volumes for individual meetings. In the list of meetings below, names of IOM presenters are underlined, and student contributions are indicated with an asterisk.

July 17-19, 1997
Workshop on Parent-body and Nebular Modification of Chondritic Materials, Maui, Hawai‘i
Attended by A.J. Brearley, N.P. Hanowski*, R.H. Jones, and F.J.M. Rietmeijer

Oral presentations:

Brearley, A.J. "Unraveling nebular and parent-body effects in chondrite matrices: Mineralogical and compositional constraints."


Jones, R.H. “Alteration of plagioclase-rich chondrules in CO3 chondrites: Evidence for late-stage Na and Fe metasomatism in a nebular environment.

Rietmeijer, F.J.M., G. Fu, and J.M. Karner “Alteration of presolar dust based on transmission electron microscope/analytical electron microscope studies of chondritic interplanetary dust particles and nonequilibrium simulation experiments.”

Hallenbeck, S.L., J.A. Nuth, and F.J.M. Rietmeijer “Thermal quenching of silicate grains in protostellar sources.”

R.H. Jones chaired session, “Petrologic and chemical constraints on accretion and alteration of chondritic materials.”
July 21-25, 1997
60th Meteoritical Society, Maui, Hawai‘i
Attended by A.J. Brearley, N. P. Hanowski*, R.H. Jones, and F.J.M. Rietmeijer

Oral presentations:

Hanowski*, N.P. and A.J. Brearley “Transmission electron microscope observations of advanced silicate alteration in chondrules of the CM carbonaceous chondrite, Lewis Cliff 90500.”


Jones, R.H. “Ubiquitous anorthitic plagioclase in Type I chondrules in CO3 chondrites: Implications for chondrule formation and parent-body metamorphism.”

Rietmeijer, F.J.M. “Cluster particles: A unique new class of asteroid debris or a note of caution?”

September 26-28, 1997
Fifth School of Mineral Physics, Wroclaw/Sobotka, Poland
Attended by: F.J.M. Rietmeijer

Oral Presentation:

Rietmeijer, F.J.M. “Dynamic pyrometamorphism in cosmic dust entering the Earth’s atmosphere.”

October 20-23, 1997
Geological Society of American Annual Meeting, Salt Lake City, Utah
Attended by: Catherine Duke*, J.J. Papike, C.K. Shearer
Abstract published in GSA Abstracts with Programs

Oral Presentations:


December 8-12, 1997
American Geophysical Union Fall Meeting, San Francisco, California
Attended by: Horton Newsom
Abstracts were published in EOS Transactions, American Geophysical Union, Vol. 78, No. 46, Supplement.
Poster presentation:

Rushmer, T. and A.J. Brearley “Fracture pathways and partial melt compositions: Geochemical consequences of melt-induced microcracking.”

Newsom, H.E., J.J. Hagerty*, and F. Goff “Chemical transport in hydrothermal systems: Clues to the composition of the Martian soil.”

January 26-27, 1998
Mars Surveyor 2001 Landing Site Workshop, Moffett Field, CA
Attended by H. Newsom
Abstracts were published by the Lunar and Planetary Institute.

Oral presentations:


March 16-20, 1998
29th Lunar and Planetary Sciences Conference, Houston, Texas

Oral Presentations:


Brearley, A.J. “Dark Inclusions in the Leoville CV3 carbonaceous chondrite.”

Brearley, A.J. “Magnetite in ALH 84001: Product of the decomposition of ferroan carbonate isotopic systematics of the olivine.”


Newsom, H.E., J.J Hagerty*, and F. Goff “Acid-sulfate hydrothermal fluids and the origin of the Martian soil.”

Papike, J.J. “Comparative planetary mineralogy: Chemistry of melt-derived pyroxene, feldspar, and olivine.”

Rietmeijer, F.J.M. “Looking for order in chaos: Metastable eutectics constrain the petrologic phase equilibria in aggregate IDPs.”
I. RESEARCH


Poster Presentations:

Brearley, A.J. “Carbonates in CM carbonaceous chondrites: Complex zoning revealed by high resolution catholuminescence studies.”


Print only:

Brearley, A.J. “Microstructures of feldspathic glass in ALH 84001 and evidence for post carbonate formation shock melting.”

Jones, R.H. (1998) “A compilation of olivine and pyroxene compositions in Type 4-6 ordinary chondrites.”

Rietmeijer, F.J.M. “Non-chondritic cluster fragments: Asteroidal volcanism that escapes recognition in individual IDPs.”


R.H. Jones chaired session, “Carbonaceous chondrites.”
March 25-29, 1998
63rd Annual Meeting of the Society for American Archaeology, Seattle, Washington
Abstracts published in Proceedings of the 63rd Annual Meeting of the Society for American Archaeology

Oral Presentations:


April 30 - May 1, 1998
Workshop on using in situ resources for construction of planetary outposts, Albuquerque, NM
Attended by H. Newsom and F.J.M. Rietmeijer
Abstracts in papers presented to Workshop on using in situ resources for construction of planetary outposts, Lunar and Planetary Institute, Houston, TX.

Oral presentations:


Other professional travel by IOM Personnel:


September 29-October 2, 1997. Lecture to the Faculty of Sciences at the Silesian University, Sosnowiec, Poland.


I. RESEARCH


February 4-7, 1998. Visited the University of Michigan, Ann Arbor, MI, and presented two lectures. Also, attended the Ph.D. defense exam for Sharon Feldstein. J.J. Papike.


April 1-3, 1998. Visited the University of Texas, Austin, TX, and gave two lectures on Planetary Science. J.J. Papike

I. RESEARCH


SECTION II
FACILITIES
II. FACILITIES

1. Curation and Meteorite Museum

As in previous years, the Meteorite Museum has been an important educational and recreational attraction on campus and visited by many school groups and tourists. The interest in the museum and meteorites received considerable stimulation as a result of the announcement in August, 1996, of evidence for putative life on Mars and continued unabated throughout 1997-1998. The number of visitors to the museum increased as a result. Our faculty, staff, and students conducted tours for elementary and high schools not only from the Albuquerque area, but from other areas of New Mexico and as far away as Los Angeles. The continuing popularity of the Museum and our tours emphasizes the important educational role of this facility for the local community. In addition to the activities centering on the Museum, we also exhibited samples from the Institute’s collection on Astronomy Day at the Coronado Mall, May 2, 1998.

The Institute's collection has continued to be a very important resource for researchers worldwide, and we have been quite active loaning and providing samples to a number of scientists. Demand for samples in the collection has been moderate, and this year we provided eight samples and thin sections to six qualified investigators in the USA, Japan, and Europe. In addition, the research agenda within the Institute continues to make extensive use of samples from the collection.

During 1997-1998, the Institute was fortunate to obtain samples of six meteorites, all of which were not previously represented in the Institute’s collection. Several of these samples have been purchased with Institute funds and public donations to the museum. With the addition of these new samples, the Institute’s collection now contains samples of approximately 576 meteorite falls and finds from around the world. From the public sector, we examined over 120 suspect meteorite samples, of which four were classified as new meteorites and subsequently donated to our museum.

2. Experimental Petrology Laboratory

The experimental petrology laboratory includes two vertical muffle tube high-temperature furnaces: a Deltech furnace and an Astro furnace. Both have gas-mixing capabilities and programmable temperature control, and are operational up to 1600°C under a wide range of oxygen fugacities. Several different types of experiments are
being conducted, including 1) an investigation of pyroxene microstructures formed at different controlled cooling rates, and during various annealing conditions, 2) measurement of diffusion coefficients, 3) a kinetic study of olivine reduction reactions and 4) a study of partial melting of an ordinary chondrite.

3. **ICP/MS Laboratory**

The ability to rapidly and precisely measure trace elements in sub-parts per billion concentrations is required in solving a wide range of environmental, petrogenetic, metallogenic and geochemical problems. For example, the analysis of "heavy metals" (e.g., As, Pb, Cu, Cd, Sb, Ag, Hg, Zn) in water/waste is critical to many environmental impact evaluations (e.g., ground water contamination). The same set of elements in planetary materials provides essential clues to early processes in the Earth and terrestrial planets, such as planetary accretion and core formation. In response to this need, geochemists have developed inductively coupled plasma-mass spectrometry (ICP-MS) for the environmental and geological sciences. ICP-MS is an analytical technique for multi-trace element and isotopic analysis. The technique combines an inductively coupled argon plasma, generating ions at 8000 K and a quadrupole mass analyzer for ion detection. The main advantages of ICP-MS as a method for geochemical analysis are its multi-element (and isotopic) capability, sensitivity, and speed at a reasonable cost. It is possible to routinely determine 33 elements spanning the realm of geochemical behavior with detection limits to .001 mg/ml.

The Institute of Meteoritics operates a VG Plasma Quad PQ2 ICP/MS for Institute, Departmental, campus and off-campus analytical needs. An analytical methods course in ICP-MS is offered to undergraduate and graduate students interested in using trace element techniques in solving geologic problems. This course has helped undergraduate students gain acceptance into graduate school and graduates to find employment. The laboratory has developed analytical procedures for the analysis of most stable elements in the periodic table in a wide range of analytical matrices. Current and projected use of the laboratory for trace element analysis include faculty, staff and students from the Institute of Meteoritics, Department of Earth and Planetary Sciences, Department of Chemistry, and Department of Civil Engineering at UNM. A total of 15 students (undergraduate and graduate) within the Department of Earth and Planetary Sciences used the ICP-MS facility as part of their research interests. This
involved eight faculty and staff in the department. Analyses were also carried out for the following off-campus projects:

David Vaniman and Grant Heiken, Yucca Mountain trace element characterization of minerals (Los Alamos National Laboratories)
E. Peterson, Super-conductor analysis (Los Alamos National Laboratories)
Fluid flow studies (Sandia National Laboratories)
Soil contamination studies (Sandia National Laboratories)

4. Electron Microprobe and Scanning Electron Microscope Laboratories

During the summer of 1997, we replaced our aging Hitachi S450 (purchased in 1980) with a new JEOL 5800LV scanning electron microscope (SEM) and Oxford Isis X-ray analytical system. The new microscope and analyzer was purchased with grants from NSF and NASA and matching funds from UNM. The new instrument provides state-of-the-art capabilities such as low vacuum operation and cathodoluminescence imaging, along with quantitative energy dispersive X-ray analysis and improved image resolution at high magnification. A high-speed computer attached to the microscope also allows digital images to be transferred over the local area network and the Internet.

In addition to the new SEM, the Institute of Meteoritics operates a JEOL 733 electron microprobe. The SEM and microprobe labs provide training for academic and non-academic users and conducts analyses for academic and non-academic clients on an hourly basis. The microprobe, and the SEM lab in particular, have enjoyed a busy year in 1997-98. The probe currently has 18 Departmental and IOM users, 2 users from the University of Nevada, Las Vegas and 1 from the University of Silesia, Poland. The SEM has 18 users from UNM, NM Tech, Sandia, NM Museum of Science and Natural History, along with several trained commercial users. IOM personnel provided analytical services for a number of academic and commercial clients in 1997-87. Analyses and other work was performed by C. Adcock or M. Spilde for the following academic clients:

Y. Asmeron, Dept. of Earth & Planetary Science (sample preparation)
P. Crown, Anthropology Dept., UNM (microprobe)
N. Creager, Anthropology Dept., UNM (microprobe)
W. Elston, Dept. of Earth & Planetary Science, UNM (microprobe)
A. Garza, Dept. of Earth & Planetary Science, UNM (microprobe)
C. Hollaway, Civil Engineering Dept., UNM (SEM)
K. Jungling, Electrical & Computer Engineering Dept., UNM (SEM)
K. Kim, Mechanical Engineering Dept., UNM (SEM)
B. Kues, Dept. of Earth & Planetary Science, UNM (SEM)
H. Liu, Dept. of Material Science, NM Tech (SEM)
P. Lu, Dept. of Material Science, NM Tech (SEM)
P. Napolitano, Chemistry Dept., UNM (SEM & microprobe)
NM Engineering Research Inst. UNM (microprobe)
D. Northup, Biology Dept., UNM (SEM)
H. Newsom, Institute of Meteoritics (SEM)
N. Olsen, Anthropology Dept., UNM (microprobe)
C. Shearer, Institute of Meteoritics (SEM & microprobe)
K. Salehpoor, Mechanical Engineering Dept., UNM (SEM)
University Hospital, Dept. of Emergency Medicine, UNM (SEM & microprobe)
Y. Wang, Dept. of Material Science, NM Tech (SEM)

Analyses were conducted for the following government agencies and non-academic clients:

C. Bryan, Sandia National Laboratory (SEM)
D. Czor, Albuquerque (SEM)
GCX, Inc., Albuquerque (SEM & microprobe)
General Mills, Albuquerque (SEM)
Innovative Technology Solutions Corp., Albuquerque (SEM)
Laser Technics, Inc., Albuquerque (SEM)
Lovelace Respiratory Research Institute, Albuquerque (SEM)
N. Missert, Sandia National Laboratory (SEM)
Nanochem Inc., Albuquerque (SEM)
NM Office of Mineral Trustee, Santa Fe (microprobe)
QM Technologies, Albuquerque (SEM)
Daniel B. Stephens & Associates (SEM)
TPL, Inc., Albuquerque (SEM & microprobe)
M. Weidenbeck, IOM/Sandia SIMS Laboratory (SEM & microprobe)

Lab personnel conducted tours and presentations for groups of various ages during the year. We provide demonstrations of general science interest to grade school and high school groups, while providing exposure to modern analytical techniques to interested UNM classes and similar groups. Demonstrations on the microprobe were given for one class, Antho 373 “Geoarcheology”. SEM demonstrations are conducted in conjunction with UNM community out-reach programs, and classes from Lincoln and Polk Middle Schools visited the SEM lab, along with a group of MESA students and groups from the Southwestern Junior Science and Humanities Symposium, held at UNM. We also conducted an SEM demonstration for a tour group from the convention of Criminal Justice Scientists held in Albuquerque. In May, a film crew from CNN filmed a segment in the SEM lab for a science news program.

5. The UNM/SNL Ion Microprobe

A CAMECA IMS 4f Secondary Ion Mass Spectrometer (SIMS), originally purchased by Sandia National Laboratories (SNL) in 1989, is located in the Advanced Materials Laboratory on the UNM South Campus. This instrument is used primarily for trace
level (ppb range) chemical analyses on small (< 30 \mu m) areas. In addition, it is also used for determining the isotopic signatures of small domains within geochemically significant specimens. This machine is also used for determining high resolution (< 10 \mu m) chemical depth profiles within geological and engineered materials.

This instrument is jointly operated by IOM and SNL Department 1823, managed by Michael Wiedenbeck. In addition to Dr. Wiedenbeck, IOM Research Associate Grant Fowler was deployed as a full time member of the SIMS laboratory. Due to the untimely passing of Grant Fowler, Dr. Wiedenbeck has become responsible for the total operation of the lab. Dr. Wiedenbeck is currently training additional SNL and IOM-EPS operators.

Since mid-1993 the Facility has been funded by the National Science Foundation as an external user facility (Facilities and Instrumentation Program). A request for an extension was submitted to NSF in December 1996 (PIs: Wiedenbeck, Papike and Shearer). This application was successful and the current arrangement is funded through July 1999.

External Users of the Facility: 1 July 1997 - 30 June 1998

Eric Blinman
Krishan Chawla
Steven Droes
M. Darby Dyar
Ed Grew
Thomas Harris
Kenneth Jungling
Ron Loehman
Roger Nielsen
Jan Nixon
Raytheon STX Corp.
Jane Selverstone
Larry Taylor
Dr. R. Wendlandt

Institute of Meteoritics Users of the Facility: 1 July 1997 - 30 June 1998

Adrian Brearley
Sharon Feldstein / Rhian Jones
Horton Newsom
James Papike
Charles Shearer
6. Sample Preparation Facility

This year IOM has a fully operational sample preparation support facility for all its institute labs. The facility is capable of preparing samples from powder, whole rock, or optical thin sections, for use in the SEM, EMP, or SIMS machines. While we do not make thin sections themselves, we do “finish” them, and provide other sample techniques such as vacuum encapsulation. The lab has been very successful in the 1997-98 fiscal year.
SECTION III
TEACHING
III. TEACHING

1. Courses Taught

Fall 1997


Spring 1998


ANTHRO 373 "Geoarcheology." Guest lecture by M. Spilde.

Summer 1998


2. Fall 1997 IOM Research Seminar Series


November 3:  "Nature of the Martian Mantle." C.K. Shearer

November 10:  "Spinel in Martian Meteorites." C. Herd
III. TEACHING

November 17: "Experimental Aqueous Alteration of Allende." C. Duke.


March 2: "Metastable Equilibria." F. J. M. Rietmeijer
March 9: "Life on Mars?" C. K. Shearer.
April 20: "Corrosion Residues from Lechuguilla Cave: Possible Analogs for Life on Mars?" M. Spilde.
April 27: "The Virtual Sample." C. Adcock.

4. Student Committees

Graduate Student Advisement

<table>
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<tr>
<th>Student</th>
<th>Committee</th>
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<tr>
<td>Claudia Bochert</td>
<td>M.S.</td>
<td>J. J. Papike</td>
</tr>
<tr>
<td>Laurie Bowman</td>
<td>M.S.</td>
<td>J. J. Papike (Advisor), C. K. Shearer</td>
</tr>
<tr>
<td>Catherine Duke</td>
<td>Ph.D.</td>
<td>A. J. Brearley (Advisor), J. J. Papike</td>
</tr>
<tr>
<td>Armando Groffman</td>
<td>Ph.D.</td>
<td>C. K. Shearer</td>
</tr>
<tr>
<td>Sharon Feldstein</td>
<td>Ph.D.</td>
<td>R. H. Jones (Advisor)</td>
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### III. TEACHING

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<td>Justin Hagerty</td>
<td>M.S.</td>
<td>H.E. Newsom (Advisor)</td>
</tr>
<tr>
<td>Nicolaus Hanowski</td>
<td>Ph.D.</td>
<td>A.J. Brearley (Advisor), J.J. Papike, C.K. Shearer</td>
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<tr>
<td>Kate Helean</td>
<td>M.S.</td>
<td>C.K. Shearer</td>
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<td>Christopher Herd</td>
<td>M.S.</td>
<td>J.J. Papike (Advisor), C.K. Shearer</td>
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<tr>
<td>Gordon Keating</td>
<td>Ph.D.</td>
<td>J.J. Papike</td>
</tr>
<tr>
<td>Jessica Moore</td>
<td>M.S.</td>
<td>J.J. Papike</td>
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<tr>
<td>Ivan Thorsos</td>
<td>Ph.D.</td>
<td>A.J. Brearley, R.H. Jones, H.E. Newsom (Advisor)</td>
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5. **Progress of Earth and Planetary Sciences Department Graduate Students Supported by IOM**

**Laurie Ellen Bowman** received her B.S. in Earth and Planetary Sciences from the University of New Mexico in the Summer of 1994. She joined IOM as an M.S. student in the fall of 1994 and received her degree in December of 1997. Her thesis was titled, "Diogenites as asteroidal cumulates: Insights from automated EDS modal analysis and chromate chemistry."

**Catherine Duke** earned her B.S. in Biology from the University of New Mexico and joined IOM as a M.S. student in the summer of 1997. During the 1997-98 academic year, she received a Zonta Foundation Fellowship and a travel grant from the Meteoritical Society. In the spring of 1998, she defended her M.S. proposal with distinction, and her application to the Ph.D. program in Earth and Planetary Sciences was accepted. She has been working with Adrian Brearley on experimental hydrothermal alteration of carbonaceous chondrites and will continue this project in the coming year.

**Sharon Feldstein** completed her Ph.D. in the Spring of 1998.

**Nicolaus Hanowski** completed his coursework towards his Ph.D. degree in Fall, 1997. He wrote and successfully defended his Ph.D. thesis entitled, "The Aqueous Alteration of CM Carbonaceous Chondrites - Petrographic and Microchemical Constraints" on
May 6, 1998. He returned to Germany in April of 1998 and is now working as a Postdoctoral Research Associate with the German Aerospace Center (DLR) in Cologne.

Chris Herd joined IOM as a M.S. student in the fall of 1997. He received his B.S. in Geological Sciences from Queen’s University at Kingston, Canada, in the spring of 1997. His research involves the analysis of spinels in the SNC (martian) meteorites in order to estimate the oxygen fugacity of martian melts and to determine the petrogenetic history of martian igneous rocks. He was awarded a New Mexico Space Grant Consortium fellowship (NASA) for 1998 and a Graduate Student Researchers Program fellowship (NASA) for 98/99. In May of 1998, he successfully petitioned to bypass the M.S. and is now working towards a Ph.D. degree.

Ivan Thorsos is continuing to make progress towards his Ph.D. degree. Ivan completed his course work and submitted abstracts for two research proposals which will form the basis of his Ph.D. comprehensive exam. His likely dissertation topic is “Impact crater processes on Mars resulting in lakes and hydrothermal systems.”
SECTION IV

DEPARTMENTAL AND UNIVERSITY ACTIVITIES
IV. DEPARTMENTAL AND UNIVERSITY ACTIVITIES

C.T. Adcock
Manager for the IOM Sample Preparation Lab
Assistant/Technician, Electron Microprobe and Scanning Electron Microscope Labs

A.J. Brearley
Curator of the Meteorite Museum and Collection, Institute of Meteoritics engaged in cataloging, acquiring and loaning of meteorites.
Developed Institute Home Pages and Catalog for the World Wide Web

R.H. Jones
Manager of Experimental Petrology Laboratory
Assistant Curator of Meteorite Collection

H.E. Newsom
Member, New Mexico Space Grant Faculty Advisory Board
Educational Outreach Coordinator, Institute of Meteoritics

J.J. Papike
Director of IOM
Member of Earth and Planetary Sciences Facilities Committee
Member, Arts & Sciences Senior Tenure Committee
Chair, Arts and Sciences Committee for Analytical Laboratory Coordination (CALC)
Earth & Planetary Sciences Search Committee for a New Mineralogist.
Earth & Planetary Sciences Search Committee (Chair) for TEM Manager

C.K. Shearer
Manager, ICP-MS Laboratory
Member of Earth and Planetary Sciences Facilities Committee
M.N. Spilde
Manager, Electron Microprobe and Scanning Electron Microscope Labs.
Member, Department of Earth and Planetary Sciences Computer Committee.

Visitors to IOM

Visitors to IOM during the period of this report included:


December 2-4, 1997 Dr. Typhoon Lee, Academia Sinica, Taiwan. Hosted by A.J. Brearley and R.H. Jones.


May 11-12, 1998 Dr. Sasha Krot, University of Hawai‘i, Honolulu, Hawai‘i. Hosted by A.J. Brearley.
SECTION V

PROFESSIONAL ACTIVITIES
V. PROFESSIONAL ACTIVITIES

A.J. Brearley

Associate Editor, American Mineralogist (1994-1997)
Abstractor for Mineralogical Abstracts, abstracted papers from Analytical Chemistry
AGU 1996 Editor's Citation Award for Excellence in Reviewing

R.H. Jones

Abstractor for Mineralogical Abstracts
Fellow of Meteoritical Society, Mineralogical Society of America
Member of Mineralogical Society of Great Britain, American Geophysical Union
Member of Lunar and Planetary Science Conference Program Committee, 1997

H.E. Newsom

Associate Editor, Geochimica et Cosmochimica Acta, Journal of the Geochemical Society and the Meteoritical Society

J.J. Papike

Chair, NASA Curation and Analysis Planning Team for Extraterrestrial Materials (CAPTEM) 1997 - 1999
Member, NASA Mars Expeditions Strategy Group (MESG) 1997 - 1998
Member, NASA/Johnson Space Center, Astromaterials Working Group. Advisory to Center Director 1998-2000
Member NASA Mars Sample Handling Requirements Panel (MSHARP) 1997-1998
Member, NASA Working Group to define Mars Exploration Architecture 2000-2010
Member, NASA Working Group for Mars Sample Return Architecture
F.J.M. Rietmeijer

Panel Member, NASA Cosmochemistry Review Panel

Panel Member, NASA Mars Surveyor Program 2001 Orbiter, Lander, Rover Missions Science Review Panel

C.K. Shearer

Mineralogical Society of America Representative to American Geological Institute

AGI Ian Campbell Medal Committee

USRA member of the review committee for the Lunar and Planetary Institute

Organizer for GSA theme session, “Volatiles in Planetary Mantles and Basalts”

Keynote Speaker for Naval Research Lab TEAMS meeting

M.N. Spilde

Elected to President of the New Mexico Microbeam Users Group, April, 1998

In addition to the activities listed above, members of IOM acted as reviewers of numerous manuscripts submitted to international journals and proposals submitted to federal funding agencies.
SECTION VI
EDUCATIONAL OUTREACH
AND
PUBLIC SERVICE
VI. EDUCATIONAL OUTREACH AND PUBLIC SERVICE

1. Meteorite Museum

The Meteorite Museum is the most important focus of the Institute of Meteoritics’ educational outreach. 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 System studies. IOM personnel commonly volunteer to give guided tours of the Museum and laboratories to groups of visiting students. During the period of this report, individuals who have been given tours include O. Richard Norton who on August 27 - 29, 1997, was granted access to the IOM meteorite collection for the purpose of photography that is be included in a book on meteorites. Some of the groups given tours include: Cleveland Middle School, UNM MEMS Summer Bridge Program, UNM Engineering Department Open House, Conference on Criminal Justice, and UNM High School Science Research Program.

Several members of IOM have also visited schools in the area to give talks on various aspects of planetary sciences. Considerable interest was generated by an exhibit set up by IOM at the Astronomy Day at the Coronado Center, May 2, 1998. In addition to the public education provided by the Museum, we are routinely consulted by members of the public to help identify suspect meteorites and to provide information on meteorites and associated phenomena. We have met and corresponded with numerous people from all over the world in providing this service.

2. Public Service

C.T. Adcock
-Assisted with Astronomy Day activities at Coronado Mall, May 2, 1998
-Conducted SEM demonstrations for numerous school groups
-Analyzed suspect meteorites from sites throughout the world

A.J. Breamley
-Devised and participated in meteorite display for Astronomy Day at Winrock Mall, Albuquerque, in April, 1998
-Identified numerous suspect meteorites and provided information on meteorites for members of the public from both within and outside New Mexico
VI. EDUCATIONAL OUTREACH AND PUBLIC SERVICE

C.L. Duke

Conducted seven tours through the Meteorite Museum to groups that included school-age extracurricular tours, visiting elementary, middle, high school students, and senior citizens

Gave a presentation on ALH84001 to the Albuquerque Academy on November 18, 1997

Assisted with Astronomy Day activities at Coronado Mall, May 2, 1998

Nicholas Hanowski

Conducted tours through the Meteorite Museum

C. Herd

Coordinated and gave tours of the Meteorite Museum for visiting elementary, middle, and high school students

Assisted with Astronomy Day activities at Coronado Mall, May 2, 1998

R.H. Jones

Co-Coordinated and conducted tours of the Meteorite Museum for visiting, elementary, middle, high school, and UNM students, as well as other interested groups

Identified numerous suspect meteorites for members of the public and responded to telephone and e-mail queries about meteorites

Set up and coordinated the IOM meteorite exhibit at Astronomy Day, Coronado Mall, on May 2, 1998

H.E. Newsom

Gave space science presentations at UNM to six different K-12 classes from New Mexico schools

Gave space science presentation to MESA Summer school (20 children) at Albuquerque High School.
Assisted with Astronomy Day activities at Coronado Mall, May 2, 1998

October 3, 1997, presented lecture about Mars at the Enchanted Star Party meeting in Socorro

November 15, 1997, presented lecture about Mars to the Albuquerque Astronomical Society

F.J.M. Rietmeijer

May 2, 1998, participated in the meteorite display for “Astronomy Day in the Mall,” Coronado Center, Albuquerque

Advised Dr. S. James, School of Physics, Canberra, Australia, on a class project collecting micrometeorites

C.K. Shearer

Presentations for the following organizations: New Mexicans for Science and Reason, Albuquerque Gem and Mineral Society, Kiwanis Club, UNM Geology Club, Department of Physics and Astronomy, and Albuquerque Geological Society

M.N. Spilde


Conducted SEM demonstrations for Southwestern Junior Science and Humanities Symposium, May 1, 1998

Conducted SEM demonstrations for a tour group of Criminal Justice Scientists and numerous school groups
VII. PUBLICITY
VII. PUBLICITY

1. Departmental Activities

During the year, IOM has seen a substantial increase in the amount of inquiries concerning suspect meteorites and/or general information concerning the composition of meteorites, where to search for meteorites, and our public service for identifying meteorites. This in turn has created media attention toward our department. Our staff participates and cooperates with the various newspapers, periodicals, radio and television requests to the best of our ability and resources.

A.J. Brearley

Interviewed twice by John Mason for Channel 4 TV regarding observed fireball over southern New Mexico and about meteorites in general. Broadcast on October 3rd and 7th of 1997

Interviewed by John Fleck, *Albuquerque Journal*, on October 8, 1997, for article on meteorites which was published on October 9, 1997


Numerous interviews given about the Portales meteorite fall reported in the Albuquerque Journal and syndicated papers.

H.E. Newsom

July 10, 1997 - Interview for KOB-TV segment on Mars aired.


September 27, 1998 - Cited in an article about the origin of the Moon in the French newspaper, *FIOUE*.

March 6, 1998 - Quoted in an *Albuquerque Journal* article about the discovery of water ice on the Moon

April, 1998 - Interviewed for the radio program “Earth & Sky,” which discussed Dr. Newsom’s work on the origin of the Mars soil. The show’s broadcast aired on July 13, 1998

Numerous interviews given about the Portales meteorite fall reported in the Albuquerque Journal and syndicated papers.
M.N. Spilde


C.K. Shearer

UNM Scientists Look for Life in Rock

The Institute of Meteoritics is studying a piece of the Martian meteorite that some think contains evidence of ancient life on the Red Planet.

BY JOHN FLICK
Journal Staff Writer

The dark spot on Chip Shearer's microscope slide, no wider than a human hair, is tiny stuff to hold a key to one of science's biggest questions: Was there once life on Mars?

The spot is a bit of carbon lodged in a crack in a rock. Sliced thin to fit on a microscope slide and magnified by a high-tech electron microscope, the rock's fractured minerals look like ice on a Minnesota lake breaking up in the spring thaw.

The rock is a meteorite from Mars, and some scientists believe the carbon is evidence there was once life on that distant planet. Shearer and his University of New Mexico colleagues are working to see if that theory is right.

An electron microscope at a University of New Mexico basement magnifies Shearer's spot of carbon into a dark, narrow sinew edged in white, and Shearer huddles before a computer terminal, studying the image.

The sinew is made of carbonates, molecules a team of NASA scientists says were created by tiny bacteria that once lived in the rock.

Their controversial claim was made in the summer of 1996, setting off a fierce scientific debate. Now, the space agency has turned to Shearer and a handful of other scientists around the country to try to help settle the question of whether the life on Mars claim is right.

Shearer and Adrian Brearley, both of UNM's Institute of Meteoritics, are two of 14 scientists whose proposals to study the Martian meteorite were selected.

See UNM on PAGE A2
UNM Scientists Eye Mars Rock

from PAGE A1

won funding earlier this year from the National Aeronautics and Space Administration.

Along with money, Shearer and Brearley received precious pieces of the rock itself.

Shearer is poring over his microscopic images of the little carbonate globules and the glassy minerals around them, trying to understand how they were formed.

Were the conditions conducive to life, or was it too hot inside the rock when the carbonates were formed that nothing could have survived?

Scientists found the rock on an Antarctic ice field in 1983. By studying its chemistry, they determined it came from Mars, apparently knocked off that planet by a great collision 16 million years ago and sent into an orbit that eventually crossed Earth’s path.

Shearer’s piece is not much bigger in diameter than a pencil. It has been preserved in a microscope slide, and Shearer has placed it in a small chamber that looks like a microwave oven with a chimney.

The chimney pumps a stream of electrons onto the sample, and detectors pick up the electrons and X-rays that bounce back, giving Shearer a crystal-clear picture of the rock and its chemical makeup.

If it was too hot for bacteria to have survived when the carbonates were formed, scientists say you can rule out the life-on-Mars explanation.

Since what has come to be known as NASA’s “life announcement,” critics have offered up evidence that the rock’s minerals could only have formed at such high temperatures.

But the question is unsettled, said University of Tennessee meteorite expert Harry McSween, an advocate for the hot-rock view.

A “just right” temperature, like Goldilocks’ porridge, doesn’t prove the life on Mars case, but at least it means life was possible, according to McSween.

“It allows the argument to continue,” McSween said.

Scientists have determined that the rock itself formed 4.5 billion years ago on the surface of Mars, just as the planet was forming.

“It’s part of the old Martian crust,” Shearer said.

Since it formed, the rock has been battered once or more times by meteors or other space debris slamming into Mars, cracking and heating the rock and, in the process, creating the minerals that Shearer is looking at.

Shearer was actually studying pieces of this same meteorite before “the life announcement” and his analysis of the rock’s chemistry has made him one of the leading skeptics of the life on Mars claim.

But it’s one of the ironies of science that, despite that belief, his new work seems to support the claims of the life on Mars camp.

Ed Scott of the University of Hawaii reported evidence earlier this year that glassy minerals found in the rock’s cracks could only have formed at high temperatures, suggesting the carbonates formed at temperatures too high for life.

Shearer’s work suggests Scott is wrong, that the minerals and the carbonates formed at different times, meaning the door is left open for the life on Mars crowd.

While that might be seen to conflict with Shearer’s anti-life beliefs, that’s science, Shearer said — following the evidence where it leads him. “I just want to reconstruct the history and get out the answer,” he explained.

Even though his work supports a life-like temperature for the carbonates’ formation, that doesn’t mean it proves there was life on Mars. Shearer believes the carbonates could have been formed by ordinary chemical reactions, with no bacteria involved.

Ultimately, Shearer said, he would be happy to be proven wrong on the question of life in this meteorite.

“I’d be very happy if someone confirmed the record of life was preserved in the meteorite, Shearer said. “I just don’t see it.”

ANCIENT PUZZLE: Scientists think these tiny crystals of carbon — the ribbon of black in this University of New Mexico electron microscope image — might be evidence of life on Mars, but a UNM scientist studying the question remains skeptical.

TINY CLUES: A microscope slide contains specimens of a meteorite from Mars similar to the one being studied for signs of life.
Après une collision de la Terre avec une autre planète

La Lune s'est construite en une année

Il n’aura pas fallu de temps pour que les débris en rotation autour de la Terre s'agrégent pour former notre satellite. Les modèles informatiques ont livré leurs calculs.

On ne pensait pas la formation de la Lune si rapide. L'assemblage de débris en orbite autour de la Terre au tout début de son histoire se serait agrégé en à peine plus d'une année pour donner naissance à notre satellite. Trois scientifiques de l'Université de Boulder, au Colorado, ont reconstitué sa naissance (Nature, 25 septembre 1997) à l'aide de vingt-sept simulations réalisées sur ordinateur.

Pour mener leur étude, les Américains Robin Canup et Cian Stewart et le Japonais Shigeki Ida se sont inspirés de la théorie de l'impact géant. Un modèle établi à la fin des années 80, par deux spécialistes de géologie terrestre et cosmique.

Robin Hewson, de l'Institut des météorites de l'Université du Nouveau-Mexique, à Albuquerque, et Stuart Ross Taylor, de l'Université nationale australienne de Canberra, la Lune est née du « scalp » de la Terre par un autre rasant. Il y a quelque 4,5 milliards d'années, une planète en formation sensiblement plus petite que la Terre, d'une taille comparable à celle de Mars, percuta l'ébauche de notre globe. La rencontre est catastrophique.

La première étape est très rapide. Elle dure environ quarante-huit heures. Le noyau métallique de la planète incidente se sépare de son manteau siliceux. Il rebondit quelques instants puis est absorbé par la Terre qui l'intègre à son propre noyau. Les autres matériaux, constitués, pour une part, des goulotailles de manteau de l'impacteur et, pour l'autre, de morceaux arrachés au manteau terrestre, sont jetés en orbite autour de la Terre sous forme de violents jets de matière. Ils forment alors un essaim de matière liquide qui finit par se refroidir et se solidifier. Un disque dur entoure alors la Terre.

À ce stade, les matériaux les plus éloignés de la Terre entrent en collision et fusionnent pour former un satellite. C'est sur cette deuxième étape, hier encore largement méconnue, que se sont penchés les experts. À travers vingt-sept modèles informatiques, ils ont recréé 1 000 à 2 700 objets de taille variable afin de reconstituer l'assimilation originale.

« Dans chaque modèle, les objets s'agrègent inévitablement en moins d'une année pour former un satellite situé à environ 22 500 kilomètres de la Terre », confie Robin Canup. Les débris en périphérie du disque se rassemblent facilement, tandis que ceux de la région plus proche du globe semblent rebondir les uns sur les autres sans jamais se foncer. « Probablement en raison de la présence de la planète de Roche (1), » explique Robin Canup. « Une fois que les objets en périphérie sont rassemblés, le matériau situé à l'intérieur du disque retombe alors immédiatement sur la Terre, à chaque simulation, seulement 15 à 40 % du matériau total se regroupent pour former une Lune. »

Ainsi, l'impacteur devait-il être beaucoup plus massif que prévu, d'une taille comparable à deux ou trois fois celle de Mars. Les chercheurs de Boulder ont calculé que les débris menaient la route autour de la Terre en seuls ou dix heures et qu'il suffisait d'attendre un millier de rotations, à peine plus d'une année, pour voir les débris plus gros s'assembler et former un satellite.

Michel Festou, chercheur au laboratoire d'astrophysique de l'Observatoire Midi-Pyrénées, à Toulouse, se réjouit aujourd'hui des résultats des Américains.

D'un système remarquablement stable et très particulier, les chercheurs ont réussi à rétrograder le passé grâce aux appareils de simulation dynamique dont sont dotés les laboratoires depuis quelques années. Les missions américaines et japonaises, Lunar Prospector, Clementine et Lunar A, confirmeront peut-être ce scénario avant le début du troisième millénaire.

Mélanie PIRARD
LANL: Ice Exists on Moon

Findings Could Alter Exploration of Space

BY JOHN FLECK
Journal Staff Writer

Los Alamos National Laboratory scientists have found evidence of ice on the moon, a finding that could revolutionize space travel and advance our understanding of the formation of our solar system.

Using an instrument aboard NASA's Lunar Prospector spacecraft, the Los Alamos team found traces of ice in soil at the moon's north and south poles, apparently the remains of billions of years of bombardment by comets.

"In one hundred years, they may consider this one of the biggest discoveries in space exploration of the 20th century," said University of New Mexico planetary scientist Horton Newsom.

The discovery, based on data collected over the last seven weeks by Lunar Prospector, was announced at a NASA news conference Thursday.

The water-containing lunar soil is desert-dry by Earth standards, but plenty wet enough to provide both water and the raw materials for rocket fuel, scientists said.

"This is a significant resource that will enable a modest amount of colonization for centuries," said Los Alamos researcher Bill Feldman.

Instead of the huge cost of shipping water and rocket fuel from Earth, it could be made on the moon, creating a lunar truck stop to serve our exploration of the solar system.

"For the first time, when we go to another planetary body as we did in Apollo, you can fuel up," said Alan Binder, chief scientist for Lunar Prospector mission.

"That fuel can also be used to go on to Mars and the rest of the solar system," Binder said.

See LANL on PAGE A2
LANL Finds Evidence of Ice on Moon

from PAGE A1

During the NASA news conference, "It opens some possibilities that just weren't there before," Mike Duke, of the Lunar and Planetary Institute in Houston, said in a telephone interview Thursday afternoon.

Feldman called the data preliminary, saying more work is needed to determine how much water there is. But there's no doubt that it's in significant quantities, he said.

Binder and Feldman estimate there's at least 15 million tons of water on the moon, and possibly as much as 250 million tons, spread over the soil around the north and south poles of the moon.

"We are certain there is water," Binder said. "The uncertainty is how much."

The water is concentrated in patches near the moon's poles, and based on their preliminary data, the scientists believe a typical ice-bearing cubic yard of soil could contain between one and five gallons of water.

According to Binder, it's a simple matter of heating the soil to boil out the water, then condensing it with the same technique used in old-fashioned stills.

"Obtaining the water from the soil is really quite simple," Binder said.

NASA estimated there's at least enough water for a community of 2,000 people for more than a century, without recycling.

The Associated Press

WTI HENRIQUS: This artist's conception of the Lunar Prospector shows the spacecraft in lunar orbit with its instrument mast deployed. The robot craft has scanned the lunar surface to find signs of ice on the moon's poles.

Scientists have long known it was possible for the moon to have water, but where the Apollo missions from 1969 to 1972 landed astronauts near the planet's equator, all they found were rocks and black soil. Sunlight had apparently baked away whatever water might have been left over from when the moon was young.

Apollo left the moon's north and south poles untouched. However, and scientists had theorized water might have survived, turned into crystals permanently sealed from the sun's heat rays.

That is what Feldman, Binder and their colleagues believe. The discovery was made by an instrument called a neutron detector, built by Feldman and his Los Alamos colleagues for the National Aeronautics and Space Administration's Lunar Prospector.

The instrument collects neutrons, a type of subatomic particle, bouncing around among water molecules up to 18 inches deep in the lunar soil.

NASA launched Lunar Prospector in January, and it's been orbiting the moon for the last seven weeks collecting data. It's only been in the last 10 days that it's become clear there is water on the moon's surface, Feldman said.

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By JOHN FLECK

Los Alamos National Laboratory scientist Sylvester Maurice walked next door to colleague David Lawrence's office a week and a half ago with a graph showing a simple way to explain the complex that scientists mounted on NASA's Lunar Prospector spacecraft to hunt for water's "feet signs of water for a community of 2,000 people for more than a century, without recycling.

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Johnson gives state’s lawyers good workout

If lawyers were only a tiny bit as vocal as their critics would have us believe, the state Bar Association should be among the first to endorse Republican Gov. Gary Johnson for a second term. Rarely has a governor, by his actions, thrown so much business to so many attorneys, much of it at taxpayers’ expense.

According to estimates — described as “way low” — published last December in the New Mexico news magazine Crosswords, in excess of $400,000 in “costs and covering” in tax money alone had been spent through 1997 on legal costs borne by the state in respect of the state’s securities lawsuits. Johnson has managed to create for himself — and his state — since taking office. And there’s no telling how many additional hundreds of thousands of dollars have been paid to attorneys by the various groups and individuals who have found it necessary to do battle with Johnson over his frequently unconstitutional exploits.

Now is the end in sight. Witness the current legal battle to get state welfare recipients the benefits they were denied when the governor refused to continue enforcing the legal welfare scheme he whipped up all by his lonesome after vetoing welfare reforms passed by the 1997 Legislature.

Johnson’s state-paid attorneys are presently negotiating a resolution to this affair. Under a so-called “confidentiality agreement” signed by attorneys on both sides of the dispute, details of any settlement that might emerge from these negotiations are sketchy. By some estimates it could exceed $2 million.

Yet even the governor’s own top advisors concede that, following his veto of the ’97 welfare reforms, it is now possible for the state to lose a court decision, and it is yet unknown how much money may have been spent in the process.

This is a good workout for the state’s lawyers, but it’s bad news for the rest of us.
ASTEROIDS from D1

unless we do something about it. In fact, in 1908 a cosmic object exploded with the force of a large hydrogen bomb in the atmosphere over Tunguska in Siberia, fortunately a virtually unpopulated area at that time.

At the present rate of discovery, it will take several centuries to create a nearly complete census of potentially hazardous large asteroids. The recommendation of the NASA study is to spend a few million dollars a year to speed up the process of identifying and determining the orbits of possibly hazardous objects, such that in 25 years most of the possible asteroid threats can be identified.

The good news is that there will probably be many years to decide on a strategy to deal with an object that might really hit the Earth. For example, the recently discovered asteroid 1997 XF11 will not pass near the Earth until October 2028.

Clearly, research on the nature of these objects and strategies for dealing with them deserves more attention from government funding agencies, which have not yet responded to the results of the studies already conducted.

Part of the problem with addressing these issues is the time scales of the hazards. Politicians do not usually deal with problems that may only be faced by their great-grandchildren.

The basic research that revealed this threat required the work of dozens of scientists over many decades, and the proposed solution involves studies over more decades to come.

The federal government, when it acts, supports research mainly through grants to universities, such as the University of New Mexico, which is also supported by the state of New Mexico.

Even though university scientists perform many other important roles that directly benefit the public, such as education, the research they conduct today may have profound implications for the long-term survival of the human race.

Newsom is a research professor in the Institute of Meteoritics and department of earth and planetary sciences at the University of New Mexico. He has worked for more than 20 years on meteorites, the origin of the Earth and moon and the possible environments microbial life could inhabit on Mars. Newsom is also involved in educational outreach activities for K-12 students in New Mexico.
Meteor Fragments Fall in N.M., Tenn.

By Richard Benke
The Associated Press

Not much doubt about it: Meteor fragments fell from the sky during the weekend in eastern New Mexico — and apparently in Tennessee.

One crashed through a couple's roof in Nashville, another through a barn roof in Portales and a third burrowed into a Portales back yard. All three falls occurred at roughly the same time Saturday morning.

Scientists at the University of New Mexico and Sandia National Laboratories are interested in studying the samples. In fact, the largest of the three meteorites will be brought here to UNM next week.

Sandia physicist Mark Boslough said if the fragments are from the same meteor, at least one likely separated before entering the atmosphere. He said the distance between the Nashville and Portales crash sites, about 1,000 miles, "implies they were separated in space."

Horton Newsom, a research professor at UNM's Institute of Meteoritics, said he's sure the Portales fragments are from a meteor, and there are probably more.

"There's a good chance there were multiple fragments," he said.

The one that crashed into Nelda Wallace's back yard was eight inches by 12 inches, weighed 37 pounds and, at first, was "too hot to handle," Wallace said. She said there were several explosive sounds overhead, then the rock whistled in and crashed in a big cloud of dust as she looked on.

"It's quite rare to have a fall that size," Newsom said. "The person who got it is quite lucky. Fortunately no one was hurt. There is still no known case of anyone being killed by a meteorite."

Portales meteor buff Skip Wilson said he looked at Wallace's meteorite and at the fragment that crashed through Robert Newberry's Portales barn Saturday morning. Wilson said he believes both, crashing about four miles apart, came from the same meteor.
Researchers to probe piece of meteorite

Associated Press

ALBUQUERQUE, N.M. — It is about 4.5 billion years old, has traveled many millions of miles and, at 37 pounds, is probably the largest meteorite ever seen to fall in New Mexico.

Scientists at the University of New Mexico on Tuesday welcomed the football-sized chunk of asteroid that crashed into Nelda Wallace's back yard in Portales June 13.

So far, about 10 pieces of the meteor have been found around Portales, a city of nearly 11,000 in eastern New Mexico near the Texas Panhandle, said Adrian Brearley, senior research professor.

"This kind of meteorite is very unusual," Brearley said at a university news conference Tuesday. "It's a mixture of iron, nickel and silicate. The nickel is dissolved in it — like an alloy."

Of four meteorites recorded as being seen crashing to earth in New Mexico and this probably is the largest. The next largest fell in northeastern New Mexico in March 1933, Brearley said.

In fact, this one could be from the same asteroid, scientists speculated Tuesday.

Wallace and her brother-in-law, Fred Stafford Jr. of Redlands, Calif., were having coffee around 7:30 a.m. June 13 when they heard a series of booms in the sky. Then, closer, came a roaring sound Wallace compared to a freight train and a jet plane.

"It went shееее-ew and landed," she said. "I expected to find a piece of a jet airplane."

Nelda Wallace of Portales, N.M., sits next to a 37-pound meteorite Tuesday at the University of New Mexico in Albuquerque. The meteorite, whose age is estimated at 4.5 billion years, landed in back of her home earlier this month.

She stood about 130 yards away as it chiseled out a 10-by-12-inch hole in her calciche clay driveway. She said she told her daughter: "Guess what? I've been bombed."

Brearley, who came here from Manchester, England, 12 years ago, and fellow researcher Horton Newsom, obtained a fingernail-sized slice of the meteorite Tuesday for testing.

"It could help scientists study the origins of the universe, both said.

They also want to know if it came from the same asteroid as the Pasamonte meteorite in 1933, which crashed about 30 miles west of Clayton, N.M.

The Pasamonte meteorite could "plausibly" have come from an asteroid about 325 miles in diameter that is known as Vesta. Vesta is orbiting the sun about 125 million miles away from Earth in the asteroid belt between Mars and Jupiter, Newsom said.
**Scientists test ‘unusual’ meteorite**

**BY RICHARD BENOIT**
Associated Press

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**NASA Stages Mars Tests in N.M.**

Mock Water Probes Fired Into Ground

**BY JOHN FLECK**
Journal Staff Writer

NASA scientists have been using the New Mexico desert as a stand-in for Mars in tests to develop the space agency’s newest Mars lander.

Using Sandia National Laboratories equipment and a test range in the foothills outside Socorro, the scientists have been firing grapefruit-sized mock space probes into the desert soil.

The spacecraft they are developing, NASA’s Deep Space 2, will be launched to Mars in 1999 in search of water beneath the ground near Mars' south pole.

There was once enough water on Mars to cover the planet hundreds of feet deep, said Ginny Gulick, a planetary geologist at NASA’s Ames Research Center in California.

Pictures of the planet show valleys that appear to have been carved by massive floods. "They required a lot of water to form," said Gulick.

But today Mars’ surface is largely dry, with the water either evaporated into space or collected underground as ice or deep groundwater.

Scientists have theories about how much water is likely to be underground, but they’ve not been tested, said Horton Newsom, a University of New Mexico planetary scientist.

So Deep Space 2’s scientists want a spacecraft that can burrow into the planet’s soil to see how much, if any, water is there.

To accomplish that, they are trying a daring technique — slashing a small lander onto the surface of Mars with enough force to fire a harpoon-like scientific instrument up to 6 feet into the ground.

Building instruments that can survive the high-speed impact is a tough challenge, which is why the scientists have spent more than a year in New Mexico banging prototypes into the ground to see how they hold up.

"It really is unprecedented," said Sarah Gavit, Deep Space 2 program manager at NASA’s Jet Propulsion Laboratory in California. "We’re out on a limb."

A 4-pound prototype of the lander passed a key test in late October when it survived being crashed into the ground at 400 miles an hour, the National Aeronautics and Space Administration announced this week.

The lander is like a small ball with a harpoon inside it. The ball hits the ground and stops, while the 4-inch-long harpoon keeps going, burying itself in the Martian soil.

From underground, the harpoon’s water detecting instruments collect data about what the soil is made of, sending the information up a cable connected to the ball. The ball then radioed the data back to Earth, telling scientists how much water it found.

To test their concept, the scientists have been using an air gun, a device with a 7-inch barrel that uses air pressure to fire the probe at speeds and angles that simulate the spacecraft’s impact on Mars, according to Gavit.

The work is being done at the Energetic Materials Research and Testing Center at the New Mexico Institute of Mining and Technology in Socorro.

If Deep Space 2 works, the scientists will accept more than just learning about Mars, Gavit said. The little probe will also be the forerunner of a generation of 21st century spacecraft visiting other planets and their moons.
Scientists analyzing 37-pound meteorite

The Associated Press

ALBUQUERQUE, N.M. — It is about 4.5 billion years old, has traveled many millions of miles and, at 37 pounds, is probably the largest meteorite ever seen to fall in this state.

Scientists at the University of New Mexico on Tuesday welcomed the football-sized chunk of asteroid that crashed into Nelda Wallace’s Portales backyard June 13.

So far about 10 pieces of the meteor have been found around Portales, a city of nearly 11,000 in eastern New Mexico near the Texas Panhandle, said Adrian Brearley, senior UNM research professor.

“This kind of meteorite is very unusual,” Brearley said at a UNM news conference Tuesday. “It’s a mixture of iron, nickel and silicate. The nickel is dissolved in it — like an alloy.”

Of four meteorites recorded as being seen crashing to earth in New Mexico, this probably is the largest. The next largest fell in northeastern New Mexico in March 1933, Brearley said.

In fact, this one could be from the same asteroid, scientists speculated Tuesday.

Wallace and her brother-in-law, Fred Stafford Jr. of Redlands, were having coffee about 7:30 a.m. June 13 when they heard a series of booms in the sky. Then, closer, came a roaring sound Wallace compared to a freight train and a jet plane.

“It went siiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii and landed,” she said. “I expected to find a piece of a jet airplane.”

Brearley, who came here from Manchester, England, 12 years ago, and fellow UNM researcher Horton Newsom, obtained a fingernail-sized slice of the meteorite Tuesday for testing.

They also want to know if it came from the same asteroid as the Pasamonte meteorite in 1933, which crashed about 30 miles west of Clayton, N.M.

The Pasamonte meteorite could “plausibly” have come from an asteroid about 325 miles in diameter that is known as Vesta. Vesta is orbiting the sun about 125 million miles away from Earth in the asteroid belt between Mars and Jupiter, Newsom said.
UNM To Study Mars Rock
Grants Allow Pair To Analyze Meteorite for Signs of Life

By JOHN FLECK
Journal Staff Writer

Two University of New Mexico scientists have received grants to study samples from a meteorite some scientists believe shows evidence of past life on Mars.

The scientists hope to answer questions about whether ancient Martian bacteria could have created unusual formations in the rocks, said Chip Shearer, of UNM's Institute of Meteoritics.

Shearer and Adrienne Brearly, also of the Institute of Meteoritics, are among 14 scientists whose proposals to study the controversial meteorite were recently accepted by the National Aeronautics and Space Administration.

The meteorite became famous last summer when a team of NASA scientists announced it had found possible evidence for ancient Martian life in the meteorite which was discovered in Antarctica.

The scientists reported they found carbon molecules they believed were left by bacteria-like organisms 3.8 billion years ago in a Martian rock. The rock was knocked off Mars in a dramatic collision and landed as a meteorite some 13,000 years ago in Antarctica.

Shearer and other scientists who have also studied the meteorite have offered data conflicting with the finding, and NASA has launched a major effort to try to sort out the scientific claims.

The scientists were given a total of about $100,000 for their research, Shearer said, and they will also be given tiny slices of the meteorite for their analyses.

Such samples are in short supply. The meteorite, discovered in 1984, weighs less than 5 pounds. Shearer and Brearly will each get two samples to study, Shearer said.

The scientists will be trying to determine the temperature at which carbon molecules in the meteorite formed.

Those carbon molecules are central to the claim that ancient microbes once lived in the rock, but some scientists have suggested the so-called "carbonates" were formed at temperatures too high to support life.

"What we're both doing is looking at whether these carbonates formed at high temperatures or low temperatures," Shearer said.
ANNUAL REPORT

Department of Economics
University of New Mexico

July 1, 1997 - June 30, 1998

David S. Brookshire
Chair
1. Significant Developments During the 1997-1998 Academic Year

Progress continues to be made toward departmental goals. The extension of the experimental lab into the teaching arena, evaluation of the undergraduate program through the outcomes assessment program and the formal kickoff of the Association of Undergraduate Economics Students (AUES) were accomplished. The initial stage of a graduate program outcomes assessment was undertaken. A peer review of teaching process was implemented. The faculty continue to seek outside research funding.

Several professors began to utilize the University of Arizona software in the lab for graduate and undergraduate classes. In addition, the lab was utilized by numerous students for their research program. These efforts led to the presentation by students of their research at professional meetings.

While the evaluation of the undergraduate program is an ongoing process via the outcomes assessment, the initial effort yielded insights into the knowledge base of our students. A decision was made to utilize the same procedures for the second year. It was found that interpretation of the results could be accomplished in only a limited fashion with one year’s worth of data.

The formation of the AUES has greatly enhanced our ability to interact with the undergraduates. The officers of AUES regularly interact with the undergraduate director and provide valuable input for our program.

The necessary data for the graduate outcomes assessment were identified. This effort will rely upon data that are already collected from the graduate program.

The implementation of the peer review process proceeded satisfactorily. All those involved found the process to work well. The process provided valuable information to both the individual being reviewed as well as the faculty as a whole.

Finally, the faculty continues to seek both internal and external research funding. Sources for the external funding have included NSF, USGS and USEPA.

2. Significant Plans

The department intends to focus on the outcomes assessment process. Two years of data are available for the undergraduate program and this is the start up year for the graduate program.
For the first time in many years, the three Ph.D. fields are fully staffed. The graduate committee will be examining the program. Various proposals are on the table for fine tuning the program.

The outreach to the undergraduates will continue. Procedures to establish an undergraduate internship program will commence this year.

3. Appointments to Staff

During the 1997-98 academic year, we successfully completed a search for one new faculty member who joins us beginning in the fall 1998 semester.

Deborah Anderson joins the Department of Economics in August 1998 in Labor Economics with interests in gender issues and balancing work and family responsibilities, and the economics of education.

4. Separations from Staff


5. Publications

Six of the department faculty had 11 journal articles and one book chapter accepted for publication.

6. Outside Professional Activities

Ten faculty members presented 20 papers at professional meetings.

7. Research Grants and Contracts Funded

The department received the following grants to fund faculty and graduate research during this academic year.

*U.S. Geological Survey*
"Economic Modeling Frameworks Utilizing Earth Science Information for Hazard Mitigation"
Brookshire, D.
$25,000
August 1997 to August 1998

*Western Alliance to Expand Student Opportunities*
"Intergenerational Responsibility for Environmental Resources"
Chermak, J. and K. Krause
$2,750
May 1998 to August 1998

The following grants are from internal sources.

*Research Allocations Committee, UNM*
$1,935

*Research Grants and Contracts Submitted*

In addition to the grants funded above, the faculty submitted the following proposals for consideration.

*Agency for Health Care Policy and Research*
"New Mexico Medicaid: Children's Access to Health Care Utilization and Medicare Expenses" Her, P.

*Environmental Protection Agency*

*National Science Foundation*
"The Compliant, the Confused, and the Corrupt: How Complexity Affects Taxpayer Behavior" Krause, K. and M. McKee

"Experimental Investigation of the Tax Compliance/Tax Avoidance Decision" Krause, K. and M. McKee

"An Experimental Analysis of Economic Behavior in Children" Krause, K.

*Research Allocations Committee, UNM*
"Length of Residence and Community Effects in Determining Youth Behavior in Albuquerque" Binder, M.

8. Attachments

*Bachelor of Arts Degrees Conferred*
49 Bachelor of Arts degrees conferred

*Bachelor of Science Degrees Conferred*
3 Bachelor of Science degrees conferred
Master of Arts Degrees Conferred
Gerald Hendrickson
David Hineline
Christopher Moeller
Michael Ripperger
Recep Seymen

J. Raymond Stuart Award
Josha Antos, Jason Kist, Princy Sethi, David Scrogin, and Hale Thurston received this honor.

Distinguished Alumnus
James B. (Bud) Mulcock, Jr. received this honor.
### Table 1
**UNM Department of Economics**  
**Sponsored Research Money Generated**  

<table>
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<tr>
<th>Academic Year</th>
<th>Grant Research</th>
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<tr>
<td>1997-98</td>
<td>29,685</td>
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### Table 2
**UNM Department of Economics Degrees Awarded**  

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Bachelors Degrees</th>
<th>Masters Degrees</th>
<th>Ph.D. Degrees</th>
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The past year, as perhaps are all years, has been marked by transition and change; however, perhaps not as it has been in recent years, most department members would probably agree that this has been a good year. Enrollments in our Freshman English classes were substantially higher in F97 as UNM enjoyed a welcome increase in new students. The promise of enrollment increases rippling through our curriculum as these new students progress toward their degrees makes the future look bright indeed.

This year we made two good hires in an important area of our curriculum (Creative Writing, Fiction), and we have started several positive initiatives in nearly all facets of our departmental endeavors. Faculty, staff, and students are engaged in their work and are finding satisfaction in their productivity.

The task before us is to solidify and substantiate the gains we have made in this year so that they carry on into successive years and to encourage continued prosperity and growth in the areas we have set before us as future challenges. Facing these challenges is a welcome task.

In the report that follows I offer an overview of some of the specific elements of transition and change that have marked this year. Following my introductory overview, the Directors of departmental programs offer more detailed reports for their specific areas.

1997/98 Departmental Program Directors
I became Department Chair at the end of the Summer Session, in August. Cheryl Fresch stepped down as Undergraduate Director in the prior year; Jim Thorson took on this position starting August 1997. Gary Harrison, Wanda Martin, Rick Johnson-Sheehan, Mike Hogan, and Helen Damico continued as Graduate, Freshman English, Internship and Professional Writing, ESL, and Medieval Studies Directors, respectively. Pat Smith was Director of Writing for most of the year, stepping down in May 1998 when Sharon Warner took over the post.

1997/98 Departmental Staff
Margaret Shinn, DeeDee Lopez, and Pat Lockhart continued as Department Administrator, Freshman English (FE) Academic Advisor, and Administrative Assistant to the Chair, respectively. There were two new hires: Ona Savage joined the staff in August as Academic Advisor for the Undergraduate and Graduate programs; in September, Matt Allen became the Department Technical Writer.
Faculty Separations, Retirements, Hiring
Assistant Professor Monica Espinosa completed her terminal contract year in May 1998 and left our faculty, having been denied tenure the year before. Professors Bob Fleming and Ivan Melada retired in December 1997.

Two new tenure-track Assistant Professor colleagues (James Colbert and Julie Shigekuni, see discussion below in the Creative Writing section) were hired in Creative Writing, Fiction, to begin in August 1998.

Professor Colbert was a Visiting Assistant Professor in our department for AY97/98, having been the first choice to emerge from the tenure-track search that was frozen in January of 1997 and accepting a Visiting position. The job search that produced him as its first choice was re-instated in the Fall of 1997; Colbert gave a formal presentation of his work to the faculty and participated in a formal job interview; he was offered the position; and he accepted.

Professor Shigekuni was one of two candidates invited for campus interviews following a national search that produced more than 100 applicants and interviews of a dozen candidates at the MLA meeting in Toronto. Professor Shigekuni is the author of the novel A Bridge Between Us; she accepted our offer in late February.

New Academic Initiatives
Several new academic initiatives begun in the past year promise to continue to enrich our curriculum into the future.

Victorian Month and "Nicholas Nickelby" Professor David Jones directed a production of the play-adaptation of Dickens's novel, Nicholas Nickelby, in April of 1998. On very short notice starting late in the F97 term, Professor Gail Houston, working with Jones and with Professor Witemeyer and three graduate students, organized a month-long celebration of Victoriana to coincide with the presentation of "Nickelby."

There were weekly lectures from local and national experts on the Victorian period; a marathon, week-long reading of the Dickens novel itself (in which everyone from English faculty, staff, and students, to UNM President Peck, to local TV news anchors participated); displays of Victorian art and photography; and even a tea party/fashion show and croquet on the green (well, actually at the Duck Pond). Funding for these events came from our department, other A&S departments, the College of Arts and Sciences, the NM Endowment for the Humanities, and the President's Office at UNM. It was a resounding success, with attendance at even the most academic of the lectures in excess of 30 people.

This activity is the first of what will become annual spring events in which the English and Theater Departments collaborate (and, eventually, involve other University departments as well) to offer a major play and a lecture series.

Preparations for the Spring 1999 event, featuring Shakespeare's Hamlet, are
Departmental Fellows  We have created designated Departmental Fellow positions for graduate students assigned duties associated with some aspect of the department’s mission. For examples, Departmental Fellows act as *Blue Mesa Review* and *American Literary Realism* Assistant Editors, as Assistant Internship Director, as Victorian Month Fellows, and as Assistants to the Director of Freshman English and the Medieval Studies Director. In these positions they receive a small, extra-compensation stipend for the work they do as they assist a faculty member. Some Fellows receive course release if they are a TA. This program helps us to encourage faculty to write graduate students into grants they propose and to create small forms of graduate assistance in addition to the TA appointment.

Outreach  The department has long had a variety of outreach programs, the more prominent being those associated with the Medieval Studies Program and with Creative Writing. Those programs continued their efforts to work with local and state-wide schools and with the non-academic public.

New this year, the Victorian Month festivities included an outreach to the public schools, and future plans for the spring program will increase that involvement. The Creative Writing faculty has also begun new programs of this sort, including expanded our reading series, a writer’s conference for the summer, involving high school students with the editing and production of *Blue Mesa Review*, and the creation of an internet-based, online writer’s workshop for public school students. In every academic initiative we conceive, we now consider how we can build outreach to the schools and the non-academic community into our efforts.

*La Puerta*  Beginning F97, English 101 students used as their primary textbook, *La Puerta*, a reader of essays and other writings whose authors are entirely members of the UNM community -- faculty, staff, and students. The success of *La Puerta* is, in part, psychological: only students at UNM use this book, and it serves as a tangible token of 101 students’ membership in our academic community. Preparations for a second edition of the book began in June 1997.

**Writing Proficiency Portfolio**  In part responding to the enrollment pressures created by the increased number of Freshman entering in F97, the FE program started the Writing Proficiency Portfolio program. This program allows students who earn a B or better in 101 (or who are exempt from taking 101) to present a portfolio of three essays written in other classes to fulfill the second semester of their University Writing requirement. Students must pass the portfolio or 102 before they move into upper division status as determined by the number of credit hours completed. No academic credit is given for the Portfolio; it merely substantiates a student’s fulfillment of the writing requirement.

This program should allow us to move some of the burden for teaching (and requiring) writing out of our department and into the 100-200 level courses offered.
across the university. This will give us some greater control over the number of
sections of 102 we have to offer in a given term. It should also allow capable lower
division students to focus their energies in the content-areas of their choice. We
hope to see this program continue to grow, especially with the full implementation
of the Core Curriculum in Fall 1999.

Medieval Studies Institute In this year, the Medieval Studies Program,
which has long been closely associated with our department, became a newly
organized, interdisciplinary Medieval Studies Institute, directed by our colleague,
Professor Helen Damico. The new Institute promises to enrich the outreach
programs and academic events that have long been associated with our sponsorship
of the Medieval Studies Program.

New Administrative Initiatives
Several new administrative initiative began in the past year.

Policy & Personnel Committee Is now composed of members who serve
staggered terms so that in any given year two members serving two-year terms
continue from the prior year and two new members are elected to two year terms; a
fifth member is appointed by the Chair to serve a one year term.

“Markers of Merit” Working with P&P’s advice, the Chair devised a
point system for determining differential salary increases based on relative merit in
teaching, publication, and service. Teaching and publication are each worth 40
points; service is worth 20. There are several individual indices in each of the
categories. The final tally averages the totals for the past three years.

The Chair’s administrative staff derived the first accounting of points working from
the Annual Biographical forms submitted in January. These tallies were returned to
faculty for their review and then re-tallied and returned for a final review. I met
personally with individual faculty who had any questions about the results.

Faculty were informed of their own total and received a list of the departmental
scores (with no names attached) so they could see their relative ranking. In May, the
department voted at my suggestion to consider the best two of the past three years in
computing the average. That policy will start in S99. One or two faculty expressed
misgivings about quantifying merit, but all others appreciated the openness of the
process and the manner in which it might help them direct their future efforts.

Spending the carry-forward The department had a large carry-forward in
its budget from the past several years. A portion of this was allocated to each faculty
member to use as he/she wished. A larger portion was allocated to P&P, which
took suggestions from the faculty and used the money to install internet ports in all
departmental offices, help defray graduate student travel requests, and purchase
miscellaneous equipment ranging from computers to a slide projector. This effort
deflected some concern away from our lack of salary increases and also helped foster
the notion that individuals should decide how some money is spent and committees can decide how to spread expenditures around the department to benefit the greatest number. We retain a cautionary carry-forward in our budget.

Web page re-design Working with Technical Writer Matt Allen and graduate student Rick Mott, the Chair directed redesign of the graphical interface of the department’s web page in the fall of 1997. The new design incorporates more news, an interactive alumni page, and links to associated activities.

Brochures We began evaluating our departmental brochures as part of the re-design of the web page. New brochures for the graduate program are available this fall, 1998, as a result of this effort in the past year.

New Staff Initiatives
With two new staff members and newly assigned duties, the past year saw some new initiatives related to staff.

Bi-weekly meetings The Chair began bi-weekly meetings with the staff in the fall term to discuss how we perceived our work and our interaction with each other and with the faculty.

Merit evaluations/raises With short notice we faced the necessity of devising a merit review by incorporating our discussions of staff responsibilities from our bi-weekly meetings into an evaluation procedure. Staff wrote self-evaluations that were read and commented on by the Chair and at least one faculty member. From these merit evaluations were made.

Technical Writer and Academic Advisor Positions The addition of Ona Savage to the staff as Academic Advisor for the Graduate and Undergraduate programs represented the consolidation of what had been, briefly, two positions for the past two years. Ms. Savage is an experienced academic advisor, and her experience plus the dedicated assistance of a work-study student has, so far, made this arrangement workable. Our bi-weekly meetings allow us to monitor the progress of this alignment of duties. Matt Allen has taken the Technical Writer’s position onto the internet. He develops and maintains our web page in addition to producing the print materials past technical writers have worked with.

Publications and other Accomplishments
This report is filed for the fiscal year (June to June) and the Annual Biographical Supplements that record this information are filed annually (January to January), so I really have no accurate record available from which to report on this topic. The 1998 Supplements aren’t made yet (and won’t be until December/January) and the 1997 Supplements make no distinction for work produced before or after June. Because the information is available elsewhere, I decline to present an inaccurate account here. Next year I’ll keep track and offer a summary of this information.
Conclusion
This has been a year of new beginnings, and we are pleased with the promise of our efforts. We look forward now to the challenge of still more new beginnings and to confirming not just the promise but the tangible results of the projects newly begun in the year just past. The reports that follow have been edited from reports filed by each departmental director.

Graduate Program Annual Report: 1997-98  Gary Harrison, Director

Following from the initiative begun in 1996-97, the English Graduate Office aimed to obtain approval for, and prepare for the implementation of, the revised Master's program curriculum and the restructuring and expansion of 400 and 500-level courses. These goals have been accomplished.

The English Graduate Office also aimed to improve efforts for recruitment and retention of graduate students and improve communications by developing a brochure/poster, informational booklet, and internal policy and procedures manual. The booklet and brochure have been completed and will be published in June 1998; the policy and procedures manual is in draft and will be published in July 1998.

In addition, the English Graduate Office continued its efforts to promote a strong sense of intellectual community between and among faculty and graduate students; to prepare Ph.D. students for the job market; and to assist graduate students academically and financially to attend conferences in order to present their research. By sponsoring two colloquia each semester, setting up a series of bi-weekly "brown bag lectures," helping to sponsor the EGSA "Southwest Symposium," by running a bi-weekly series of job-placement workshops (Harrison and Rick Johnson-Sheehan) and by implementing departmental Travel Grants in the amount of $225.00 each, These goals too were achieved.

What follows is an itemized description of the activities of the Graduate Committee, a description of graduate student awards for 1997-98, as well as information on enrollment, graduation, and admissions.

Graduate Committee
Gary Harrison, Director of Graduate Studies for 1997-98 was chair. Voting members of the graduate committee for 1997-98 were: Helen Damico (Fall 96 only), David Jones, Charles Paine, Sharon Warner, Hugh Witemeyer (Spring 97 only), Carolyn Woodward; the EGSA graduate student representative was Andrea Penner; and the ex-officio members were Wanda Martin, Director of Freshman English, and Pat Smith, Director of Creative Writing. The Graduate Committee voted on a number of policy issues (see below); approved the Fall, Spring and Summer M.A. and Ph.D. Comprehensive Examinations; reviewed applications for Fellowship and Travel Grants; and reviewed applications for admission.
Ona Savage joined the English Department in August, 1998, as Academic Advisor to the undergraduate and graduate programs. Her extraordinary initiative has already made its marks on the English Graduate Program. Ona, assisted by Matthew Page, developed and modified the database we use to track graduate student progress, helped to set up the recruitment program, reorganized and brought us up to date on the filing system, and has rapidly become a key source of reliable information and a key liaison between the English Graduate Office and the Office of Graduate Studies.

Policy Changes

1. February 1998: Approved a Ph.D. reading list for Folklore (on file)

2. April 1998: Reduced seminar requirement for Ph.D. from three (12 hours) to two (8 hours)

3. Established format for 50-item Master’s Comprehensive Examination (sample on file) 3 Parts (4 hours). Part I: (30 minutes) Identifications; Part II: (1 1/2 hours) Short Answer--three comparative questions dealing with genre, form, themes, motifs in literature; Part III: (1 1/2 hours) Essay--one long essay discussing the historical importance of a particular text.

Graduate Student Awards
During the 1997-98 academic year, English Department graduate students won the following awards, fellowship and scholarships:

Departmental Awards:
Buchanan Arms Award for Outstanding Achievement in Graduate Study: Jeanette Riley
D.H. Lawrence Fiction Award: Ada Chamberlain for her story “Buoyancy”

College/University Awards:
Deans Dissertation Fellowship: Renée Faubion for “Neither Master Nor Slave of Meaning: American Women Poets and the Sublime”
Outstanding Teaching Assistant Award: Renée Faubion
Challenge Fellowship: Carin Bigrigg to direct and lead university-wide, community-wide seminars on Tony Kushner’s Angels in America
Graduate Fellowship: Franci Washburn
Academic Program Scholarships: Denise Tillery and Liz Wright
Graduate Tuition Fellowship: Nancy Fong and Levi Walden (for 1998-99)

Departmental Travel Grants
These one-time grants for a maximum of $225.00 were awarded on a competitive basis to graduate students presenting papers at major national conferences.

Fall 1997
Reflecting national trends but still alarmingly precipitous, the number of applications to the English Department Graduate program dropped again this year by nearly 65%: from 136 total applicants in 1996-97 to 90 in 1997-98. The quality of applicants to the program remained at previous levels.

To increase recruitment, the English Graduate Office initiated an aggressive recruitment program, recruiting faculty to telephone first-choice applicants, and setting up an e-mail/telephone bank of faculty and graduate students so that applicants could contact people in the department for information.

These strategies seem to have helped in recruitment, for the acceptance rate of first-round candidates went from 32% to over 60%. The 6% salary increase for Teaching Assistants, combined with the English Department’s offering for the first time a 1-2 teaching load for first-time TAs has almost certainly contributed to the increase in our acceptance rate.

This year the English Department also participated in a recruitment session for Evening Programs hosted by David Stuart’s office on January 8, 1998. At that meeting Gary Harrison, Rick Johnson-Sheehan and Charles Paine discussed the Professional Writing Master’s Program with nearly 25 prospective candidates.

We plan to continue participating in these recruitment sessions. In addition, the Director of Graduate Studies hopes that mailing our brochure/poster and
responding to applicants with a handsomely designed booklet describing our programs will begin to increase the numbers of applicants to the program by Spring of 1999—that is, applicants for Fall 1999 admission.

The figures below show admissions statistics for students applying for Spring 1997 and Fall 1998.

Applying for Spring 1997
Number of applicants: 17
- PhD: 3
- MA Lit: 5
- MA CW: 8
- MA PW: 1
Offered admission: 8
- PhD: 1
- MA Lit: 2
- MA CW: 4
- MA PW: 1
Accepted admission: 7
- PhD: 1

Applying for Fall 1998
Number of applicants: 73
- PhD: 24
- MA Lit: 24
- MA CW: 23
- MA PW: 2
Offered admission: 36
- PhD: 14
- MA Lit: 18
- MA CW: 10
- MA PW: 0
Accepted admission: 24
- PhD: 11
- MA Lit: 7
- MA CW: 6
- MA PW: 0

Graduation/Degrees Granted
The English Department conferred six Doctor of Philosophy and twenty-one Master of Arts degrees from Summer 1997 through Spring 1998, as follows:

Ph.D. Graduates
Summer 1997
none
Fall 1997
Jami Huntsinger Hacker
Tamara Kaye Thurston
Spring 1998
Mohamed E. Ali
Carolyn Holbert
Andrew McClure
Jeannette Riley

M.A. Graduates
Summer 1997
Larry Ross Boggan
Katherine Bronson Elliott
Sheila Gilmartin
Trista Martin
Stephen Wexler
Fall 1997
Terry Cameron
Adam Cohen
Rosa Louie
Elvira Pulitano
Sophie Wadsworth
Spring 1998
Donna Fine
Mary Anne Lightfoot
Martha Ninneman
Jonelle Moore
Holly Jo Romero-Perez
Jay Weinstein
Kate Warne

Enrollment
As of Spring 1998, the Department of English enrolled a total of 125 graduate students, broken down as follows:
Of the 72 Ph.D. students, 44 are ABD enrolling only in Dissertation hours. Thus 61% of our Ph.D. population is ABD. This high rate of ABDs must be addressed, as it continues to rise each year. We have made efforts to decrease our intake of Ph.D. students, but the Department has objected to any efforts on the part of the Graduate Director to impose a limit of 5 Ph.D. students per year.

The Graduate Director next year will hold a series of dissertation workshops, in order to spur Ph.D. candidates along in writing their dissertations. In addition, the Graduate Committee will work on ways to streamline the Ph.D. examination process, to better coordinate the dissertation with the examinations.

Of the 25 MA Creative Writing students, 7 are working on their thesis only. These numbers represent a 27% rate of students in thesis only; the Ph.D. program should aim for this figure. Of the three MA Professional Writing students, two are enrolled in thesis only.

Job Placement
The Graduate Director and Professor Rick Johnson-Sheehan held bi-weekly workshops for Ph.D. students seeking employment in tenure-track jobs in English. Eight students actively participated in the program; four were interviewed at the Modern Language Association meeting, another had a telephone interview, and of these five two found full time tenure-track positions. Bill Foreman, accepted a position at Murray State College; Jeanette Riley accepted at position at Kent State University, Stark Campus. In the summer, two PhD graduates from past years, Jan Wellington and Susan Field, accepted positions at the University of South Alabama and at New Mexico Tech, respectively.

Our placement rate for Ph.D.s at 25% is better than last year, but falls short of the national average of roughly 40%. Nonetheless, several job seekers included in figuring this percentage had not completed enough of their dissertations by December to be serious candidates; despite recommendations to postpone the job search, several students persisted, with predictably disappointing results.

Next year, as part of the outcomes assessment project developed by the Graduate Director, the English Department Graduate Office will begin systematically monitoring the job placement of our Master’s graduates as well.

English Graduate Student Association. (EGSA)
The Graduate Director supervised the EGSA in a number of activities again this year, including hosting departmental colloquia, new student orientation, the bi-weekly brown-bag lecture series, and the Southwest Symposium. This year’s
director of the Southwest Symposium was Karen McKinney. Despite a small number of presenters this year (only 25), the overall participation at the Symposium was very good. The plenary address by Vincent Cheng, Professor of English, University of Southern California, was attended by members of the UNM community at large and many people from the Albuquerque community.

Undergraduate Program Annual Report: 1997/98

Jim Thorson, Director

The undergraduate programs in the department of English had a very successful year in academic year 1997-98. With the enormous help of Ona Savage and work-Study student Matthew Page, a data base is being established, though the nature of such bases is that the numbers contained in them keep changing. Thus, I cannot say, at this moment, that we have N students in each of the six graduation tracks which are offered through the English department and the college of Arts and Sciences. Neither can I tell you, nor will I ever be ever to ascertain, how many students are enrolled in BUS programs who consider themselves English majors.

Despite these limitations, I can confidently assert that we have around four hundred twenty English majors in our sophomore, junior, and senior classes. For the last two years, we have graduated an average of one hundred forty English majors at our annual convocation (154 in 1997, 136 in 1998. The drop between 1997 and 1998 came as a recent surprise to me because I had been relying on the number of 146, which was an arithmetical error caused by a false number of fifty December graduates, as opposed to the accurate forty.) I know of no reason to think that we are going to drop off further, given the larger freshman class in 1997-8 and the high retention rate on that group reported by David Stuart's office.

We can report that the list of graduates read at the convocation on May 16 included 136 names. Of these, 43 were in the liberal arts program, 36 in creative writing, thirty followed the professional writing track, twelve graduated from the pre-graduate concentration, eleven were in the pre-law program in the English department, and four in the joint English-philosophy program.

I do not have comparative figures for the 154 1997 graduates, which I do not think were generated, but the graduates for 1998 seem to me to support my general observation that liberal arts is our most popular option, followed by creative writing and professional writing, with pre-law, pre-graduate and English-philosophy trailing in popularity. I thought about the possibility of discontinuing the English-philosophy track, but a search discovered some dozen students who had declared that option, and it does not really cost us anything to run. At least one of our honors students is contemplating writing an honors thesis in the program, details of which will have to be worked out. We may have to waive the requirement for English-philosophy 480, the joint course that should serve as a capstone of the program for some students in the future. It was taught in the spring semester 1998, but I do not have any figures on its enrollment.
The major movement on the curricular front during this academic year was the passage by the undergraduate committee, and ultimately by the department, of guidelines for the conduct of English 250, the only course required of students in every one of our concentrations. Though couched in suggestive terms, the new guidelines should provide a more consistent experience for our English majors in that important course.

We will continue, whether we like it or not, to get majors who do not take this course until late in their undergraduate careers, but many of them, based on my own observation in my sections of 250, are taking it fairly early in their course of study. I think that this is an important development and needs to be encouraged. I have had the opportunity to talk with quite a number of newly-declared English majors, and I encourage them to take it as early as possible in their program.

The other business, unfinished at the moment, is the proposal from the American literature section to split the American literature survey, currently English 296, into two courses, English 296 and 297, with the division of subject matter to fall at about the middle of the nineteenth century. The undergraduate committee approved the change and will forward it to the department for consideration the first thing in the fall semester. Some curricular changes will have to be considered concerning the counting of survey courses toward the major in the various tracks when this question is taken up by the department.

One minor matter concerning this change is that it will simplify intra-state transfers, as New Mexico State University, for instance, has offered the sophomore-level survey as a two-semester course for some time. This prospective change has been reported to the Commission on Higher Education task force on "transfer modules" in various disciplines.

Work on the task of developing state-wide "transfer modules" seems to be just about wound up, with a report having been recently received. That has not been a lot of work, but it was legislatively mandated and will be good to have it done without damage to our programs.

The undergraduate budget has been able to support readings by Luci Tapahonso, Lena Carr, and Evalina Lucero, Native American authors under the sponsorship of Louis Owens. We also supported the appearance of R. Bodner (as Basho) for a class taught by David Johnson. We were also able to support some of Professor Gail Houston's Victorian Month activities, especially including the lecture by Professor Emeritus Paul Davis. I believe that sponsorship of these special appearances is a very important part of the undergraduate program.

The Mary McDonald Scholarship was awarded to Ms. Debbie Peterson, one of our honors candidates to help her with tuition in the fall. The Prize for an essay on New Mexico was won by Alice Trabaudo, who has also been recommended for the
honors program in the fall. Diane Farish was awarded the Dale and Ivan Melada Endowed Scholarship and will be in the honors seminar in the fall. The Reba Rutz Biedelman scholarships were awarded to Whitney Woodward and Erin Hagenow, who will be attending graduate school in English this fall.

The English department honors program had an outstanding year in 1997-98, and has laid the groundwork for an even better year in 1998-99. During the fall semester, 1997, Professor Robert Fleming taught the honors seminar on Ernest Hemingway with seven students enrolled. Most of them submitted honors thesis proposals during the term. We changed the program slightly last year to make it clear that the seminar is a prerequisite for submitting an honors thesis.

In the spring semester, 1998, Professor Mary Power taught the honors seminar as "theory and practice of the short story." Reports on the class were very positive, and there are plans to try to publish the creative writing short stories produced by members of the class. Some of these students will be writing their honors theses during a semester later than the fall of 1998, but ten of them submitted honors thesis proposals this spring. The undergraduate committee commented on these proposals and approved them. Some were a little more polished than others, but that is to be expected. We look forward to having a big crop of honors theses in the fall of 1998, and more in subsequent semesters.

At the end of the fall semester, 1997, three students submitted honors theses. Ms. Tracy Wooten was awarded her degree summa cum laude, and Julia Corcoran and Leilani Labong each received their degrees magna cum laude. May graduates whose honors theses were adjudged to be worthy of honors included Amanda Rogers Jones and Danielle Frandina, whose degrees were magna cum laude, and Katherine Field and Jason O'Rourk who received cum laude honors.

At least five other students indicated an intention to write honors theses and either failed to complete the honors thesis or the thesis was not awarded honors. This is an unfortunate fact, but as long as we maintain a high standard, the honors will mean something.

More than twenty students have been accepted into the honors seminar for next fall, on Mark Twain, which will be taught by Professor Gary Scharnhorst. At least five more students have applications in hand for the program, and I suspect that by the time classes start there will be around fifteen students in the honors seminar on Mark Twain. Very early in the fall semester, the undergraduate committee will be considering proposals for the honors seminar in the spring semester, 1999.

Sigma Tau Delta, the English undergraduate honorary, behind the leadership of Laura Jett, the immediate past president, initiated eighteen new members this academic year. This number should be compared to eight new members last year. The new officers, who were elected in contested elections in March, are taking over, and seem to have lots of energy and ideas. Leslie Chick is the new president,
Felicitas Marquart the vice president, and Sarah Duffy the secretary-treasurer.

The new officers were all able to attend the national annual meeting in Anaheim, California in March largely because of the budget provided by Arts and Sciences. Several members are already planning to attend and hope to give papers at the seventy-fifth annual meeting to be held in Saint Louis next academic year. There is also to be a regional meeting in Boise, Idaho, but I am not sure that anyone will get organized to attend, as it occurs early in the fall semester. Sigma Tau Delta now has a web site linked to the departmental web page.

The group also supported lectures by Derek Hughes and Janet Todd, visitors from England, during the spring semester by serving refreshments and by financial support to the honoraria for these outstanding speakers. The Sigma Tau Delta leadership also arranged for the appearance of a Santa Fe actress who "does" Georgia O'Keefe during finals week. It was well attended and very successful.

During the fall semester, members of the honorary sold coffee and bagels in the Humanities building hall as a fund-raiser. Graduating members of the honorary were recognized at the graduation convocation, and Laura Jett, as noted above, was one of the speakers. We will have more members to recognize next spring. We were able to award four $200 scholarships to students studying abroad in the summer of 1998. We hope to continue this program again next year.

We hope for an even more impressive year next year. The students in the honors program are outstanding and deserve recognition for their achievements. One of our honors candidates for the fall semester has already won the prestigious Truman Scholarship and he and one other English major are among the four candidates who will be vying for a Rhodes Scholarship in the fall.

Freshman English Annual Report: 1997-98 Wanda Martin, Director

Teaching Assistants and part-time instructors taught 245 sections of 13 courses, including 96 sections of 101 and 89 sections of 102. Thus they worked with about 5390 undergraduate students and accounted for over 16,000 student credit hours.

Liz Wright and Jen Riley completed their two-year terms as Assistants to the Freshman English Director, assisting in the design and execution of Orientation, helping me teach the new-TA training course, taking primary responsibility for visiting first-year TAs' classrooms, and coordinating the collaborative grading groups that assure consistency among sections.

Partly as a result of her administrative work here, Jen Riley has been pressed into service as Writing Center Coordinator in her new job at Kent State-Stark in Ohio. Unfortunately, the press of work will make it necessary to discontinue these positions for 98-99 in order to provide TA- Departmental Fellows to manage the
Writing Proficiency Portfolio Program and the editing and production of the new edition of La Puerta.

We continued to refine our outcomes assessment project for 101 and 102, analyzing the contents of 25 portfolios from each course in each semester to assess how well a random sample of students are achieving the course goals. We're still working on the database, with no results to report yet. This will be on-going, helping us to refine what and how we teach in these courses and allowing us to work more effectively with faculty in other disciplines. I’ve written an article on the process of developing this project, which will appear in 1999 in The Writing Program Administrator as Researcher to be published by Heinemann-Boynton/Cook.

The new 101 textbook, La Puerta: A Doorway into the Academy, was generally well accepted by Teaching Assistants and students. As expected, this book required students to move more quickly into contact with reading and writing for academic purposes. In the assessment reading of January, the 101 portfolios from Fall 97 were seen by the readers as clearly stronger than those submitted in previous years. Teacher evaluations at the end of Fall semester point to some needed changes that will be made in La Puerta II, to be published in August 1999. A second printing for Fall 1998 included minor corrections.

We piloted a new model for 102 in six sections during Spring 98. This redesigned course will put a substantial literary or non-fiction text (Stegner's Angle of Repose at present) at the center of the course, asking students and teachers to develop from that reading writing topics that will engage other disciplines. Students accepted this model enthusiastically, citing the pleasure of reading a real book and the interesting writing topics they were able to propose and investigate. Teaching Assistants found their standing in the classroom enhanced by beginning the semester working from their strengths as literary critics and enjoyed working with their students to learn more about how other disciplines address certain topics. This model is in use in all 102 sections for Fall 98.

The Writing Proficiency Portfolio Program, established in summer 1998, attracted 32 candidates during AY 97-98. Portfolios were accepted and candidates interviewed by six senior Teaching Assistants, who evaluated the work and provided extensive written commentary to the authors. Eighty percent of registered candidates passed the evaluation, a success rate we attribute largely to thorough counseling and preparation.

Finally, due to a generous salary increase and our ability to reduce the workload for first-year TA’s from four courses to three, we had a very successful recruiting year, gathering an entering class of twenty-two very promising new Teaching Assistants.
Hiring, Retiring
The biggest new developments in Creative Writing came in hiring. In January of 1997 our departmental search committee identified James Colbert as our top candidate for a fiction position, but to our dismay hiring was subsequently frozen. Jim bravely accepted an offer to come to UNM as a visiting writer for 1997-8, and his gamble paid off. In the autumn of 1997 the dean authorized us to offer him a job as a tenure track assistant professor, and he accepted.

Even as a visitor Jim started very strongly here, offering an extra Problems class on the intersections between literary theory and creative writing, and offering for the fall of 1998 to teach our new graduate course introduction to the field of creative writing. He is also taking over the editorship of Blue Mesa from David Johnson.

In the autumn of 1997 we were also authorized by the dean to search for another assistant professor in fiction writing. To our delight, Julie Shigekuni, our top candidate, accepted our offer. Our area is greatly strengthened by the active and energetic presences of Jim and Julie. Now we are thinking ahead to the impending retirement of David Johnson, who has served our area so invaluably well as director of the program, workshop teacher, director of graduate and undergraduate theses, and editor of Blue Mesa.

High School Writers Inn
Tony Mares has spent much energy this year setting up the High School Writers Inn, an internet service of the Creative Writing Program which offers on-line E-mail feedback to elementary, middle, and high school students and senior citizens who would like comments on their creative work.

It is the only such program in New Mexico, and already it is being accessed frequently. This project will offer excellent recruitment opportunities, and should prove particularly invaluable for New Mexico writers who live far from universities.

D.H. Lawrence Writer’s Conference
Sharon Warner, with the assistance of Mary Beth Folia, has been working hard to plan the department’s new D. H. Lawrence Summer Writers Workshop, to begin in Taos in the summer of 1999.

New Courses, New Degree Program, Old Procedures
We have designed one new graduate course, an introduction to the field of Creative Writing for all graduate students, English 501, have begun offering a section of 422-522 (poetry) that offers special emphasis on translation, and have begun to explore putting an MFA option into our graduate program.
Undergraduate Admissions Screening
After experimenting for two years, in Fall 1997 the Creative Writing Committee agreed to abandon the policy of screening for admission to upper-division undergraduate classes, as the procedure seemed to be cutting severely into creative writing enrollments. Teachers are now informally screening their students in the opening week of class, and this seems to be working.

Visitors
As mentioned above, James Colbert was a Visiting Assistant Professor for 1997-98. In the fall of 1997, Marcia Southwick was once again our welcome visitor in poetry, and in the spring of 1998 Pam Houston, author of *Cowboys Are My Weakness*, came to teach fiction and creative non-fiction as our Visiting Writer. Next spring, our visiting writer will be poet Susan Tichy.

Pam Houston, Lisa Maxxon, Andrew Vachss, and Luci Tapahonso all appeared in the reading series in the spring semester.

*Blue Mesa*
The tenth issue of *Blue Mesa*, with a special section on “Love and Sex in the 21st Century,” came out this summer. David Johnson is stepping down after five years at the helm as editor, to be replaced by Jim Colbert. Jim has many plans to increase the circulation and make connections with the Albuquerque Public Schools, who might use special issues of the magazine as a text. The new *Blue Mesa* editorial intern is Elise McHugh.

*Prizes*
In the fall of 1997, the Lena Todd prize in fiction was won by Mark Lewis, with Mike Davis coming in second. The judge was local author Carolyn Meyer. The Lena Todd prize in poetry was won by Paige Ackerson. John Crawford, Albuquerque publisher of West End Press, judged. In the spring of 1998, the D.H. Lawrence Fiction Contest was won by Ada Chamberlain. The judges were Bobby and Lee Byrd of El Paso, publishers of Cinco Puntos Press. In the American Academy of Poets Contest, the winner was Will Barnes, with Paige Ackerson and Deborah Coy named as runners-up. The contest was judged by Enrique LaMadrid, local poet and translator.

*Director of CW*
Finally, this July, Pat Smith stepped down from her three-year term as director of creative writing and Sharon Warner assumed the post. It has been many years since we have had a director who was a full-time creative writer rather than someone whose duties were split between creative writing and literature, and we are grateful for Sharon’s willingness to take on the job.

*Internship/Professional Writing*  Richard John-Sheehan, Director

The English Department’s Internship Program offers students an opportunity to
spend a semester or more working part-time hours in a publishing/writing environment in which they can polish their skills while generating printed copy or "clips" for a portfolio of their work. Interns typically work an average of 10 hours per week for an entire semester.

While working at their internship or after completing their internship, students are required to take a 3-credit "Internship Seminar" (English 499) in which they work on career-building skills. In the seminar, they learn how to write resumes and application letters, use newspapers and the internet to search for job opportunities, and improve networking skills.

The result of the seminar is a "writer's portfolio" of written work that students can show potential employers at interviews. We have found that students with polished portfolios compete successfully in the job market.

The internship program is healthy. Over the past two years, we have successfully placed about 40 interns in positions around Albuquerque and on campus. Our interns are reporting good experiences in the workplace, and their professional writing portfolios are full of the real world examples that interviewers want to see. Indeed, students from the UNM Professional Writing Program have had great success finding jobs when they finish their degrees.

In the future, we hope to expand the internship program in two ways. First, we would like to encourage more non-Professional Writing English majors to complete internships before they graduate. To attract these students to the program, we are seeking more non-technical internships that might appeal to their liberal arts orientation. Second, we would like to create regular "co-op" opportunities for our graduate students, especially those students pursuing a Masters in professional writing. Ideally, these co-ops would be paid summer experiences in which students would be immersed in non-academic workplaces.

We expect the internship program to grow over the next few years, because we are increasing the amount of professional writing students at both the undergraduate and graduate levels. Moreover, as students become more career-minded, we believe we will attract more non-professional writing concentration English majors to the internship program.
The Department of Foreign Languages & Literatures completed its sixth year as a distinct unit created out of the former Department of Modern & Classical Languages. The department offers a Ph.D. in Romance Languages with a concentration in French, M.A.'s in French, German and Comparative Literature & Cultural Studies and B.A.'s in Classical Studies, Comparative Literature & Cultural Studies, French, German, Modern Languages and Russian. The department also collaborates with interdisciplinary programs around campus such as European Studies, Asian Studies, Russian Studies and Women's Studies by offering cross-listed courses and by sharing faculty resources and expertise. Courses were taught this past year by thirteen faculty members, six instructors and sixteen TA's spread over the different language programs. The department graduated 30 B.A. students, 10 M.A. students and 2 Ph.D. students; these latter graduates, Florence Goulesque and Mary Schense, are especially pleasing to note since they signal renewed interest in the French doctoral program.

The department maintained its administrative profile for the second year with Walter Putnam serving as Chair, Monica Cyrino as Director of Undergraduate Studies, Deborah Jenson as Director of Graduate Studies and Diana Robin as Director of Comparative Literature & Cultural Studies. Specific language instructors were responsible for handling student advising in each of the major and minor language units. Office operations were ably handled by Wilma Williams, Department Administrator, Lisa Stewart and Patrick Hubenthal, Administrative Assistants. The latter two were also in charge of the administration of the Francophone and German Summer Schools, respectively. We were also fortunate to recruit and retain a fine group of work-study students who help with office duties.

Faculty distinguished themselves in many areas: Lorna Brau (Visiting Assistant Professor of Japanese) taught Japanese culture courses to increasingly enthusiastic audiences and carried out summer research in Japan; Pamela Cheek (Assistant Professor of French) passed her code-3 review successfully and ran the Francophone summer school program in Santa Fe; Monica Cyrino (Assistant Professor of Classics) continued her popular success in teaching large introductory courses in Classics as well as leading a summer study tour to Greece; Deborah Jenson (Assistant Professor of French) devoted much time and effort to improving the French graduate program and to working on her book project on the theme of "likeness;" Byron Lindsey (Associate Professor of Russian) edited his translation of Vladimir Makanin's *The Loss: A Novella and Two Short Stories* for Northwestern University Press for which he received the Eugene Kayden National Translation award in 1997; Peter Pabisch, Professor of German, coordinated the Atlantic Bridge, an umbrella organization of international programs supported by Continuing Education; Lorraine Piroux, Assistant Professor of French, devised a successful new theory course while submitting her first book manuscript for publication in France; Walter Putnam, Professor of French, delivered a talk at the Maxwell Museum on Gide's Congo writings and completed an article on this topic for an edited volume; Diana Robin, Professor of Classics, directed a rich and varied colloquium...
series for the Cultural Studies program; Katrin Schroeter, Assistant Professor of German, directed the successful 1998 session of the German Summer School in Taos; Warren Smith, Professor of Classics, received a New Mexico NEH grant to support his ongoing Greek Week series of drama productions and lectures.

The administrative structures of the department seem to be in place and the unit continues to work as a whole whenever and wherever possible, keeping in mind the particularities of each language group. FLL seems to have found a comfortable cruising speed and altitude. We conducted Outcomes Assessment at the undergraduate level across several languages and are preparing to do likewise at the graduate level. There is a general consensus that the level of training is quite good and getting better; at the graduate level, this is especially striking in the theoretical area where new faculty have brought new ideas and perspectives to the graduate courses. These courses are starting to attract greater numbers of students from other departments who have heard of the stimulating literary and cultural programs offered in FLL. We will devote a good deal of attention this year to the lower-division and undergraduate programs in an attempt to accommodate a rapidly-changing and growing student population.
FACULTY PUBLICATIONS AND PROFESSIONAL ACTIVITIES

B. REFEREED JOURNAL ARTICLES AND BOOK CHAPTERS


C. OUTSIDE PROFESSIONAL LECTURES AND PAPERS PRESENTED


Cyrino, Monica. April 1998. “Of Love and Bondage in Euripides’ Hippolytus”. Classical Association of the Middle West and South. Charlottesville, VA.

Jenson, Deborah. April 1998. “Constant under the Empire of Mme. de Stael or the Sexual Pathology of Liberty in the Post-Revolutionary State Romance”. American Society for 18th Century Studies. Notre Dame, IN.


1. SIGNIFICANT PLANS

1.1 FIVE-YEAR PLAN

During the Fall, 1993 semester, the department put together a *Five-Year Plan* that focuses the department's research and teaching orientation in two areas:

1. environmental analysis (physical geography and human/environment interaction);
2. geographic information technologies - GIT (GIS, GPS and remote sensing).

Both of these specialties serve important societal needs and build on existing strengths within the university. Specialization affords the department the opportunity to increase collaborative research and to serve the campus community with its GIT lab. It also has enabled the department to attract graduate students of first quality and to raise the department's overall standing in the university and profession.

The two subfields selected for emphasis are well suited not only for the enhancement of geographical research but for integration into the missions of many other units of the university and the state. The development of geographic information technologies matches well with the developments at the major scientific laboratories, and promises to attract major grants and funding for the department. The demand for GIT training is not limited to the Department of Geography. Biologists, geologists, anthropologists, economists, and planners all use the technologies and are utilizing our teaching laboratory. There is also support from biologists and geologists for the environmental focus. The Department is focusing its energy in the environmental area at the interface between climate, biogeography, and water resources and their
interaction with human society. Both GIT and the environmental focus are begging for interdisciplinary research efforts, which should attract significant new research funding to the department and university.

1.2 STATUS OF FIVE-YEAR PLAN

The primary goal of the Department of the Geography, as set forth in the Five-Year Plan, is to refocus and strengthen its curricula so that it will be in a position to initiate a Ph.D. program in the future. In order to achieve this goal, the department has restructured its curriculum and degree programs at the undergraduate level and will do the same for its graduate program this year. In addition, an infrastructure that can support the programs is being developed. Increasing its FTE faculty is an essential but unrealized portion of the department's goals.

The Five-Year Plan is being implemented, and the Department of Geography is very different from the one that existed in 1993. The curriculum has been refocused on environmental analysis and GIT; a B.S. degree has been added; the personality of the department is changing and will continue to change as new hires occur; the infrastructure to support a Ph.D. program is being developed; a colloquium series is being institutionalized; and the new faculty are beginning to actively pursue extramural funding.

2. STAFF APPOINTMENTS AND SEPARATIONS

2.1 FACULTY REPLACEMENTS AND NEW HIRES

The faculty was composed of 4.5 salaried members in the Fall, 1993. Three of the faculty members were professors and two were associate professors. During the 1993-94 AY the department searched for two additional faculty members and successfully hired one, Dr. Louis
Scuderi, who joined the faculty in the Fall of 1994. Dr. Scuderi received his Ph.D. in 1984 from the University of California, Los Angeles. His research and teaching interests are in climatology and climate change, geographic information systems, and remote sensing. Dr. Scuderi has designed, developed and obtained funding for our geographic information system/image processing laboratory. He is an excellent addition to the department and has been tenured and promoted to Associate Professor. Dr. Olen Paul Matthews joined the department in the Fall, 1995, as department chair. Dr. Matthews has a background in water resources, natural resource policy, public lands, and mineral resources. In the fall of 1996 Dr. Theresa Mulhern joined the department but resigned at the end of her first year. In addition to the lose in a faculty member, the department had a job search suspended in January. In the Fall, 1998, Kirk Gregory joined the Department as an Assistant Professor. He has a specialization in GIS and environmental geography (water resources). His Ph.D. is from Kent State.

The department currently has 6 faculty members. The department will be searching for an additional position this year in the GIS/Environmental specialization.

3. OTHER SIGNIFICANT DEVELOPMENTS

3.1 SPATIAL DATA ANALYSIS LABORATORY

The Spatial Data Analysis Laboratory was successfully funded under NSF DUE-9551046: "Instrumentation for an Undergraduate Spatial Data Analysis Laboratory." Equipment for the lab was purchased two years ago, and it was used for the first class in the spring semester 1996. Demand for the courses continues to be high and finding instructors is problematic. Our major concern is adequate systems administration.

The Spatial Data Analysis Laboratory (SDAL) is a state-of-the-art facility designed to provide undergraduate and graduate students with hands-on experience in Geographic
Information Technologies (Geographic Information Systems, Image Processing, and Global Positioning Systems) and to support faculty research in these areas. Laboratory computer facilities are designed around twin SUN SparcStation 712 units networked to 10 SUN X-terminals. In addition, the SDAL has 5 Pentium based IBM clones which can be used as stand-alone machines or, through the use of X-terminal software, networked to the SUN workstations to provide additional workstation access. The SDAL has, in addition to its main computing units, peripheral devices that allow for rapid input and output of raw data, maps and imagery. These include tape-drives, CD-ROM units, a full size digitizing table, individual digitizing tablets, a scanner, black and white as well as color printers, and a full size A-E color plotter. Besides storage on individual machines, the SDAL has a RAID storage unit with 24 GB of storage (expandable to 60 GB). Like the RAID unit, all SDAL equipment was chosen so it could be easily and cheaply upgraded. The laboratory has access to GIS, Image Processing, and Statistics software products, including: ARC/INFO (GIS), MapInfo (GIS), S+ (statistical software link to ARC/INFO), and ERDAS (Image Processing).

Through pricing discounts, special educational purchase agreements, and cooperative deals, the $140,000 allocated for SDAL development has been used to purchase ~$250,000 in hardware and software.

3.2 EARTH DATA ANALYSIS CENTER (EDAC)

EDAC has been co-located with the Geography Department. This has created space problems, but the increased opportunities for interaction with the Department is beneficial. EDAC is engaged in remote sensing and geographic information systems (GIS) development and serves as a focal point for graduate and undergraduate student employment.
4. PUBLICATIONS AND PROFESSIONAL ACTIVITIES

4.1 PUBLICATIONS AND PRESENTATIONS

Bradley T. Cullen


Olen P. Matthews

Cullen, Brad and Olen P. Matthews (pending). “Western Australians’ Perspectives on Mining,” Applied Geography Conferences.


Stanley A. Morain


Louis A. Scuderi


4.2 OUTSIDE PROFESSIONAL ACTIVITIES

Dr. Cullen currently holds the position of Southwest Regional Counselor, National Council (Board of Directors) for the Association of American Geographers; Associate Editor, The Social Science Journal, 1994-present; Associate Editor Southwestern Association of American Geographers Journal; Coordinator, Applied Geography Conference, Albuquerque(1997); and Joint organizer and chair of a session on “Regional Economic Development,” Applied Geography Conference, 1990-1997; Joint Organizer, Annual Meeting of the Southwest Division, Association of American Geographers, Albuquerque.

Dr. Matthews served and continues to serve on several professional boards including: Advisory Board, Interamerican Dialog on Water Management; Chair, Policy Committee, Universities Council on Water Resources; Associate Editor, Water Resources Bulletin(term ended 1998); Shared Use of Transboundary Water Resources Task Committee, American Society of Civil Engineers; and Water Regulatory Standards Committee, American Society of Civil Engineers.


Dr. Louis Scuderi is currently reviewing articles that appear in the following journals: Arctic and Alpine Research (multiple papers); The Annals of the Association of American Geographers; and
Radiocarbon. Dr. Scuderi is also a reviewer for NSF proposals in: Solar Terrestrial; Climate Dynamics; Geography and Regional Science; and Polar Programs. He has also presented papers at: 1998 Association of American Geographers Meeting: Chicago; and 1995 IUGG Meeting Boulder, Colorado.

Dr. Williams organized and operated the Thirteenth annual Southwest Institute, hosted in 1997 by the New Mexico Museum of Natural History. Graduate and undergraduate credits in Geography were offered by this department. In conjunction with the two field courses a collection of readings and reference material was organized and edited. A field Guide was also created for each course. Future plans include developing a series of guidebooks on the Southwest.

4.3 OUTSIDE SPONSORED RESEARCH


Scuderi, L. A., Assessing the Climate Change on Corn And Wheat Production in the United States,” National Science Foundation, $19,251.

5. GOALS FOR 1998-1999

Our main goals for Geography next year include: Redoing our five year plan, continuing to adjust to EDAC’s co-location, hiring a qualified Geographer for our vacant position, revising
our graduate program to put in an MS degree, doing minor revisions on our undergraduate program in the GIT area, integrating our computer lab more directly into the Department and University. Other goals include increasing faculty research productivity and increasing the number of majors.

The co-location of EDAC and Geography has caused cramped space and allowed administrative restructuring. The first is a problem, and we will attempt to obtain additional space to relieve the situation. Sharing a Department Administrator with EDAC has worked well, but we do not yet have a joint solution to our computer systems administration problems. Space and systems administration will be a major priority this next year.

During the next year, the department will be hiring one new faculty member. The position is a geographer with a specialization GIS and Environmental Geography. This position is extremely important if the department is to develop the critical mass required for implementing a Ph.D. program. The department will work hard to develop a suitable applicant pool in order to find the best possible candidates to achieve this goal.

The undergraduate program was substantially revised two years ago but requires revisions in our GIT offerings. This year we will begin revising our graduate curriculum with the intention of offering an MS degree. Many supporting courses have been revised to reflect the recent faculty additions and the department’s new areas of interest, but the graduate courses have yet to be restructured. This will be done this year.

The Spatial Data Analysis Laboratory was made operational two years ago allowing the department to offer courses in GIT. This has increased the department’s visibility on campus and the demand for courses has been substantial. As a result, the department will seek additional funds to expand the lab facility. In addition, the lab provides an excellent location for conducting GIT short courses. We are a Trimble “Center of Excellence” for GPS, one of the GIT technologies, and will continue to offer short courses in that technology. Making the lab run efficiently is a time-consuming task, and the department needs a technician to help in its
management. This is part of our systems administration problem and an ongoing effort is being made to resolve this problem.

In order to be in a position to offer a Ph.D. program in the future, the department needs to increase its research productivity. One goal is to increase the number of outside grants submitted by department members. Another is to increase the number of referred publications.

The department will also try and increase the number of graduate and undergraduate students in the program. Most undergraduates become majors after taking a course in geography. For that reason, the department will strive to offer the highest quality undergraduate courses possible. The department will also continue to develop its colloquium series.
I. Significant Developments during 1997-98

The retirement of some of our senior professors and the hiring of new faculty were the major developments of the 1997-98 academic year. Charles McClelland and Howard Rabinowitz both stepped down at the end of December and Donald Sullivan gave his last lecture in May. Robert Himmerich y Valencia ended his teaching career with the end of the Spring semester although he will stay on as editor of the New Mexico Historical Review until the end of September, 1998. The departure of these long-serving stalwarts was a cause for sadness, since their talents will be hard to replace. But we wished them all godspeed. This July, however, the department was deeply grieved when Howard Rabinowitz died after a courageous battle with leukemia. We will all miss his enormous vitality, intellectual energy and ready humor. The department plans to establish a memorial fund in Howard’s honor.

On the brighter side, Robert Kern, who last year had announced his retirement, decided that he would stay on. Moreover, the department was able to hire three new tenure-track faculty: Kimberly Gauderman, Elizabeth Hutchison and Samuel Truett. Professor Gauderman (Ph.D. UCLA) is a specialist in Colonial Latin American history, whose dissertation research concentrated on women in seventeenth-century Quito. Professor Hutchison (Ph.D. UC Berkeley) is a historian of modern Latin America with expertise in Central America and the Southern Cone. Her dissertation research focused on women workers in early twentieth-century Chile. Samuel Truett (Ph.D. Yale) comes as our professor of Colonial and American Southwestern history. His dissertation research illuminates ecological and economic developments in the U.S.- Mexico borderland area in the late nineteenth and early twentieth centuries.

In addition to these regular appointments, the department was extremely fortunate to be able to hire Cynthia Orozco as a two-year Visiting Assistant Professor in the field of Chicana/o history. This was done in conjunction with the Chicana/o Studies Program and the Center for Regional Studies, whose generosity has enabled us to fill the vacancy that occurred when David Maciel left UNM at the end of 1996. Dr. Orozco's research is in the area of the Mexican-American civil rights movement and she has recently completed a book on the history of LULAC. Finally, the department is benefitting from the fact that Dr. Kenneth Orona (B.A. UNM, Ph.D. Yale) is currently here as a Post-Doctoral Fellow under the auspices of the Center for Regional Studies. Dr. Orona's dissertation focuses on the Mid-Rio Grande Conservancy District. In the Fall semester he will be working on readying that work for publication; in the Spring, he will teach two courses for History and Chicana/o Studies.

The department is also pleased by the fact that a number of our members made significant steps forward in their careers. Melissa Bokovoy was granted tenure and advanced to the rank of Associate Professor. Robert Himerich y Valencia was also awarded tenure. Professors Noel Pugach and Daniel Feller were promoted to full Professor status.
II. Significant Plans and Recommendations

Staffing continues to be the highest priority for the department. This year we will focus on filling two vacancies in the European field. We have been authorized to search for a specialist in Modern Western Europe whose research will be focused on the 19th century and may have expertise in the sub-fields of social and cultural history and/or the history of European imperialism. The University has also approved a second search for a Medieval historian. We are seeking a person who specializes in Western Europe and/or the British Isles and who can offer courses on the Middle Ages and the Renaissance.

This year, the department will be focusing on the improvement of undergraduate teaching. We plan a number of informal meetings to discuss aspects of the undergraduate curriculum and on teaching methods. Recently we had the first of these meetings which concentrated on the teaching of the introductory survey courses.

The department also is seeking ways to assist our graduate students in preparing and writing their dissertations. Last year we instituted an informal "dissertation seminar." the purpose of this exercise was to encourage ABDs to present to their colleagues a dissertation proposal or chapter for discussion and analysis. The first of these seminars proved very successful and we will be continuing the practice this year.

III. Appointments to Faculty/Staff

Kimberley Gauderman, Assistant Professor, August 1998.  
Elizabeth Hutchison, Assistant Professor, August 1998  
Cynthia Orozco, Visiting Assistant Professor, August 1998  
Samuel Truett, Assistant Professor, August 1998

During the year the following were appointed as part-time faculty:  
Beth Bailey, Visiting Professor, War and American Society  
Bart Barbour, Visiting Lecturer, History of New Mexico  
Fritz Cocron, Visiting Lecturer, Western Civilization, History of France  
Russ Davidson, Visiting Professor, Latin American History  
Ingo Schroeder, Humboldt Fellow, Visiting Professor, Native American Colonial Southwest  
Charles Truxillo, Visiting Lecturer, Western Civilization  
Rebecca Ullrich, Visiting Lecturer, British Empire

The following History Department graduate students served as Teaching Associates:  
Kathleen Chamberlain, U.S. and U.S. West  
Yvonne Darcy, U.S. History  
Jerry Davis, U.S. History  
Carlos Herrera, History of New Mexico  
Andy Kirk, U.S. History  
William Rector, Modern Latin America  
Barbara Sommer, Colonial Latin America
IV. Separations from Faculty/Staff

Robert Himmerich y Valencia retired from teaching May, 1998
Charles McClelland, December 31, 1997
Howard Rabinowitz, December 31, 1997
Donald Sullivan, May, 1998

V. Publications of the Division

During the past year the members of the History Department published 11 books and edited collections plus 25 scholarly articles. Deserving special notice were the monographs by Melissa Bokovoy (Peasants and Partisans: Politics and Ideology in the Yugoslav Countryside, 1942-1953), Elizabeth Jameson (All that Glitters: Class, Conflict and Community in Cripple Creek) and Jane Slaughter (Women and the Italian Resistance, 1943-1945). Richard Etulain distinguished himself by bringing out 3 co-edited collections: Researching Western History: Topics in the Twentieth Century (with Gerald Nash) Religion in Modern New Mexico (with Ferenc Szasz) and By Grit and Grace: Eleven Women who Shaped the American West (with Glenda Riley).

VI. Outside Professional Activities of Staff Members

Members of the department gave 21 conference papers and other panel presentations at professional meetings. Paul Hutton continued to serve as Executive Director of the Western Historical Association and was honored with the President’s Award of the Western Writers Association. Virginia Scharff did extensive work as Program Chairman for the WHA’s 1998 Annual Convention. Richard Etulain was chosen President-Elect of the WHA and he will assume the Presidency in the Fall of 1998. Margaret Connell-Szasz served as the Local Arrangements Chairperson for the National Conference of Phi Alpha Theta, which met in Albuquerque December 26-29, 1997.

VII. Outside Sponsored Research

Linda Hall: Fulbright Summer Award for research in Peru, 1998.

VIII. Work of Department Office Staff

The office staff of the Department of History continues its fine work. Yolanda Martinez our able Department Administrator provides the leadership that is indispensable to the efficient flow of business. He knowledge of procedures and her endless good humor keep the department on an even keel. Helen Furgeson continues to do a fine job in her role as Graduate Secretary, and Loretta Hayoz has been an effective and helpful receptionist. The part-time assistance of Cindy Tyson is invaluable.
1. Significant developments during 1997-98

Faculty
Caroline Smith was hired as assistant professor in phonetics and phonology with her appointment to begin in August 1998. Smith completed her Ph.D. at Yale University. She has held postdoctoral fellowships in France and at UCLA and visiting professorships at UCLA and the University of Ottawa. For the year prior to joining our faculty, Smith worked as a staff linguist with Eloquent Technology in Ithaca, New York, while holding a visiting scholar position at Cornell University. She is an active researcher in experimental phonetics and has a solid publication record, including author or co-author of ten articles in, among other publications, *Journal of Phonetics*, *Journal of the International Phonetic Association*, and *Journal of the Acoustical Society of America*. Smith is a specialist in experimental phonetics.

SLI Lab
The construction of the state-of-the-art Signed Language Interpreting Laboratory was delayed throughout 1997-98, and it is now hoped that the Lab will be up and running for the Spring 1999 semester. The intended space, Ortega 147, had to be used for instructional purposes during 1997-98 pending the completion of the new classroom building, Dane Smith Hall. Plans were made to begin purchase of the equipment in late Spring. However, a change in the directorship of the Special Education unit of the New Mexico Department of Education delayed securing of the support that they had committed, and those funds are crucial for construction of the Lab. However, the new director, Robert Pasternack, insists that the $15,000 in state funds is forthcoming. In the meantime, Bill Isham has opened a promising dialogue with Motorola in pursuit of very significant construction and longer-term maintenance support for the Lab.

Department Newsletter
The Department’s first newsletter, *The Great Linguini*, was distributed to all alumni of the Linguistics, Signed Language Interpreting, and Educational Linguistics programs and to many other persons previously or currently associated with the Department of Linguistics. Carrying news of the Department faculty, staff, students, and alumni, this newsletter was beautifully designed and informatively written by Department Administrator Barbara van Buskirk.
2. Significant plans and recommendations for the near future

Faculty

Continuing to follow up on the recommendations of the Department's 1996 Unit Review, we requested permission to carry out searches for two positions to begin in Fall 1999. The first priority is a position in Native American educational sociolinguistics, intended to be a joint appointment with the College of Education in support of the interdisciplinary doctoral program in Educational Linguistics. This position is intended to be a response to the need for expertise and leadership with regard to language revitalization and language in education in Native American communities. This top priority search has been authorized.

The second priority is a position in syntax and discourse analysis, areas in which the Department is under-staffed and which are vitally important in particular for the doctoral program. This second position was not authorized. We remain hopeful that such a position will be authorized in the future.

Space

Insufficient space continues to plague the Department and its smooth functioning. The space used by Professor Morford for her psycholinguistics research laboratory during 1997-98 will be allocated to Professor Smith in August so as to provide our new faculty member with an office. The Department of Mathematics and Statistics has loaned us one of its offices on the third floor of the Humanities Building for 1998-99. This will enable us to fulfill our commitment to provide lab space for Morford and her research. Still, the fact that Morford must move her lab each academic year hinders her productivity as a scholar. Department personnel continue to make do within the limitations of inadequate space until the Honors Center space on the first floor of the Humanities Building becomes available.

Student Support

With only three regular assistantships and one special assistantship, the Department is able to provide very little support for its increasing number of graduate students. We have been fortunate over the past several years to have had a major annual contribution from the parents of Joan Bybee (with a match from the Exxon Foundation) that enabled us to award one additional assistantship. One of our higher goals must be to increase graduate student support.

With this in mind, last fall the Department established the Robert W. Young Scholarship Fund for Native American Linguistics. With major contributions from Judy and Garland Bills (with matching contributions from BFGoodrich) and from Joan Bybee, the UNM Foundation fund is close to achieving the $10,000 minimum required to begin to make funds available for awards.

3. Appointments to staff

Robert Hahn joined the Department in July, 1998, with a full-time appointment as staff interpreter/assistant in the Signed Language Interpreting program.

Holding part-time teaching positions in the Department during the 1997-98 academic year were Dr. William Bradford (Linguistics), Dr. Ferdinand de Haan (Linguistics), Dr. Joan Manes
4. Separations from staff

Suzanne Lee, who served as staff interpreter/assistant in the Department’s Signed Language Interpreting program since August 1996, resigned her position effective July 17, 1998, in order to move to San Antonio, Texas, where her husband is employed.

5. Faculty activities

Sponsored research

Our records indicate that the following external grants were administered through the Department of Linguistics during the period covered by this annual report:

Phyllis Wilcox, “RSA Region IV interpreter training project,” funded by the University of Arkansas, $4,000, 1 October 1997 to 30 September 1998.

Phyllis Wilcox, “RSA Region IV interpreter training project,” funded by the University of Arkansas, $2,500, 1 October 1996 to 30 September 1997.

In addition, Jill Morford continued as co-principal investigator (with two others) for a project administered through McGill University, “Patterns of relative clause propositions using an augmentative and alternative system,” funded by the Social Sciences and Humanities Research Council of Canada in the amount of $50,000 for April 1997 to April 2000.

Also, Jill Morford has learned that her proposal for research on “Perceptual processing in delayed language learners has been funded by the National Institute of Health in the amount of $116,850 for a three year period, 1 September 1998 to 31 August 2001.

Four UNM-internal grants were held by Department faculty during the period covered by this report. All four were Research Allocations Committee awards:


Jill Morford “Maturational effects on phoneme perception,” 3 December 1996 to 15 December 1997 ($2,870).

Publications
A complete accounting of faculty publications and other scholarly productivity is provided in the annual supplements to the biographical record. There is no need to duplicate such information here.

Awards and honors
Joan Bybee continued her three-year appointment (1996-99) as Regents' Professor in recognition of her high level of achievement as a scholar and teacher.

Eduardo Hernández Chávez, who served as interim director during 1997-98, has been appointed to a three year term as director of the Chicano Studies Program beginning in Fall 1998. This appointment is at .6 FTE.

Vera John-Steiner received the 1998 Annual Research Lectureship award, the highest honor for research and creative activity that UNM can bestow on a faculty member. Her lecture on “Creativity and collaboration: A sociocultural approach” was delivered on April 28.

Phyllis Wilcox was selected to receive one of the two Outstanding Teacher of the Year Awards for 1997-98. This award is administered by the Provost’s Teaching Enhancement Committee on Awards and Fellowships.

Other activities
Garland Bills continued as executive director of the Linguistic Association of the Southwest (LASSO).

Leslie C. Greer continued as a member of the Board of the American Sign Language Teachers Association.

At the end of the Spring semester, Eduardo Hernández Chávez completed his duties as interim editor of the Southwest Journal of Linguistics.

Sherman Wilcox continued as editor of the new international journal, Evolution of Communication.

6. Student activities

Degrees awarded
The following degrees offered through the Department of Linguistics were awarded to the listed students during the report period:

B.A. in Linguistics: Jesse Elizabeth Blackburn (Spring 1998).

B.S. in Signed Language Interpreting: Kirsten Benner, Helen Epstein, Elaine Gangel, Stephanie Mainello-de-Lara, Kristine Newark, Shawn Sweet, Michelle Trujillo (all Fall 1997); and Juanette Alvis, Abby Anderson, Sally Schwartz, Vangie Tenorio (all Spring 1998).

M.A. in Linguistics: Dawn Nordquist (Fall 1997).

**HDLS**

In November, the Linguistics Graduate Student Organization changed its name to the High Desert Linguistics Society. The HDLS continued to actively represent master's and doctoral students in Linguistics as well as doctoral students in Educational Linguistics. Officers for 1997-98 were Jordan Lachler (president), K. Aaron Smith (vice president), Karen Naughton (treasurer), James MacFarlane (representative to Linguistics faculty meetings), Amy Hazelrigg (representative to Educational Linguistics faculty meetings), and Elisa Maroney (GPSA representative). Jill Morford served as faculty advisor to HDLS.

The major activity of the HDLS this year was hosting the highly successful High Desert Linguistics Society Student Linguistics Conference. The conference was internationally announced, and refereed papers were presented by graduate students from linguistics departments around the United States and abroad. Joan Bybee presented the keynote address titled “The emergent lexicon.”

**Awards and honors**

Awarded regular departmental assistantships for 1997-98 were Paromita Chakraborti (.50 TA Fall), Terry Janzen (.25 GA), Jordan Lachler (.50 TA), James MacFarlane (.50 TA Spring), Elisa Maroney (.50 TA), and Karen Naughton (.25 GA).

Special assistantships were awarded to Cecilia Flood (.25 TA), Joanne Scheibman (.25 TA), and K. Aaron Smith (.50 GA).

Graduate Tuition Fellowships for 1997-98 were awarded to James MacFarlane (Spring), Dawn Nordquist (Fall), and Douglas Rauber (Fall/Spring).

Representing the Department of Linguistics on two student councils organized by the Dean of the College of Arts and Sciences were Jennifer Lizut (B.S. program in Signed Language Interpreting) on the A&S Undergraduate Student Council and Paromita Chakraborti (Ph.D. program in Linguistics) on the A&S Graduate Student Council.

Ysaura Bernal-Enríquez (Educational Linguistics Ph.D. candidate) has received one of the 51 AAUW American Fellowships awarded by the AAUW Educational Foundation for 1998-99.

Michael Guerrero’s dissertation, “A critical analysis of the validity of the Four Skills Exam,” was the second-place winner of the 1998 Outstanding Dissertation competition of the National Association for Bilingual Education. The dissertation was directed by John Oller.

Terence Janzen (Linguistics Ph.D. candidate) completed the fourth year of a four-year doctoral fellowship awarded by the Social Sciences and Humanities Research Council of Canada. He completed his doctorate in April 1998 with a dissertation titled “Topicality in ASL: Information ordering, constituent structure, and the function of topic marking.” He has returned to his faculty position at Red River Community College in Winnipeg, Canada.

Dagmar Jung, Ph.D. candidate in Linguistics working on her dissertation while a member of the faculty of the University of Cologne, is a member of the founding managing board of the newly formed German Society for Endangered Languages, for which she serves as Secretary. The goal of this non-profit society is to promote the use, preservation, and documentation of endangered languages and dialects.
Presentations and Publications

Paromita Chakraborti (Linguistics Ph.D. candidate) presented a paper she co-wrote with Joanne Scheibman (Linguistics Ph.D. candidate) and Joan Bybee, "Prosody and segmental effect: Some paths of development for word stress," at the annual meeting of the Association for Linguistic Typology in Eugene, Oregon, in September 1997.


Dagmar Jung had her article on "Word order in Apache narratives" appear in Athabaskan: Language and linguistics, edited by Ted Fernald and Paul Platero and published by Oxford University Press.

Jordan Lachler published (with Thomas McElwain) the book Rabbit stories: An introduction to the Mingo language which comes with a complete audio recording of the 18 stories.

6. Other professional activities

The Department sponsored a strong set of scholarly presentations during 1997-98 in its Colloquia Series and Brown Bag Lunch Series. The presentations included the following speakers (those in the Brown Bag Series are marked with an asterisk):

- Östen Dahl (University of Stockholm, Sweden), "Egocentricity and syntax" (September 8).
- Terence Janzen (Linguistics Ph.D. candidate, UNM), "Topics and topicality: Characterizing topic and subject in ASL" (September 19).
- James Magnuson (University of Rochester), "Using eye movements to track the time course of lexical activation in continuous speech" (September 22).
- *Jordan Lachler (Linguistics Ph.D. candidate, UNM), "Incipient vowel merger in West Virginia Mingo" (October 22).
- Bernard Comrie (University of Southern California), "Reference-tracking: Description and explanation" (November 7).
- *Ferdinand de Haan (Corrales, NM), "Extraction of phonological information from a corpus of spoken Russian texts" (November 12).
- *Angus Grieve-Smith (Linguistics M.A. candidate, UNM), "Using virtual reality methods to synthesize signed languages" (December 3).
- Dagmar Jung (University of Cologne/Linguistics Ph.D. candidate, UNM), "The dynamics of polysynthetic morphology: Person and number marking in Athabaskan and Na-Dene" (dissertation proposal) (December 8).
- Lee Cataldi (Australian linguist), "Metonymy in the Warlpiri narrative Wapurtarlikirlf" (February 11).
Stefan Frisch (Indiana University), “The form and function of the OCP” (February 20).
Richard Wright (Indiana University), “Talker-hearer interactions in speech production: Lexical competition and reduction” (February 23).
Caroline Smith (Eloquent Technologies, Ithaca, NY), “Prosodic and contextual sources of variation in speech production: Examples from English and French” (February 27).
Iain Davidson (University of New England, Australia), “Human evolution, language, and mind” (March 6).
Manfred Krug (University of Freiburg, Germany), “Recurrent paths in the evolution of new English auxiliaries” (March 11).
*Jordan Lachler (Linguistics Ph.D. candidate, UNM), “Sense development and grammaticization of he in West Virginia Mingo” (April 29).
*Terry Janzen (Linguistics Ph.D. candidate, UNM), “Coding and transcribing ASL data” (May 8).

On April 24, Joan Bybee and Sherman Wilcox gave a lecture on “The origins of language in gesture and ritual” in the Department of Philosophy Colloquia Series. This talk was a reprise of the controversial and widely reported presentation they gave at the American Association for the Advancement of Science annual meeting in Philadelphia.

On May 2, the Signed Language Interpreting program hosted its fifth annual Vision Day. Featured guest Ben Bahan, famed American Sign Language story-teller and director of Deaf Studies at Gallaudet University, presented a workshop during the day and a performance of his stories that evening at the Del Norte High School theater. Both activities attracted a large audience from the University and from the community.
The Department of Mathematics and Statistics continued to meet the demands of its broadly defined missions in education, research, and service during the 1997-98 academic year, and tried to improve in many important ways. The number of tenure stream faculty stood at 31 at the end of the year, a decrease of 9 from the 40 faculty on our roster seven years ago. In spite of these losses, our programs remain strong in the face of concerns for the future.

1. Significant Developments During the Academic Year, 1997-98

- Total research funding was approximately $1.7 million. This included new funding by Professors Buium, Efromovich, Embid, Hagstrom, Kapitula, Lorenz, Steinberg, and Wofsy, as well as continuing funding by Professors Bedrick, Christensen, Buium, Efromovich, Gibson, Hagstrom, Huzurbazar, Kolltchinskii, Lorenz, Loring, Pereyra, Steinberg, Stone, and Wofsy. The total figure was up substantially from approximately $1.0 million last year.

- The department began, in the spring semester, to operate the Statistics Clinic, a consulting service directed by Professors Bedrick and Christensen. Staffed by statistics faculty and graduate students from the Department of Mathematics and Statistics, the service is offered without charge to clients at UNM in support of their academic research. This service is funded by the College of Arts and Sciences, the Department of Mathematics and Statistics, the UNM Office of Research Services, and CIRT. The clinic also provides contract services for UNM, local industry, government, and educational institutions. These services draw upon the wide range of expertise in the Statistics Group at UNM, and of affiliated faculty at UNM with statistical expertise.

  The Statistics Clinic has a mission to improve the quality of research at UNM, as well as to enrich the education and training of statisticians through their involvement in statistical consulting. In the first semester of operation, there were 172 appointments with clients, there were several collaborations on grant proposals, and $1,700 was billed for contract services.

- The position of Graduate Chair was upgraded from that of a regular departmental committee chair to an official administrative position carrying a SAC. Professor Embid served as Graduate Chair, and began major reforms in the graduate program. His activity seems to be improving graduate student morale and our success in recruiting graduate students. His reforms will take time for full implementation, but include much more aggressive recruiting, more active advising and tracking of students, and degree program improvements.
• Associate Professors Edward Bedrick, Pedro Embid, and Deborah Sulsky were promoted to Full Professor. Assistant Professors Aparna Huzurbazar, Todd Kapitula and Maria Pereyra, received favorable Code 3 reviews and moved to Code 4 status.

• We were authorized to search for two assistant professors, one in pure mathematics and one in applied analysis. Michael Nakamaye of Harvard University accepted the position in pure mathematics, but will not start until Fall Semester 1999. Monika Nitsche of Tufts University accepted the position in applied analysis, but will not start until Spring 1999. Both have current NSF support.

• Total enrollment for the AY was 11,376 students. That was an increase of 3.4% over the previous AY. Undergraduate enrollments rose by 3.7% over the previous AY, while graduate enrollments fell by 2.2%. The losses at the graduate level were primarily in pure mathematics, where there was a 26% drop in enrollment.

• A total of 24 BS, 9 MA, and 8 Ph.D. degrees was awarded in 1997-98. This was a substantial increase in BS and Ph.D. degrees over the previous year. We expect fewer Ph.D. degrees again next year.

• Professor Alexandru Buium accepted an offer from the University of Illinois for a very substantial increase in salary. He formally is on LWOP for AY98-99, and the department is committed to bringing him back. He is an exceptional researcher, whose presence here made it possible for us to hire Michael Nakamaye. Permanent loss of Professor Buium could have a devastating effect on pure mathematics in the department.

• Professor Ronald Christensen was elected a fellow of the Institute of Mathematical Statistics, an honor added to his earlier election as a fellow of the American Statistical Association.

• The UNM Mathematics Contest, a long-standing and popular high school contest, was revived after a brief hiatus. Professor L.S. Hahn and Lecturer Cathy Gosler approached this important outreach effort with great enthusiasm, and secured substantial funding from the Public Service Company of New Mexico Foundation. The funding may become permanent, and seems to secure the future of the contest. Prizes, including books, cash, and scholarships were awarded at a banquet for contest winners in the spring.

• We completed our second undergraduate outcomes assessment. Dissatisfaction with our assessment program has spawned considerable internal review of our entire undergraduate program, and promises to lead to substantial curriculum reform.

• We completed and had approved a graduate outcomes assessment plan. It will be implemented in AY98-99.

• We initiated formal changes in both undergraduate and graduate programs, mostly related to statistics courses. We are asking for a separate STAT prefix for those courses instead of the current MATH prefix. We also propose BS, MS, and Ph.D. degrees in Statistics. We wish to change the MA in Mathematics to an MS, and allow Plan I for the MS. A number of
4xx/5xx course numbers are in part of the package. Myriad forms related to all this have been submitted, and we hope for approvals in AY98-99.

- Miguel Abanades and Elizabeth Burroughs were selected for Outstanding Teaching Assistant Awards for 1997-98. There were only 8 such awards made in the entire university. The award recognizes contributions made by teaching assistants to quality instruction at UNM, and includes a $300 cash prize.

2. Significant Plans and Recommendations for the Near Future

- We are desperate for more faculty. We have approvals for two positions, one in statistics and one in applied mathematics, and we need to make good hires. We need to hire in many consecutive years in order to come back to a critical mass. Regular faculty should be teaching courses from the level of calculus and beyond, but we have many part-time faculty teaching calculus and even 300-level courses. Graduate offerings are slim to nonexistent in key areas. Only tenure stream faculty can maintain the health of our programs. If we fill the positions approved in AY98-99, we will have exhausted our hiring plan. We need to develop a coherent strategic plan to guide our next several hires.

- The large package of curriculum changes, relating primarily but not exclusively to statistics, needs to be shepherded through the system through faculty senate approval and inclusion in the next catalog.

- Advisement needs to be tightened up at both the graduate and undergraduate levels. The graduate committee, headed by Professor Embid, and the undergraduate committee, headed by Professor Coutsias, will work with the staff to improve the situation. Students are taking too long to complete a degree, and these efforts should help improve that situation.

- We need to develop assessment for our huge service courses. Those multi-section courses need to be better coordinated with respect to syllabi, homework, and exams. We may need to examine our extensive use of part-time faculty in those courses to see if improvements in staffing are possible.

- The Plan I MS degree is new for our department. It should provide a means for an attractive terminal professional degree, but we need to work carefully on implementation.

- Several undergraduate curriculum change proposals need to be discussed and implemented. A promising one is a fifth year teaching certificate program joint with College of Education, possibly evolving into a Master of Arts in Teaching. Some convergence of pure and applied mathematics programs seems possible.

- We need to implement graduate outcomes assessment, and work to improve our existing undergraduate assessment.
3. Appointments to Faculty/Staff

- There were no appointments to faculty.
- Professor Jacek Bochnak from the Vrije University in Amsterdam was a visitor to the department during the Fall semester 1997.
- Dr. Balu Nadiga, Ph.D. Caltech and a staff member at LANL, was named an adjunct associate professor.
- Elizabeth Frank was appointed the Systems Analyst III for the department, effective April 20, 1998. Ms. Frank vacated a Systems Analyst II position in the department to take this position, and the Systems Analyst II position was not filled by the end of the year.

4. Separations

- Professor Cornelis Onneweer and Professor Pramod Pathak both retired from the department at the end of Fall semester 1997. Frank Kelly, Lecturer III in the department, also retired at the end of Fall semester. All three individuals retired in order to take advantage of the early retirement program that was expiring at the end of the semester.
- Peter Espen, Systems Analyst III, resigned from his position on January 9, 1998, to take a position in industry.

5. Publications (for calendar year 1997)

Aceves, Alejandro B.


Bedrick, Edward J.


Boyer, Charles P.


Buchner, Michael A.


Buium, Alexandru


Christensen, Ronald


Coutsias, Evangelos


Efroimovich, Sam


"Robust and efficient recovery of a signal passed through a filter and then contaminated by non-Gaussian noise," *IEEE Transactions on Information Theory*, 43, 1184-1191.


Ellison, James A.


Embid, Pedro F.


Entringer, Roger


Epperson, Jay B.


Galicki, Krzysztof


Gibson, Archie G.


Gilfeather, Frank L.


Huzurbazar, A. V.


Kapitula, Todd


Koltchinskii, Vladimir I.


Kucharz, Wojciech


Lorenz, Jens


Loring, Terry A.


Pereyra, M. Cristina


Qualls, Clifford R.


**Steinberg, Stanly L.**


**Stone, Alexander P.**


**Wofsy, Carla**


**Zimmer, William J.**


6. **Outside Professional Activities**

**Alejandro Aceves**

He attended the AFOSR Nonlinear Optics meeting at the University of Arizona, September 23-26, 1997.

He attended the Third Joint meeting of the American Mathematical Society and the Sociedad Matematica Mexicana in Oaxaca, Mexico, December 3-6, 1997, where he gave a talk.

He visited Northwestern University and Fermi Laboratories in Chicago for research purposes in February 1998.

He attended the OSA workshop in Victoria, British Columbia in March 1998 and gave a paper.

He gave a colloquium at Southern Methodist University on April 9, 1998.

He visited Brooklyn Polytechnic University on April 23, 1998, and gave a colloquium.

He also visited Princeton University on April 24, 1998, for research purposes.
Edward Bedrick

He organized an invited session at the WNAR/IMS meeting in Park City, Utah in July. He participated in the National ASA meeting in Anaheim in August and also attended a meeting on data mining at the Maui Supercomputer Center.

He visited the University of Wyoming and gave a talk on March 17, 1998.

He gave a talk on March 27 at New Mexico Tech in Socorro.

Charles Boyer

He was the plenary speaker at the American Mathematical Society Meeting in Albuquerque in November, giving the speech, “Quaternionic Geometry and Einstein Manifolds.”

Together with Krzysztof Galicki, he arranged the special session on Quaternions in Global Riemannian and Algebraic Geometry at the AMS meeting, held November 8 and 9, 1997 at the Albuquerque Convention Center.

Alexandru Buium

He visited the University of Illinois at Urbana-Champaign on September 11 and 12, 1998, and gave a colloquium.

He arranged the special session on Diophantine Geometry at the AMS meeting, held November 8 and 9, 1997 at the Albuquerque Convention Center.

He gave the talk to the participants in the second round of the UNM Mathematics Contest on Saturday, February 7, 1998.

He spent a week in Cambridge, England, where he participated in a workshop.

Laura Cameron

She attended the Western Regional National Council for Teachers of Mathematics meeting in Denver, February 21-22, 1998, where she gave a session.

She represented the department as a member of the Mathematics Development team at the statewide meeting on Collaborative Excellence in Teacher Preparation in Albuquerque, February 27-28, 1998.

She attended the Third International Mathematics and Science Study Workshop, April 23-24, 1998 in Albuquerque.

Ronald Christensen

He visited Montana at the end of September where he attended the ASA Chapter meeting at Montana State University and gave a talk. He also gave two seminars. As a reward for his
labors, he was honored as the most overworked associate editor for the Journal of the American Statistical Association.

He traveled to Slovakia where he was the invited speaker in the Probastat '98 International Conference on Probability and Statistics, in Bratislava, in February 1998.

He gave a talk at the University of Augsburg, Germany, in late February 1998.

He was elected to a Fellowship in the Institute of Mathematical Statistics for his outstanding research contributions in May 1998.

He was a judge at the New Mexico Science and Engineering Fair on April 18, 1998.

Sam Efromovich

He gave a presentation on his research related to image processing, together with Cristina Pereyra and Carla Wofsy, as part of the department’s celebration of Mathematics Awareness Week, April 26-May 2, 1998.

James Ellison

While on sabbatical at DESY in Hamburg for the academic year, he gave an invited talk at a workshop on Nonlinear and Stochastic Beam Dynamics in Accelerators – A Challenge to Theoretical and Computational Physics in Lîneberg, near Hamburg in September.

In mid-September he attended a Defense of Dissertation in Aarhus, Denmark, where he was a censor for the dissertation entitled, “Channeling and related strong field QED effects in crystals.”

Pedro Embid

He spent two weeks in Merida, Venezuela in September as one of four invited faculty who participated in the Tenth School of Mathematics.

He received an award for outstanding teaching of mathematics at the banquet on December 4, 1997, of the UNM chapter of Kappa Mu Epsilon, the national mathematics honor society.

Jay Epperson

Together with Cristina Pereyra, he arranged the special session on Harmonic Analysis at the AMS meeting, held November 7 and 8, 1997 at the Albuquerque Convention Center.

He participated in the first New Mexico Harmonic Analysis joint seminar, held in Las Cruces, February 27-28, 1998.

Krzysztof Galicki

Together with Charles Boyer, he arranged the special session on Quaternions in Global Riemannian and Algebraic Geometry at the AMS meeting, held November 8 and 9, 1997 at the Albuquerque Convention Center.
Nancy Gonzlaes

She participated in the School Science and Mathematics Annual Conference, November 13-16, 1997 in Milwaukee, Wisconsin, where she presented a paper.

Her manuscript, "A Blueprint for Problem Posing" was accepted for publication by the School Science and Mathematics Journal.

Cathy Gosler

Together with L.-S. Hahn, she organized the UNM Mathematics Contest, from its initial round in November, its second round in February and its concluding Winners Banquet in April 1998.

She attended the Western Regional National Council for Teachers of Mathematics meeting, held in Denver, February 21-22, 1998, where she gave a presentation.

She was selected to be included in the 1998 edition of Who's Who Among America's Teachers.

She participated in the Conference for Teachers of Mathematics Education at the Las Cruces Education Institute on April 19-20, 1998. She gave a talk about teaching methods and visited four classes in the Las Cruces schools.

L.-S. Hahn

He is a co-organizer of the UNM Mathematics Contest and is solely responsible for composing the questions for Round I, held in November, 1997 and Round II held in February, 1998. He also grades all the questions for Round II.

At the American Mathematical Society meeting in Baltimore on January 8, 1998, he received a citation for his contributions to the mathematics profession through public service.

Aparna Huzurbazar

She gave a talk on February 12, 1998, at M.D. Anderson Cancer Center at the University of Texas, Houston Medical Center.

She attended the AAAS meeting in Philadelphia on February 13, 1998, as the ASA representative to the AAAS section on Industrial Science and Technology.

She organized and participated in the spring meeting for the Albuquerque Chapter of the ASA, held on April 7, 1998 in Santa Fe.

She was a judge at the New Mexico Science and Engineering Fair on April 18, 1998.

Todd Kapitula

He spent the month of July in Berlin, Germany, at the WIAS Institute. While there, he gave talks at a conference in Irsee and participated in a seminar at the University of Stuttgart.
He visited the Lorentz Institute at the University of Leiden in the Netherlands to give a talk and attend a seminar, October 6-10, 1997.

He gave a talk at Simon Fraser University in British Columbia in early January.

He gave a talk at the Ohio State University on March 17, 1998.

**Jens Lorenz**

He gave two lectures on a trip in February to the University of Bielefeld in Germany.

He participated in a workshop in Bad Oeynhausen in Germany on Stability of Fronts and Pulses.

**Cristina Pereyra**

She attended the Introductory Workshop in Harmonic Analysis of the Mathematical Sciences Research Institute at Berkeley, California, August 18-22, 1997.

She attended the AMS meeting in Atlanta and gave a talk on October 18 on Harmonic Analysis and its applications.


Together with Jay Epperson, she arranged the special session on Harmonic Analysis at the AMS meeting, November 8 and 9, 1997 at the Albuquerque Convention Center.

She participated in the first New Mexico Harmonic Analysis joint seminar, held at Las Cruces, February 27-28, 1998.

Together with Carla Wofsy and Sam Efromovich, she gave a presentation on her research related to image processing, as part of the department's celebration of Mathematics Awareness Week, April 26-May 2, 1998.

She was a judge at the New Mexico Science and Engineering Fair on April 18, 1998.

She attended the NSF-CBMS Regional Research Conference on Wavelet Analysis as a tool for Computational and harmonic Analysis, May 4-7, 1998.

**Stanly Steinberg**

He visited San Diego State University on February 27, 1998 and gave a colloquium.

During the week of March 22-27, he visited Morelia in Mexico, where he gave a four hour course on finite-volume methods at the ENOAN 98 meeting at the Universidad Michoacana de San Nicolas de Hidalgo.
Alexander Stone

He organized and coordinated the American Mathematical Society Meeting, held November 8 and 9, 1997 at the Albuquerque Convention Center.

Deborah Sulsky

She presented a paper at the Joint ASME/ASCE/SES Summer meeting at Northwestern University in July.

She arranged the special session on Computational Mechanics at the AMS meeting, November 8 and 9, 1997 at the Albuquerque Convention Center.

Carla Wofsy

Together with Cristina Pereyra and Sam Efroimovich, she gave a presentation on her research related to image processing as part of the department’s celebration of Mathematics Awareness Week, April 26-May 2, 1998.

William Zimmer

He gave a colloquium at the New Mexico Tech in Socorro on May 7, 1998.

He was a guest choreographer at the Annual Dance Performance of the Eastern New Mexico University Dance Department on May 15, 1998.

6. **Outside Sponsored Research**

   See the table on the following page.
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<tr>
<th>Principal Investigator</th>
<th>Funding Agency</th>
<th>Purpose</th>
<th>Amount</th>
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<tr>
<td>Edward Bedrick, Ron Christensen</td>
<td>NSF</td>
<td>Evaluating Independence in Linear and Generalized Linear Models</td>
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<td>Charles Boyer, Kris Galicki, Ben Mann</td>
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<td>Quadratic Geometry, Einstein Manifolds and Topology of Moduli Spaces</td>
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<td>Curve Estimation Involving Time Series</td>
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<td>Nonlinear Problems In Geophysical and Relative Flows</td>
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<td>Stability of Travelling Waves with Applications in Nonlinear Optics</td>
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<td>Vladimir Koltchinskii</td>
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<td>Computation and Analysis of Invariable Manifolds and their Bifurcations</td>
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<td>Numerical and Asymtotic Studies of Complex Flow Dynamics</td>
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<td>Stable Relations and their Loci in Operator Algebra Variables</td>
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Philosophy Department  
University of New Mexico  
Albuquerque, New Mexico 87131  
(505) 277-2405, FAX: (505) 277-6362  
8 September 1998  

Annual Report, 1997-98  
G. F. Schueler, Chair  

1. Significant developments during the academic year 1996-97  

Professor Aladdin Yaqub was granted tenure and promoted to Associate Professor at the end of Spring term, 1997.  

Professor Rebecca Kukla (Ph.D., Pittsburgh, 1996), who came to UNM from the University of Oregon, began teaching in Fall, 97/98. Professor Kukla is interested especially in political and social philosophy. She is at work on a book on Rousseau. Her graduate seminar on Rousseau in Spring, '98 was I think the first seminar on this philosopher ever given in this Department. Along with other courses, she also taught a very successful 'Intro. Philosophy' class in Fall, 98. Unfortunately for UNM, she decided to go on leave during 98/99 to join her husband at Carlton Univ. in Canada. The Department faces the challenge during 98/99 of figuring out a way to keep her at UNM.  

Because of the hiring 'freeze' imposed at the end of 1996, and continued, for Philosophy at least, during 96/97, the Department was again not able to fill the empty position left with the retirement of Howard Tuttle at the end of the 95/96 academic year. As a 'fill-in' we were able to hire Jennifer Nagel (PhD Pittsburgh, expected '99) as a Visiting Assistant Prof. for 98/99. Prof. Nagel is an expert in epistemology and metaphysics and is thus able to add significantly to the strength of the Dept. in what are usually regarded as the central core areas of philosophy. It is very important to the continued development of both the graduate and undergraduate programs of the Dept., however, that this 'slot' be filled with a regular, tenure track, person as soon as possible.  

The revised graduate program in Philosophy began functioning during 97/98. In the Spring, '98 term we offered the Philosophy 'Graduate Proseminar' which is now required of all new graduate students. Under the direction of Professor Amy Schmitter, each of the eleven members of the Dept. offered a three-hour seminar focused on their own areas of research expertise. Also during the Spring term the Graduate Preliminary Exam in the history of philosophy was given to all entering Ph.D. students. Though the 'feedback' from the Proseminar and the Prelim exam were generally positive, one task for the Dept. this year is to undertake a more systematic look at how these went before instituting the 98/99 versions.
The Dept. awarded its Barrett Dissertation Fellowship for 98/99 to Lisa Gerber, an 'ABD' graduate student who has been a TA for several years. She is working with Professors Schueler and Tenenbaum on virtue ethics and the environment. Our 97/98 Barrett Dissertation Fellow, Kevin Boileau, successfully defended his dissertation in Spring, '98 and received his degree in May. The revised Dept. graduate program envisions full TA and fellowship support for all admitted Ph.D. students. We are currently using the bulk of the proceeds from our Gwendolyn Barrett Fund to support one 'dissertation year' fellowship each year. Our hope is that this will, on average, allow us to award at least one Ph.D. each year.

As in previous years, the Department sponsored an extensive list of lecturers during 97/98, including a number of distinguished philosophers from other universities, these included:

Richard Manning, Ohio University, 9/5/97 - Function and Intentionality

Fred Schueler, UNM, 9/19/97 - Why Reasons Aren't Causes

Patricia Greenspan, University of Maryland, 9/26/97 - Emotional Strategies and Rational Choice

Russell Goodman, UNM, 10/10/97 - James and Wittgenstein on Language


Ariela Lazar, Northwestern University, 11/7/98 - Deceiving Oneself or Self-Deceived? On the Formation of Belief "Under the Influence"

Rebecca Kukla, UNM, 11/21/98 - Myth, Memory and Misrecognition in Sellars' 'Empiricism and the Philosophy of Mind"

Amy Schmitter, UNM, 12/5/98 - Mind and Sign: Method and the Interpretation of Mathematics in Descartes' Early Work

Petra Von Morstein, University of Calgary, 2/6/98 - Philosophy and Suffering

Stephen Scholz, UNM Ph.D. candidate, 2/13/98 - The Paradox of Heroism

Gordon Nagel, University of Toronto, 2/20/98 - What is Justified in the Transcendental Deduction

Alasdair MacIntyre, Duke University, O'NEIL MEMORIAL LECTURES IN THE

John Searle, University of California, Berkeley, 3/9/98 - The Construction of Social Reality (Partly funded by A&S Undergraduate Program Award)

David Sobel, Bowling Green State University, 3/30/98 - Well-being as the Object of Consideration

Barbara Herman, University of California, 4/17/98 - The Perils of Heteronomy (Partly funded by A&S Undergraduate Program Award)

Joan Bybee/Sherman Wilcox, UNM, Department of Linguistics, 4/24/98 - The Origins of Language in Gesture and Ritual

Olga Hansberg, Director of the Instituto de Investigaciones Filosoficas at UNAM in Mexico City, 4/29/98 - Philosophy and the Emotions and 4/30/98 - Emotions and the Propositional Attitudes

Barbara Hannan, UNM, 5/12/98 - Sellars on Language and Empirical Knowledge: A Critique

2. Significant Plans and Recommendations for the Near Future

It is extremely important that the Department finally be able to replace Howard Tuttle during 98/99. Independently of the problems created by having to cover some courses with part-time or visiting faculty (or regular faculty better qualified to teach other things), the structure of our graduate offerings especially is now partly organized around the core areas of philosophy such as metaphysics and epistemology, which are the areas we envision Tuttle’s replacement as covering.

It is also very important that the Dept. be able to retain Rebecca Kukla (or if worse comes to worst, replace her as soon as possible). In the year she has been here her contribution to both the Philosophy Dept. and the University as a whole has been outstanding. She is an excellent and enthusiasm teacher as well as having great research potential: just the sort of junior person UNM needs and can ill afford to lose.

We plan to continue our evaluation of our new graduate program, with ‘adjustments’ being made as needed, e.g. in the graduate reading lists which are currently quite long. At the same time we plan and hope to spend more time working on both the content and the actual teaching of our undergraduate offerings, both for courses primarily taken by philosophy majors and for courses
offered to the wider UNM undergraduate population. Courses in the latter category are often the only philosophy course, or even the only humanities course many UNM students ever take.

3. Appointments to faculty/staff.

Professor Rebecca Kukla officially became a member of the Dept. in August, 1997. Patricia Aragon was hired as Staff Secretary in May, 1998.

4. Separations of faculty/staff.

Glenda Baxter, our long serving Staff Secretary, resigned in April, 1998.

5. Publications

Andrew Burgess:
"The Bilateral Symmetry of Kierkegaard's 'Postscript'," in the IKC series.

John Bussanich:
"Plotinian Mysticism in Theoretical and Comparative Perspective", JOURNAL OF THE AMERICAN CATHOLIC PHIL. ASSOCIATION.
"Non-discursive Thought in Plotinus and Proclus", DOCUMENTI E STUDI SULLA TRADIZIONE FILOSOFICA MEDIEVALE.
Review of PHILOSOPHY, DOGMA AND THE INFLUENCE OF GREEK THOUGHT IN ISLAM in PHILOSOPHY EAST AND WEST.

Russell Goodman:

Barbara Hannan:
"The Progress of Science and the Progress of the Soul" in THE ROLE OF PRAGMATICS IN CONTEMPORARY PHILOSOPHY (G. Schurz and G. Dorn, eds) Austria, 1997.

Rebecca Kukla:
"Reading Literature After Hegel," JOURNAL OF SPECULATIVE PHILOSOPHY.
"Myth, Memory and Misrecognition in Sellars 'Empiricism and the Philosophy of Mind,'" PHILOSOPHICAL STUDIES.
"Rousseau's Paranoid Pedagogy and the Making of Human Nature", JOURNAL OF THE BRITISH SOCIETY FOR PHENOMENOLOGY.

Amy Schmitter:

Fred Schueler:

Ted Sturm:
"Chinese Buddhism" in CHINESE THOUGHT: AN INTRODUCTION (2nd ed.).
"Philosophy and the Intellectual Tradition" in LATIN AMERICA, ITS PROBLEMS AND ITS PROMISE (3rd ed.)

John Taber:

Sergio Tenenbaum:
"Judgment of a Weak Will", in PHILOSOPHY AND PHENOMENOLOGICAL RESEARCH.

6. Outside Professional Activities of Faculty

Andrew Burgess:
Papers delivered: November 1997 at the national AAR convention in San Francisco, paper on "The Genre of Kierkegaard's Communion Discourses."
March 1998 at the regional AAR in Omaha I gave a paper on "Kierkegaard's Concept of Redoubling and Luther's 'Simul Justis'."
Member of the regional AAR program committee.

John Bussanich:
Co-Editor of ANCIENT PHILOSOPHY

Russell Goodman:
APA Eastern Division, Advisory committee on American Philosophy
Reader for Vanderbilt University Press.
Talk: Wittgenstein and Pragmatism, Seminar on "Pragmatism in Europe,"
Sixth Conference of the International Society for the Study of European Ideas, Haifa, Israel, August, 1998.

Rebecca Kukla:
Invited talks given in the philosophy departments of Lewis and Clarke College, Ohio Univ. and in the comparative literature dept. of the Univ. of Oregon.
NEH Summer Seminar on "How Background Practices Produce Intelligibility", UC Santa Cruz, summer 1997.

Amy Schmitter:

Fred Schueler:
APA Pacific Div. Program Committee.

Ted Sturm:
Board Member of SOPHIA.
SOPHIA panel member on "The marginalization of Philosophy in American Higher Education".
President, Society for Iberian and Latin American Philosophy.
"Perspectives on Perspective", Taos School of Art, 22 Sept. 1997

John Taber:

Sergio Tenenbaum:
"Rule of the Greater Good", conference on Utilitarianism Reconsidered, New Orleans.
"Hume on Model Claims", International Hume Society, Monterey, CA.
Chair of APA Central Div. session on "Eliminative Materialism"
Aladdin Yaqub:
Invited paper on "Revising Deflationism", APA Pacific Div., March 1998

7. Outside Sponsored Research

Alas, none.
This year was characterized by three important goals: the development and implementation of a plan to control spending in the department and manage the debt, development of a plan to modernize the undergraduate laboratories, and a review of the centers within the department. All of these objectives were met although some are ongoing processes. For instance, the modernization and upgrading of the undergraduate laboratories will take several years to complete because of the lack of funds. The development of a fiscal plan for the next few years necessitated a number of changes in the department including a reorganization of the staff. Each of these goals and the resulting changes are discussed in greater detail below.

This academic year began with the installation of a new chairman. Prof. Wolfe resigned effective 1 August after serving as chairman for 6 years. During his tenure, the department experienced a spurt of growth reaching a maximum number of 31 faculty. This number has now been reduced to 28 with the resignation of Prof. Johnson during the summer of 1997 and the retirements of Professors Bryant and Beckel in December. The teaching staff was further reduced by one faculty member being on an extended leave without pay and another on medical leave for the latter part of the fall semester and all of the spring. This state of affairs necessitated a greater use of part-time teachers than is normally desirable.

One of the major points of contention in the Department of Physics and Astronomy has been the existence of three centers within the department. These are the Center for Advanced Studies, the New Mexico Center for Particle Physics, and the Institute for Astrophysics. Under the previous structure, the center directors reported directly to the Dean of the College of Arts and Sciences and enjoyed enhanced overhead return, partially at the expense of the department. The faculty reviewed these centers during the fall semester. This review made no attempt to assess the scientific contributions made by the centers and their members but, instead, concentrated on their role in the department and their impact on the operation of the department. The findings of the department and recommendations for the restructuring of the centers were communicated to the dean in early December. Further conversations between the dean, the chair, and the center directors resulted in a restructuring of all three centers that was summarized in a memo from the dean. The new arrangement has done much to relieve the feelings of inequity that were prevalent amongst the faculty under the previous operational plan. One of the tasks for the coming year is to implement the changes outlined by the dean and to develop goals for each center against which they are to be measured in the mandated review in three years.

One of the most pressing tasks last academic year was to develop a plan for managing the debt that the department had accumulated in its overhead account. As of 1 July 1997 this debt was approximately $316,000. It is important to note that the debt had actually
declined from an all time high of nearly $443,000 the previous year. The first task undertaken was an exhaustive review of all expenditures, reimbursements and allocations that had occurred on the overhead account since FY 1991. This task was completed in the spring as well as could be expected considering the deplorable state of record keeping and bookkeeping that were prevalent in this department and the university during much of this period. Even before this task was completed, a number of cost-saving measures were put in place. One area that had immediate impact was in the reorganization of the staff. Previously, the overhead account had been burdened by staff salaries. When the department's receptionist resigned, this position was not filled and the savings incurred on the I&G account were used to cover the remaining portion of the newly hired academic advisor's salary that was on the overhead account. Also, half of the salary of the shipping and receiving clerk were moved to the I&G account. This plus other cost saving measures has reduced the debt to approximately $255,000 as listed on the July FRS. This is a substantial reduction considering that the account absorbed nearly $30,000 in over expenditures on grants and contracts and paid for nearly $37,000 in flood damage to equipment in the building. The latter costs are presumably covered by insurance. If the insurance claims and other reimbursements are removed from the above figure, the actual debt is closer to $200,000 before the addition of this year's allocation of ~$125,000. These figures are in keeping with the plan for eliminating the debt that was prepared by the department and submitted to the dean in December.

The department also spent a significant amount of time reviewing the undergraduate laboratories associated with the introductory courses. These laboratories have suffered from antiquated equipment and general neglect. The first steps in addressing this problem were begun during the academic year 1996/97. In order to insure that this problem received the attention it deserved, a full-time faculty member, Prof. Panitz, has been assigned to them with explicit instructions to develop a plan to modernize and renovate all the laboratories associated with our 100 and 200 level courses. Because of the importance of this task to the department and because of the amount of work involved, Prof. Panitz has been appointed an associate chair with responsibility for undergraduate laboratories. In addition to Prof. Panitz, one of our staff members, W. Miller, has also been assigned to the laboratories. Last year they were assisted by M. Odom, a faculty member from TVI who was on sabbatical. He has significant experience in modernizing these laboratories and is familiar with the current research on teaching undergraduate physics.

A plan for upgrading and modernizing the laboratories has been developed. This plan suggests that portions of the laboratories for the 150 and 160 series be taken from established curricula used in other universities while the rest be developed from current experiments. In addition, a new laboratory course corresponding to Phys 161 is to be created. After approval of the plan, a method for piecemeal introduction of the changes was developed and implementation begun. The first phase of the plan concentrates on upgrading the laboratory courses associated with the service courses, Phys 151, 152, 160, 161, and 262 and the introduction of the new course that corresponds to Phys 161. Because of a shortage of funds, we expect these upgrades to take approximately three years. At the same time, the laboratories associated with Phys 102, 106 and 108 will be upgraded on a one-experiment-at-a-time basis until more funds can be diverted to them. It is likely that the laboratory associated with 108 will have to be completely redesigned.
In order to improve the rate at which the necessary changes can be implemented, we are actively seeking outside funding. We have also received permission to search for a permanent undergraduate laboratory supervisor and are in midst of the search.

During the upcoming year the department will be concentrating on four major tasks. These are implementation of the plans for upgrading and improving the undergraduate laboratories, development of a long term plan for the future of the department, implementation of the graduate assessment program, and undergraduate and graduate recruitment. We also intend to review the undergraduate astronomy laboratories and develop a plan to improve them.

One of the major problems facing this department is the decline in undergraduate majors. Although this is a nationwide trend, our number of majors has dropped at an alarming rate. During the past several years the undergraduate committee has taken a number of steps to reverse this trend. These steps include better advisement and closer interaction between the department and potential majors. We have also devoted more time and money to advertisement and community activities. In addition, a BA program has been started that is attracting some students that would otherwise not be interested in a physics degree. Another seemingly successful idea has been to create an honors level class for our calculus based introductory courses. Professor Wolfe is responsible for this idea and is currently implementing it as a teaching overload. Although we are beginning to see signs of improved enrollments, the major problem has not yet been addressed. This is: we are not only competing for students within the university but must also compete against other physics and astronomy departments in the United States. In other words, we must also be able to convince students to come to the University of New Mexico to study physics and astronomy. This is true not only at the undergraduate level but also at the graduate level. In the latter case we are doing reasonably well although there is certainly room for improvement. In order to address this problem, the department will be spending this academic year developing a plan for the future of the department. This will require that we take a close look at the current state of the department in order to identify strengths and weaknesses, examine other physics and astronomy departments in the country, and identify niches where we either excel or have the potential to excel. An important part of this plan will be examine the possibility of developing interesting interdisciplinary programs and of stronger interactions with the local national laboratories. Also, this review necessitates a close look at our curriculum and teaching methods. In the past several years there has been a large amount of research published on teaching physics. Most of the suggestions and curricula that have been developed from this research have not been implemented in this department. There are individual exceptions to this statement and the new laboratories will rely heavily on the new curricula and teaching methods developed from this research. Nonetheless, it is possible that more sweeping changes need to be implemented.

Center for Advanced Studies

The Center for Advanced Studies continues under the direction of Prof. V. M. Kenkre. Under his leadership the Center has continued its vigorous program of research, international visitors, and workshops. CAS members gave a number of invited talks in
colloquia, seminars, and international conferences. In addition, over thirty papers on original work were published in 97-98 by CAS members.

Among the most visible achievements were the organization of five workshops by Center personnel that attracted scientists from many countries around the world:

1. Probing into Restricted Geometries: Fundamental Aspects of Diffusion in NMR (Sept 97)
2. Internal Workshop of the CAS (Feb 98)
3. Transport in Organic Materials II (March 98)
4. Quantum Control of Atomic Motion II (June 98)
5. Granular Materials: Statics, Excitations and Dynamics (June 98)

These workshops were primarily supported by funds from the Center although one workshop was also cosponsored by grants from Sandia and from LANL.

A new initiative for building a Consortium for the Americas for Interdisciplinary Science was constructed with strong support from the Associate Provost for Research, the Dean of Arts and Science, several Department Chairs, from LANL, Sandia, and from over a dozen Universities in Brazil, Argentina, Chile and Mexico.

In addition to these activities, the Center continued its popular seminar series and its program to sponsor long-term visits by selected scientists. This year we were fortunate to have distinguished scientists from Poland, India, Brazil, Mexico, Argentina, England, Germany and the United States.

**Highlights of Faculty Activities**

**Professor Emeritus C. L. Beckel** has been invited to contribute a paper to a special publication "Boron Chemistry at the Millenium." Accordingly a paper entitled "Lattice Vibrations of the Icosahedral Solid Boron Arsenide," by C.L. Beckel, N. Lu, B. Abbott, and M. Yousaif has been prepared and submitted.

**Professor N. Duric** organized an Astronomy Day on 14 August on behalf of this department. Approximately 30 high school students and undergraduates from New Mexico and Costa Rica attended. They were brought together for one week under Project Uplift, a UN-sponsored project to expose students to science and education. Our contribution to this program was an Astronomy Day. Astronomy Day, consisted of one evening at the campus observatory and one day devoted to exposing high school students to astronomy through lectures and hands-on activities.

**Professor B. Dieterle** was part of the international collaboration on the CHOOZ reactor experiment. The result of this experiment implies that the most massive neutrino (tau flavor) probably has too little mass to explain the Dark Matter in the Universe. This result which was published in 1998 received a lot of attention in the community. It was also reported on NOVA and in several newspapers.
Professor P. A. Henning and her student, Mr. A. J. Rivers, represented two international teams of astronomers at the American Astronomical Society meeting in San Diego in June 1998. Their reports presented the results of the Dwingeloo Obscured Galaxies Survey and the HI Parkes Southern Zone of Avoidance Survey. The Dwingeloo Survey has discovered about 40 hidden galaxies, including several clumped together in a previously unknown nearby group. The Parkes survey has uncovered 103 galaxies, only 28 of which were mapped before. Both of these reports were widely reported in the popular media. Professor M. Price of this department is a member of Parkes team.

Professors J. Matthews and B. Dieterle have become involved with the Hi Res and Auger experiments. The HiRes experiment is in Dugway Utah and the Auger experiment is proposed for Millard County, Utah and Mendoza Province, Argentina. The initial Auger site will be in Argentina. These experiments will be unique in the quality and quantity of data that they generate and thus in their potential for new discoveries. They make the United States the world center for the study of the highest energy cosmic rays—one of the most important topics in astrophysics today.

In the Auger experiment, Prof. Matthews is the co-leader of Auger fluorescence detector calibration and atmospheric monitoring group and has similar responsibilities in the HiRes experiment. The thrust of both experiments is the study of the cosmic ray spectrum near and above the GZK cutoff. The most critical instrumental issues are the absolute energy scale and the event-to-event uncertainty in the measured energy of the cosmic ray showers. The absolute energy and the event-to-event uncertainty depend critically on the calibration and atmospheric monitoring. Therefore, the University of New Mexico plays a crucial role in these major new experiments.
PROFESSORS


Cahill, Kevin, Ph.D., Harvard, 1967.


Chandler, Colston, Ph.D., California, Berkeley, 1967.


Duric, Nebojsa, Ph.D., Toronto, 1984.

Finley, Daniel, Ph.D., California, Berkeley, 1968.


Panitz, John A., Ph.D., Pennsylvania University, 1969.


Price, R. Marcus, Ph.D., Australian National University, 1966.


ASSOCIATE PROFESSORS

Duncan, Robert V., Ph.D., California, Santa Barbara, 1988.
Gold, Michael S., Ph.D., California, Berkeley, 1986.
Seidel, Sally C., Ph.D., Michigan, 1987.

ASSISTANT PROFESSORS

Deutsch, Ivan H., Ph.D., California, Berkeley, 1992.
Henning, Patricia A., Ph.D., Maryland, 1990.

UNIVERSITY PROFESSOR

Gell-Mann, Murray, Ph.D., Massachusetts Institute of Technology, 1951.

LECTURERS

Dimiduk, Kathryn, Ph.D., Stanford, 1983.
Odom, Boye M., M.S., University of Texas at El Paso, 1981.

RESEARCH PROFESSORS

Emin, David, Ph.D., Pittsburgh, 1968.
Lowe, James, Ph.D., Birmingham, 1959.
Wodkiewicz, Krzysztof, Ph.D., Rochester, 1977.

RESEARCH ASSOCIATE PROFESSORS


Moore, Gerald, Ph.D., Brandeis, 1969.

RESEARCH ASSISTANT PROFESSORS

Field, Douglas, Ph.D., Indiana University, 1991.


PROFESSORS EMERITI

Beckel, Charles L., Ph.D., Johns Hopkins University, 1954.

Bryant, Howard C., Ph.D., Michigan, 1960.

Dieterle, Byron D., Ph.D., California, Berkeley, 1967.

Hull, McAllister H., Ph.D., Yale, 1951.

Swinson, Derek B., Ph.D., University of Alberta at Calgary, 1965.

JOINTLY APPOINTED FACULTY

Brueck, Steven R. J., Ph.D., MIT, 1971 (primary appointment in Electrical Engineering and Computer Engineering (EECE)).

Jain, Ravinder K., Ph.D., California, Berkeley, 1974 (primary appointment in EECE).

Jungling, Kenneth, Ph.D., University of Illinois at Urbana-Champaign, 1970 (primary appointment in EECE).

Kelsey, Charles A., Ph.D., Notre Dame, 1962 (primary appointment in Radiology).

Osiński, Marek, Ph.D., Polish Academy of Sciences, 1979 (primary appointment in EECE).
ACTIVE ADJUNCT FACULTY

Herling, Gary H., Adjunct Professor, Ph.D., Yale, 1961.

MacCallum, Crawford, Adjunct Professor, Ph.D., University of New Mexico, 1962.

Stephenson, Gerard J., Adjunct Professor, Ph.D., Massachusetts Institute of Technology, 1964.
Faculty:

Ledlow, Michael, Visiting Assistant Professor, 8/18/97.

Dimiduk, Kathryn, Visiting Lecturer II, 8/18/97.

Odom, Boye M., Visiting Lecturer II, 8/18/97.

Staff:

Beining, David J., Public Relations Specialist, LodeStar, 8/1/97.


Fry, Betty K., Coordinator, Administrative Support, CAS, 9/2/97.

Hasselbeck, Michael, Senior Research Scientist III, 4/1/98.

Lorimer, Joel J., Shipping/Receiving Clerk, 11/17/97.

McCarrson, T. D., Senior Research Engineer I, DYNAMX, 2/1/98.

McCready, Steven S., Senior Research Scientist I, DYNAMX, 4/10/97.

Meyer, Norine, Academic Advisor, 9/22/97.

Pickard, Paul J., Prototype Machinist, 8/11/97.

Ramprasad, Ramamurthy, Post-doctoral Associate, 5/1/97.


Stotzer, Reinhard, Post-doctoral Associate, 10/1/97.

Vallo, Brian, Public Affairs Assistant, LodeStar, 2/14/98.
FACULTY/STAFF SEPARATIONS

Faculty:

Bryant, Howard C., Professor, retired 12/31/97.

Dieterle, Byron D., Professor, retired 12/31/97.

Staff:

Howells, Samuel, Senior Research Scientist, 3/29/98.

McCready, Steven S., Senior Research Scientist I, DYNAMX, 5/18/98.

McDonald, Clarice, Account Technician, 5/29/98.

Moeur, William A., Senior Research Scientist I, 4/30/98.

Natek, Nancy, Administrative Assistant, DYNAMX, 8/15/97.

Percheron, Isabelle, Senior Research Associate Staff II, 8/27/97.


Rafferty, Brent D., Senior Research Scientist I, 6/18/98.

Shipers, Shirley, Administrative Assistant III, Natural Sciences Program, 12/31/97.

Stotzer, Reinhard, Post-doctoral Associate, 3/1/98.
Ahluwalia, Harjit S.


Bassalleck, Bernd


Rare $K^+$ decays in flight, D. Lazarus et al., Proceedings of Workshop on $K$-Physics, Orsay, France, 1997.

**Bryant, Howard C.**


Cahill, Kevin E.


Caves, Carlton M.


Deutsch, Ivan H.


Diels, Jean-Claude


Dieterle, Byron D.


Measurements of the reactions $^{12}$C($e,e'$)$^{12}$N$_{g.s}$ and $^{12}$C($e,e'$)$^{12}$N*, C. Athanassopoulos, et al, Physical Review C 55, 474, 1997.

Measurements of the reactions $^{12}$C($\mu,e'\mu$)$^{12}$N$_{g.s}$ and $^{12}$C($\mu,e'\mu$)$^{12}$N*, C. Athanassopoulos, et al, Physical Review C 56, 2806, 1997.

Duncan, Robert V.


Dunlap, David H.


Duric, Nebojsa

Refereed:


Halpha, far infrared and thermal radio continuum emission within the late-type spiral galaxy M33, N. Devereux, N. Duric, and P. Scowen, *AJ* 113, 236, 1997.


Non-refereed:


Emin, David

Hall effect sign anomaly and small-polaronic conduction in \((La_{1-x}Gd_x)_{0.67}Ca_{0.33}MnO_3\), M. Jaime, H. T. Hardner, M. B. Salamon, M. Rubenstein, P. Doresy, and D. Emin, Physical Review Letters 78, 951, 1997.

Raman spectra of isotopically enriched \(B_{12}As_2\), \(B_{12}P_2\), \(B_{12}O_2\) and \(B_{12}+xC_{3-x}\): Compositions and relative stiffness of icosahedra and chains, T. L. Aselage, D. R. Tallant, and D. Emin, Physical Review B 56, 3122, 1997.

Anomalous Hall effect in Gd-doped \(La_{2+y}Ca_{1+y}MnO_3\), M. Jaime, H. T. Hardner, M. B. Salamon, M. Rubenstein, P. Doresy, and D. Emin, J. of Applied Phys. 81 (8), 4958, 1997.


Finley, Daniel


Gold, Michael S.

Search for first generation leptoquark pair production in \(p\bar{p}\) collisions at \(\sqrt{s} = 1.8\) TeV, F. Abe et al, the CDF Collaboration, Phys. Rev. Lett. 79, 4327, 1997.

Search for new particles decaying into \( b \bar{b} \) and produced in association with W bosons decaying into \( e\nu \) and \( \mu\nu \) at the Tevatron, F. Abe et al, the CDF Collaboration, *Phys. Rev. Lett.* 79, 3819, 1997.

Search for the decays \( B^0_d - \mu^+\mu^- \) and \( B^0_s - \mu^+\mu^- \) in \( pp \) collisions at \( \sqrt{s} = 1.8 \text{ TeV} \), F. Abe et al., the CDF Collaboration, FERMILAB-PUB-97/397-E, 1997.

The \( \mu\tau \) and \( e\tau \) decays of top quark pairs produced in \( pp \) collisions at \( \sqrt{s} = 1.8 \text{ TeV} \), F. Abe et al, the CDF Collaboration, *Phys. Rev. Lett.* 79, 3585, 1997.


Measurement of the \( \tilde{t}\tilde{t} \) production cross section in \( pp \) collisions at \( \sqrt{s} = 1.8 \text{ TeV} \), F. Abe et al, the CDF Collaboration, FERMILAB-PUB-97/286-E, 1997.

Measurement of the top quark mass and \( \tilde{t}\tilde{t} \) production cross section from dilepton events at the Collider Detector at Fermilab, F. Abe et al, the CDF Collaboration, FERMILAB-PUB-97/304-E, 1997.

Measurement of the \( B^0B - \Upsilon \pi\pi \) oscillation frequency in \( pp \) collisions using \( \pi\)-B meson charge-flavor correlations at \( \sqrt{s} = 1.8 \text{ TeV} \), F. Abe et al, the CDF Collaboration, FERMILAB-PUB-97/312-E, 1997.

Search for new gauge bosons decaying into dileptons in \( \overline{pp} \) collisions at \( \sqrt{s} = 1.8 \text{ TeV} \), F. Abe et al, the CDF Collaboration, *Phys. Rev. Lett.* 79, 2191, 1997.


Measurement of double parton scattering in \( \overline{pp} \) collisions at \( \sqrt{s} = 1.8 \text{ TeV} \), F. Abe et al, the CDF Collaboration, *Phys. Rev. Lett.* 79, 584, 1997.

Measurement of the differential cross section for events with large total transverse energy in \( pp \) collisions at \( \sqrt{s} = 1.8 \text{ TeV} \), F. Abe et al, the CDF Collaboration, FERMILAB-PUB-97/290-E, 1997.

Dijet production by color-singlet exchange at the Fermilab Tevatron, F. Abe et al, the CDF Collaboration, FERMILAB-PUB-97/283-E, 1997.

\(J/\psi\) and \(\psi(2S)\) production in \(p\bar{p}\) collisions at \(\sqrt{s} = 1.8\) TeV, F. Abe et al, the CDF Collaboration, Phys. Rev. Lett. 79, 572, 1997.

The jet pseudorapidity distribution in direct photon events in \(p\bar{p}\) collisions at \(\sqrt{s} = 1.8\) TeV, F. Abe et al, the CDF Collaboration, FERMILAB-PUB-98/009-E, 1997.

Production of \(J/\psi\) mesons from \(\chi_c\) meson decays in \(p\bar{p}\) collisions at \(\sqrt{s} = 1.8\) TeV, F. Abe et al, the CDF Collaboration, Phys. Rev. Lett. 79, 578, 1997.

Search for flavor-changing neutral current decays of the top quark in \(p\bar{p}\) collisions at \(\sqrt{s} = 1.8\) TeV, F. Abe et al, the CDF Collaboration, FERMILAB-PUB-97/270-E, 1997.

Evidence of \(W^+W^-\) production in \(p\bar{p}\) collisions at \(\sqrt{s} = 1.8\) TeV, F. Abe et al, the CDF Collaboration, Phys. Rev. Lett. 78, 4537, 1997.

Search for charged Higgs decays of the top quark using hadronic decays of the \(\tau\) lepton, F. Abe et al, the CDF Collaboration, FERMILAB-PUB-97/058-E, 1997.


Double parton scattering in \(p\bar{p}\) collisions at \(\sqrt{s} = 1.8\) TeV, F. Abe et al, the CDF Collaboration, FERMILAB-PUB-97/094-E, 1997.

Properties of photon plus two-jet events in \(p\bar{p}\) collisions at \(\sqrt{s} = 1.8\) TeV, F. Abe et al, the CDF Collaboration, FERMILAB-PUB-97/106-E, 1997.

Search for third generation leptoquarks in \(p\bar{p}\) collisions at \(\sqrt{s} = 1.8\) TeV, F. Abe et al, the CDF Collaboration, Phys. Rev. Lett. 78, 2906, 1997.


First observation of the all hadronic decay of \(tt\) pairs, F. Abe et al, the CDF Collaboration, FERMILAB-PUB-97/075-E, 1997.


Measurement of \(b\bar{b}\) production correlations, \(B^0\bar{B}^0\) mixing, and a limit on \(e_B\) in \(p\bar{p}\) collisions at \(\sqrt{s} = 1.8\) TeV, F. Abe et al, the CDF Collaboration, Phys. Rev. D55, 2546, 1997.
Observation of \( \lambda_b^0 - J/\psi \lambda \) at the Fermilab Proton-Antiproton Collider, F. Abe et al, the CDF Collaboration, *Phys. Rev. D55*, 1142, 1997.

Measurement of the branching fraction \( B(B_u^+ - J/\psi \pi^+) \) and search for \( B^+_c - J/\psi \pi^+ \), F. Abe et al., the CDF Collaboration, *Phys. Rev. Lett. 77*, 5176, 1996.

Ratios of bottom meson branching fractions involving \( J/\psi \) mesons and determination of \( b \) quark fragmentation fractions, F. Abe et al, the CDF Collaboration, *Phys. Rev. D54*, 6596, 1996.

Search for new particles decaying to dijets at CDF, F. Abe et al, the CDF Collaboration, FERMILAB-PUB-97/023-E, 1997.


**Gregory, Stephen A.**

Paper (refereed journal):


Textbook:


**Henning, Patricia A.**


**Herling, Gary H.**

**Kenkre, V. M.**


**Lowe, James**


Matthews, John A. J.


Measurement of $B\bar{B}$ production correlations, $B(0)\bar{B}(0)$ mixing, and a limit on $c(B)$ in $pp$ collisions at $\sqrt{s} = 1.8$ TeV, co-authors: the CDF Collaboration, F. Abe, et al, *Phys. Rev. D* 55, pp. 2546-2558, 1997.


Search for new particles decaying into $B\bar{B}$ produced in association with $W$ bosons decaying


McIver, John K.


Moore, Gerald T.


Panitz, John A.


**Prasad, Sudhakar**


**Rand, Richard J.**


**Rudolph, Wolfgang**


**Seidel, Sally C.**


Search for new particles decaying into $b\bar{b}$ produced in association with $W$ bosons decaying into $e\nu$ or $\mu\nu$ at the Tevatron, F. Abe et al, CDF Collaboration, *Phys. Rev. Lett.* 79, pp. 3819-3824, 1997.


The $\mu\tau$ and $e\tau$ decays of top quark pairs produced in $p\bar{p}$ collisions at $\sqrt{s} = 1.8$ TeV, F. Abe et al, CDF Collaboration, *Phys. Rev. Lett.* 79, pp. 3585-3590, 1997.


Measurement of $b-\bar{b}$ production correlations, $B^0 - \bar{B}^0$ mixing, and a limit on $e_b$ in $p-\bar{p}$ collisions at $\sqrt{s} = 1.8$ TeV, F. Abe et al, CDF Collaboration, *Phys. Rev. D* 55, pp. 2546-2558, 1997.


**Sheik-Bahae, Mansoor**


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**Zeilik II, Michael**


SPONSORED RESEARCH AWARDS
DEPARTMENT OF PHYSICS AND ASTRONOMY
1997-1998
John K. McIver, Chair

AWARDS TOTAL: $3,821,533

Susan R. Atlas, National Science Foundation, Energetics and dynamics of defects in copper and aluminum ULSI interconnections, $229,300, 8/15/95 - 7/31/99, $66,500 increment for FY 97-98.

Bernd Bassalleck and David Wolfe, Department of Energy, Strange particles and heavy ion physics, $336,000, 12/1/97 - 11/30/98.

Bernd Bassalleck, Brookhaven National Laboratory, Station 1 PHENIX muon tracker, $546,000, 3/27/96 - 9/30/98, $388,000 increment for FY 97-98.

Stephen T. Boyd, National Aeronautics and Space Administration, New phenomena in strongly flowing He-II near T_c, $176,000, 10/1/96 - 9/30/2000, $88,000 increment for FY 97-98.

Carlton M. Caves, Office of Naval Research, Quantum information theory and high-precision measurements, $511,000 total, 12/1/92 - 11/30/98, $85,500 increment for FY 97-98.

Jean-Claude Diels, National Science Foundation, REU: Non-reciprocal response in Femtosecond ring lasers, $29,000, 4/26/95 - 1/31/98, $10,000 increment for FY 97-98.

Byron Dieterle, Department of Energy, Nuclear physics at intermediate energies, $188,00, 12/1/97 - 11/30/98.

Kathryn Dimiduk, San Diego State University Foundation, Preparation for teacher workshops using CPU program materials, $21,000, 9/1/96 - 12/31/98, $17,000 increment for FY 97-98.

Robert V. Duncan, Sandia National Laboratories, Statistical and thermodynamic models for robotic control, $100,000, 1/23/98 - 9/30/98.


David H. Dunlap, Sandia National Laboratories, Quantum transport in coupled double quantum wells, $52,796.00, 6/1/97 - 6/1/99, $27,161 increment for FY 97-98.
David H. Dunlap and David Wolfe, National Science Foundation, *REU summer program in physics research*, $150,402, 4/15/96 - 3/31/99, $50,000 increment for FY 97-98.


David Emin and Stephen D. Hersee, Sandia National Laboratories, *Novel energy conversion devices of icosahedral borides*, $390,000, 6/1/98 - 6/30/2000, $109,000 split to Physics and Astronomy Department.


William Junor, John K. McIver, and Sergio Restaino, National Science Foundation, *Conference: Catching the perfect wave -- The application of adaptive optics to optical interferometry for the next generation of optical telescopes*, $12,940, 1/15/98 - 12/31/98.


V. M. Kenkre, Los Alamos National Laboratory, *Theoretical investigations into time evolution of nonlinear systems in condensed matter physics*, $20,000, 7/15/97 - 9/30/97.


V. M. Kenkre, Sandia National Laboratories, *Statistical approaches to the compaction problem*, $125,000, 10/1/96 - 9/30/98, $75,000 increment for FY 97-98.

Michael Ledlow, National Aeronautics and Space Administration, *X-ray properties of radio galaxies and the FR II Division*, $2,800, 12/1/97 - 11/30/98.

Michael Ledlow, National Aeronautics and Space Administration, *The X-ray properties of rich clusters from Z=0-0.2 using the ROSAT All-Sky Survey*, $51,800, 1/1/98-12/31/98.


Gerald T. Moore, Air Force Research Laboratory, *Phased high-power laser transmission optical fiber cables*, $392,671, 1/26/96 - 10/26/98, $74,671 increment for FY 97-98.


Wolfgang Rudolph, Air Force Research Laboratory, *High-resolution optical spectroscopy and sub-Doppler optical frequency stabilization (II)*, $7,212.48, 1/13/98 - 6/13/98.

Wolfgang Rudolph, Air Force Research Laboratory, *High-resolution spectroscopy and sub-Doppler optical frequency stabilization*, $10,975, 6/10/97 - 12/31/97.


Mohinder P. Sharma, Air Force Research Laboratory, *Nonlinear optics investigations for*

Mansoor Sheik-Bahae, National Science Foundation, *Investigation of Femtosecond dynamics and optical switching in active semiconductors*, $110,000, 7/1/96 - 6/30/98, $50,000 increment for FY 97-98.

Mansoor Sheik-Bahae, Los Alamos National Laboratory, *NUCOR -- Optical refrigeration in semiconductors*, $45,000, 8/15/97 - 8/15/98.
## TEACHING LOAD REPORT

**DEPARTMENT OF PHYSICS AND ASTRONOMY**  
**1997-1998**  
John K. McIver, Chair

**TOTAL 1997-1998 ENROLLMENT: 4,557**  
**TOTAL 1997-1998 STUDENT CREDIT HOURS: 11,503**

### 1997 SUMMER SCHEDULE OF CLASSES

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**TOTAL ENROLLMENT AND STUDENT CREDIT HOURS**  
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TOTAL ENROLLMENT AND STUDENT CREDIT HOURS 1,738 4,332
I. SIGNIFICANT DEVELOPMENTS

A. UNDERGRADUATE PROGRAM
The department graduated 118 majors. The annual commencement ceremony was hosted in the Grand Ballroom of the Student Union Building. Over 450 students and parents attended. Dr. Daniel Lopez, President of the New Mexico Institute of Science and Technology in Socorro, was the commencement speaker.

B. GRADUATE PROGRAM
The department awarded four (4) MA degrees and one (1) Ph.D. degree this year. The number of graduate students, counting 1998 incoming students, is 30.

The department placed four (4) Ph.D. students. They took positions at the College of Santa Fe, Everett Community College in Washington State, New Mexico State University, and Washburn University in Kansas. Two Ph.D. students received National Science Foundation Doctoral Dissertation awards in the Spring 1998 award cycle. Only twelve (12) awards were made nationwide. Caroline Beer received $11,305 for her research on "Democratization in the Mexican States," and Eric Wibbels received $16,650 for his project "Federalism and Economic Adjustment." Professor Karen Remmer is directing both dissertations.

The department and Sandia National Laboratories continued its program for graduate and advanced undergraduate students to work part-time at Sandia. Four students (two from other departments) in the department externship program are involved in projects of mutual interest, principally in the areas of international conflict and international security.

C. INSTITUTE FOR PUBLIC POLICY
The Institute for Public Policy had another successful year, undertaking many new and continuing research efforts in collaboration with other UNM faculty and students. In Fiscal Year 1998, external support for IPP research again exceeded the $1 million level.

IPP research projects undertaken include:

- Initiation of a series of studies of global climate change and the social valuation of the implications of the environmental impacts of global climate change.

- A project using focus groups, citizen conferences, and survey research to measure public reaction to the provision of technical information about the proposed Yucca Mountain nuclear waste repository site. The project is designed to develop an understanding of public responses to technical information about a controversial public policy issue in an environment in which conflicting claims are made about the risks posed by nuclear waste disposal.

- The design and implementation of statewide surveys to assess the factors impacting recruitment and retention of health care professionals in rural and other underserved areas of New Mexico. This study conducted for the New Mexico Health Policy Commission will serve as the basis for developing appropriate policy recommendations to improve geographic access to services.

- A study of the ways in which US legislators, scientists and lay citizens make trade-offs
between perceived domestic and international risks in national security policy was completed. This on-going project was the third in a series of such measurements and the study received wide public attention.

Other on-going IPP research gained national prominence when IPP Director Hank Jenkins-Smith testified before the US Congress on proposed changes in nuclear materials management. Hank also continues his service on the Natural Research Council for review of chemical weapons demilitarization.

The 1997-1998 year was the second in which Public Policy Fellowships were awarded to graduate students by IPP. Students were invited to submit proposals, written in collaboration with UNM faculty, for research leading to a paper publishable in a peer reviewed academic journal. Five students were awarded $1,000 fellowships. Of those five, the paper authored by Economics graduate student Kenneth Baker, in collaboration with Professor Michael McKee, won a "best Paper" award, providing an additional $500 to the student and to the co-authoring faculty member. Availability of funds permitting, the IPP plans to continue the Public Policy Fellowships annually.

Staff Changes. The IPP added a Post-Doctoral staff position this year: Dr. Perry Deess was hired in January 1998 to work on IPP's research in the area of health care policy. Dr. John Gastil, who had been on the IPP staff since 1994, resigned in January 1998 to take a faculty position in the Department of Communication at the University of Washington in Seattle. Administrative Assistants C.J. Ondek and Lisa Page joined the IPP research support staff in February 1998.

D. SPEAKERS
The department continued its colloquium speaker series with talks given by the following faculty, graduate students, and visiting speakers:

The Department provided a panelist to participate in the City of Albuquerque 1997 UNM Mayoral Forum held on September 2, 1997.


The Department continued its International Relations Seminar Series in conjunction with Sandia National Laboratories with Martin van Creveld, Professor of History, Hebrew University, Jerusalem, "The Future of War." February 9, 1998.


Glenn Beamer, University of California, Berkeley. "What's a Political Scientist Doing in Yonkers?" March 6, 1998
E. INTERNSHIPS
In addition to the Sandia opportunities, ten undergraduate students were placed in internships with the New Mexico State Legislature working under the close supervision of Visiting Assistant Professor Gilbert K. St. Clair. Both students and legislature staff considered the internship a success. State Senator Sue F. Wilson and Chair of the House Appropriations and Finance Committee Max Coll both wrote letters of appreciation for the help their interns provided during the session and to commend the program in general.

F. SCHOLARSHIPS
One graduate fellowship and six undergraduate scholarships were awarded this year.

II. SIGNIFICANT PLANS
A. RECRUITMENT
The department has no recruitment plans for the next academic year.

The department will prepare a new brochure on the political science major and extend its efforts to inform local high schools and UNM freshman of the opportunities the department has to offer for undergraduates.

The department will offer a new course on career preparation for political science majors.

The department will continue its efforts to increase the pool of applicants to the graduate program.

The department will continue to develop a proposal for a new Masters in Public Policy.

III. APPOINTMENTS TO FACULTY/STAFF
None

IV. SEPARATIONS FROM FACULTY/STAFF
None

V. PUBLICATIONS

Atkeson, Lonna


Garcia, Chris


Gleason, Greg


“Global International Integration: Consequences for the Social Sphere in Kazakhstan” *The Role of Sociology in the Renewal of Society.*


Hansen, Wendy


Harris, Fred
Chapter in trade book, “Lojalnosc wobec partii a lojalnosc wobec panstwa” (Loyalty towards the

Article, “A Nationalized and Individualized Senate,” in Extensions (Journal of the Carl Albert Congressional Research and Studies Center, University of Oklahoma) Fall 1997, pp. 7-10.

Book Review of *Politics or Principle?: Filibustering in the United States Senate* by Sarah A. Binder and Steven S. Smith in the American Political Science Review (Fall 1997).


Jenkins-Smith, Hank C.


McFarlane, Deborah


Mitchell, Neil


Peceny, Mark


Phelan, Shane

Remmer, Karen


Roberts, Kenneth


Sierra, Christine


Stanley, William


St. Clair, Gilbert
“New Mexico FY 98 Budget” in Proceedings of the Roundtable on State Budgeting in the 13 Western States, Western Political Science Association Annual Meeting, Center for Public Policy and Administration, University of Utah.

Stewart, Joseph

Waterman, Richard


VI. NOTEWORTHY OUTSIDE PROFESSIONAL ACTIVITIES OF FACULTY

F. Chris Garcia served on the Committee on Nominations for the American Political Science Association.

Wendy Hansen was invited to lecture at the U.S.-Japan Trade Relations in Asahi University, Gifu, Japan. She was also an Invited Symposium Participant in the Third International Symposium of Japanese Studies Abroad, Aichi Gakuin University, Nagoya, Japan.

Hank Jenkins-Smith served as Editor for Policy Currents, the Newsletter of the Public Policy Section of the American Political Science Association. He also served on the Editorial Board of the American Journal of Political Science. He was appointed to the National Academy of Sciences Committee for Review and Evaluation of Alternative Technologies for Demilitarization of Assembled Chemical Weapons.


Shane Phelan served as a Member of the Editorial Board for Women and Politics. She was also a Member of the Executive Council for Women and Politics Organized Section, American Political Science Association.

Karen Remmer served as Chair for the Nominating Committee in the Comparative Politics Section for the American Political Science Association. Other activities include Associate Editor, Latin American Research Review; Senior Fellowship Review Panel, U.S. Institute for Peace;


Joe Stewart served as a Member of the Executive Council for the *American Political Science Association*.

VII. OUTSIDE-SPONSORED RESEARCH

Hank Jenkins-Smith; Los Alamos National Laboratory - $35,970; Purpose: Comparative Views of Employees and Non-employees Toward Los Alamos National Laboratory; 7/11/97.

Hank Jenkins-Smith; NM Highway and Transportation Department - $19,000; Purpose: Transportation Citizen Conference Report and Video Tape; 8/19/97.

Hank Jenkins-Smith; Sandia National Laboratories - $200,000; Purpose: Establish a Directed Program for the Cooperative Monitoring Center (CMC) at Sandia National Laboratories; 10/1/97.

Hank Jenkins-Smith; Westinghouse Corporation - $38,000; Purpose: Testing for Attitude Changes Toward the Waste Isolation Pilot Plant (WIPP); 11/26/97.

Hank Jenkins-Smith; Los Alamos National Laboratory - $5,553; Purpose: Customer Client Survey; 12/22/97.

Hank Jenkins-Smith; NM Health Policy Commission - $197,456; Purpose: Health Care Provider and Consumer Assessment Surveys; 1/6/98.


Hank Jenkins-Smith; Sandia National Laboratories - $28,000; Purpose: Quarterly Monitoring Surveys; 4/1/98.

Hank Jenkins-Smith; NM Department of Health, Division of Epidemiology - $210,975; Purpose: The Household Survey of Selected Populations; 5/7/98.

Karen Remmer, Caroline Beer (co-PI); National Science Foundation - $11,305; Purpose: Democratization in the Mexican States; 6/14/98.

Karen Remmer, Erik Wibbels (co-PI); National Science Foundation - $16,650; Purpose: Bringing the States Back In - Federalism and Economic Adjustment; 6/14/98.
THE UNIVERSITY OF NEW MEXICO

ANNUAL REPORT
1997-1998
DEPARTMENT OF PSYCHOLOGY
Michael Dougher, Chair

DEPARTMENT OF PSYCHOLOGY
ANNUAL REPORT
1997-1998

DEPARTMENT OF PSYCHOLOGY

Michael J. Dougher, Ph.D.
Professor and Chair

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DEPARTMENT OF PSYCHOLOGY

STATEMENT OF MISSION

The Department of Psychology shares with other academic departments at the university its raison de’etre: the discovery and dissemination of knowledge. It shares with other science departments a commitment to empirical research. The distinguishing feature of this purpose for a psychology department is that the knowledge being sought concerns the individual organism, and most typically the behavior of the individual person.

The UNM Department of Psychology embraces a number of goals which serve to give the program a distinctive flavor. These are reflected in the mission of the department which is to:

- Create a supportive environment in which faculty and students associated with the department are encouraged to achieve their maximum potential as scholars.

- Promote a scientific approach to psychology, emphasizing both experimental and correlational methodologies as historic traditions.

- Encourage respect for and openness to a variety of theoretical, philosophical, and empirical approaches, with the view that the study of psychology is enriched by the interaction of multiple perspectives.

- Value active research programs within the department and in collaboration with colleagues outside the department.

- Maintain excellence in clinical and experimental psychology and foster the growth of neuroscience approaches to the study of learning, memory, and cognition.

- Encourage and support effective teaching both in communicating psychology to undergraduates as an area of major study and a critical part of a liberal arts education, and in training graduate students at a professional level.

- Train graduate students in the application of general experimental psychology in clinical and other professional settings.
- Ensure that graduate students in all areas are well trained in methodology and ethics appropriate for their effective functioning as researchers and professionals.

- Enable students to understand the development and operation of psychology in the context of diversity within the larger culture, and its application in the culture of the Southwest in particular.

- Be actively involved in service to the university, the community, the state, and the profession.

- Evaluate, in an ongoing fashion, our performance as a department with respect to our mission, and revise this Statement of Mission to accommodate to changing situation.
I. Department Information and Achievements

A. Departmental Administration and Structure

Michael Dougher served the fourth year of his four-year term as Chair of the Department, and the Department continued with the administrative structure adopted in 1995. An organizational chart of this structure is presented on the following page.

There were some changes to the Department’s major administrative committee, the Planning and Policy Committee. Gordon Hodge replaced Harold Delaney as Associate Chair for Undergraduate Education, Richard Harris replaced Ron Yeo mid-year as the Associate Chair for Graduate Education, and Mark McDaniel replaced Paul Amrhein as Area Head for the Cognitive/Learning area. John Gluck continued as Area Head for the Developmental/Personality/Social (DPS) area, Jane Smith continued in her role as Director of Clinical Training, and Rob Sutherland continued to serve as the Area Head for the Behavioral Neuroscience area.

Because this was the last year of Michael Dougher’s four-year term as Chair, Dean Fischer initiated a procedure to select a chair for the next term. After considering faculty input Dean Fischer selected Michael Dougher for another four-year term. This was also the last year of Jane Smith’s term as Director of Clinical Training (DCT), and the Clinical Committee met in May to elect her replacement. John Gluck won the strong endorsement of the committee, and he will take over as
DCT in August. Dr. Smith did an absolutely outstanding job in her tenure as DCT, and the Department expresses its deep gratitude and appreciation for all of her efforts.

As in past years, the governance of the Department relied heavily on a number of faculty who served effectively on other Departmental committees. A listing of the committee memberships for the 1997-1998 academic year is given in Appendix A. Particularly noteworthy was the very important and time-consuming work of the Graduate Admissions Committee (chaired by Holly Waldron), the Faculty Search Committee (also chaired by Holly Waldron), and the Faculty Salary Committee (chaired by Mark McDaniel). The Admissions Committee was faced with the task of selecting the very best applicants from a pool of roughly 275. Outstanding graduate students are the lifeblood of any good research department, and the Admissions Committee is to be commended for its work in recruiting an impressive class of new students. The Faculty Search Committee reviewed the credentials of over 80 applicants for our advertised position in clinical psychology, and they worked hard to bring forward the three best candidates in the pool. There is nothing a department does that is more important then hiring new faculty and this committee deserves many thanks for their hard work and diligence. Finally, the Faculty Salary Committee is given the unenviable task of ranking the performance of the faculty in order to determine the allocation of salary increases. As they have done in the past, the committee performed its job with respect, sensitivity, and professionalism.

As mandated by the central administration, the Undergraduate Curriculum Committee was given the job this past year of developing and implementing an outcomes assessment procedure. Harold Delaney took primary responsibility for this very demanding task, and did an outstanding job. The department is very grateful to Harold for his considerable efforts in this regard.
The Department again benefitted this year from the Quad-L Trust, which was endowed through the UNM Foundation by University Professor Emeritus Frank Logan. The Quad-L Library supported by this Trust not only facilitated the study of the psychology of learning, but also constituted a meeting place for students’ defenses of their graduate degrees. This year the Quad-L Trust supported a visit by Brenda Milner, Professor of Psychology at McGill University, who delivered the 11th annual Quad-L lecture. Rob Sutherland, who serves as faculty advisor to the Quad-L, coordinated the selection process for the Quad-L Lecture and arranged for Dr. Milner’s visit.

B. Undergraduate Education

Stated succinctly, the undergraduate education productivity of the Department’s faculty and staff is enormous and unsurpassed. As of Spring 1998, the Department had 607 majors, which is 14.1% of the total number of students majoring in Arts & Sciences Departments. The Department offers a wide variety of courses, ranging from introductory psychology to human neuropsychology. Students are exposed not only to some of the best lecturers at the University, but also to advanced laboratory courses requiring creative experimental design development and “hands-on” contact with human and animal subjects.

Although the overall popularity of Psychology courses has remained very high (total undergraduate enrollment in our classes is now roughly 8,000 students per year with a total of nearly 22,000 Student Credit Hours), we actually saw a decrease in the number of students enrolled in psychology courses last year. Enrollments in introductory courses showed only a slight decrease (roughly 100 students) from the year before, but enrollments in advanced psychology courses declined by 31% (7,655 in 96-97 compared to 5,247 in 97-98). This decrease is attributable to a
number of factors including declining University enrollments in recent years, reductions in our part-time instruction allocation, a reduction in the number of low-enrollment courses and specialty seminars we offer, and a reduction in the number of students majoring in psychology. Actually, these class enrollments are probably more in line with the current size of our Faculty. Part 1 of Appendix B presents the Department’s enrollment summary statistics for 1997-1998 and the preceding four years. Actual enrollment counts per course for the 1997-1998 Fall, Spring and Summer semesters are presented in Appendix C.

Despite the large number of courses offered by the Department, we were able to cut back significantly on the number of part-time and graduate student instructors in our undergraduate program over the past several years. Only eight part-time instructors were hired during the 1997-1998 year, and they are listed in Appendix D. To a large extent this was due to the willingness of the faculty to teach more of the basic undergraduate courses we offer. During the past year we had 27 courses (excluding labs) taught by non-regular faculty. Fifteen of these were taught by our graduate students and twelve by part-time instructors. Some part-time instructors taught multiple courses. Five of the courses taught by non-regular faculty were offered in the summer, giving us a total of only 22 courses taught by non-regular faculty during the regular academic year. This is the lowest number of courses and percentage of courses taught by non-regular faculty in the last five years. These statistics indicate that we are achieving our goal of increasing the number and percentage of our undergraduate courses taught by our full-time regular faculty.

The flagship for quality education in psychology remains our Psychology Honors Program, which has been in existence for over 25 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 E lists our 1997-1998 honors students along with the titles of their research theses, the names of their faculty supervisors, and the level of honors awarded to them by the department.

The department hosted a commencement convocation for its graduating students for the seventh consecutive year. The commencement address, delivered by Professor Richard Harris, was entitled “Go Forth and Question.” This continued a tradition begun in 1989 of the commencement address being given by a senior faculty member in the department. Previous addresses have been delivered by Frank Logan, Bill Gordon, Sam Roll, John Gluck, Henry Ellis, Bill Miller, Kristina Ciesielski, Mark McDaniel, and Dennis Feeney. Arrangements for the convocation were handled by Department Administrator Candace Blashak. Because of the very large number of graduates and the interest on the part of their families and friends, this has become a major departmental effort involving several hundred people and entailing expenses to the Department of over $4,000.

As stated in last year’s report, the Department undertook the rather large task of revising its undergraduate curriculum. The objective was to create a curriculum that is coherent, systematic, and reflective of the Department’s areas of focus and strength. The revision was a considerable effort and required frequent meetings of each of the areas and the full faculty. The resulting proposal is presented in Appendix N. In sum, the revised curriculum eliminates the introductory level psychology labs, eliminates courses that are infrequently offered, redundant or no longer in line with the faculty’s educational objectives and areas of expertise, increases the number of 200 level core courses required of our majors, requires all majors to take a research methods course, provides an upper division lab in each of our major content areas, and provides a more systematic course numbering system. The proposal has been presented for review to the administration with the hope that it can be put in place
for the next academic year.

C. Graduate Education

The department this year experienced its sixth year with the modified core curriculum which was approved in 1991-1992. Basically, the faculty decided to reduce the number of courses required of first-year graduate students and expand opportunities for research. The plan seems to have had some minimal effects in that students on average are proposing their master’s thesis slightly earlier in their training than in the past. The Department is still concerned, however, about the time taken by graduate students to earn their degrees and the level of graduate student research productivity. To address these issues, Richard Harris convened the members of the Policy & Planning Committee in order to draft some guidelines for evaluating and encouraging student productivity. These guidelines are presented in Appendix O.

The Department decided to use these guidelines this year to evaluate students’ research productivity and to provide students with explicit feedback and expectations for future performance. The exercise proved useful, but some flaws in the process were noted. The Policy & Planning Committee will discuss ways to improve the system for next year.

During this 1997-1998 academic year, the Department awarded 13 Ph.D. degrees. The names of these 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 257.

In addition to Ph.D. degrees the Department awarded 8 Master of Science degrees this year. Inasmuch as the Department offers no terminal master’s degrees, it can be anticipated that these latter students (listed specifically in Appendix G, along with the titles of their theses and faculty advisors)
will achieve their Ph.D.'s in the next two to three years.

Our graduate students continued to distinguish themselves in their research and teaching. Space permits mention of only selected award recipients. One student, Seth Friedman, was selected during the 1997-98 year to received the department's highest graduate student award in recognition of his outstanding research. He delivered the 1998 Benjamin Franklin Haught lecture on May 1, 1998.

The endowed trust established by the New Mexico Psychological Association and the Department to honor the memory of Professor Sidney Rosenblum sponsored the seventh annual Sidney Rosenblum Award. This year's scholarships went to Vanessa Lopez-Viets and Kamilla Willoughby.

A third endowed trust at the UNM Foundation was established by the parents of Barbara Goldman Garland in her memory. The fifth annual Barbara Goldman Garland Award, which is awarded to a Psychology graduate student who is interested in working clinically with teenaged children, was presented to two students this year: Lauren Lawendowski and David Ley.

Four years ago we made the decision to try to financially support all of our students who request aid and are in satisfactory progress toward their degrees. Happily, we were able to do that again this year. What this entails, however, is that we adjust the number of admissions to our graduate program in line with the financial support available to us. Largely due to the amount of extramural support in the Department, we were able to admit eleven graduate students out of an applicant pool of 280 to our Ph.D. program for Fall 1998 (see Appendix H for a listing of these students and their advisors). Although we were awarded an additional GA/TA line last year, the number of stipends we are able to offer is still too low and results in a heavier work load per student.
than is desirable. We are in dire need of at least three more GA/TA positions.

The Department continues to receive nearly one-third of all graduate applicants to the College and to have an acceptance rate that is markedly below the College average. The result is that admission to the Department of Psychology Doctoral Program is highly competitive, and this allows us to select students who are highly qualified and share the research interests of our faculty.

This year, the Clinical program applied for continued accreditation by the American Psychological Association (APA). APA accreditation is awarded for periods ranging between three and seven years, and we previously received a five-year accreditation in 1991. The time-consuming and labor intensive accreditation process includes the collection and tabulation of large amounts of student and faculty data and the organization of a site visit by an APA appointed committee. Although the entire clinical faculty contributed to this effort, the lion’s share of the work was done by the Director of Clinical Training, Jane Smith. As she has done in all aspects of the position, Jane did an absolutely outstanding job in preparing the Department report, arranging for the site visit, and coordinating the Department’s response to the initial report of the site visit committee. The Department in general and the clinical committee in particular are deeply grateful to Jane for her outstanding service. As of this writing, the Department has just learned that it has received a full seven years of accreditation. The clinical program’s annual report is included as Appendix P.

D. Faculty

At the beginning of the academic year, the Department had 26 voting faculty (20 FTE), including Bill Gordon who is now serving as Provost, and Britt Ruebush, who was Director of the Child Guidance Center. Britt Ruebush retired in November of this year after many years of service to the Department and University. We wish him the very best in his retirement. A number of faculty
were on sabbatical leave during the 1997-1998 year including Kristina Ciesielski (Spring), Lynette Cofer (Fall), Tim Goldsmith (Fall and Spring), Ron Yeo (Spring), and Bill Miller (Fall and Spring).

The Department attempted to hire a new assistant professor in the clinical area. Many good candidates were identified, but the search process revealed an especially acute need for someone with a focus in the child/developmental clinical area. The faculty felt that none of the applicants in that area were sufficiently strong enough to warrant an offer, so the search was postponed to next year.

Judith Arroyo received a negative tenure decision and served her final year on the faculty. Jack Blanchard and Robert Egly both received positive Code-3 decisions and were given second three-year appointments. Sadly, Professor Emeritus Charles Cofer passed away this Spring. Professor Cofer was a renown researcher in the areas of learning and motivation and a warm, knowledgeable and personable colleague. His presence around the Department will be greatly missed.

Part 1 of Appendix B shows that the size of our Department has remained constant over the past five years despite our continuing need for more faculty. Although we were able to hire Akaysha Tang, Peder Johnson’s retirement and Judith Arroyo’s departure leaves us with one less FTE than last year. Given the high student demand for our courses, the heavy workload of the faculty, and the need to maintain excellence in research and scholarly productivity, it is imperative that we hire three full-time regular faculty as soon as possible. We will replace Judith Arroyo in the clinical area next year, but we must be able to replace Peder Johnson soon in order to maintain our strength in the cognitive-learning area. Moreover, our Developmental and Social areas are in desperate need of new faculty. Both areas attract large numbers of students to their classes, and a Department simply must have adequate representation in these areas if it is to remain viable. We are in desperate need to hire
in at least one of those areas.

The research activities of the faculty are summarized in Part 2 of Appendix B. It is particularly noteworthy that our extramural support, exceeded $2 million ($2,348,557) this year. Nearly $2 million in extramural funding for six years running is certainly an outstanding accomplishment. No detailed commentary regarding faculty research will be presented here since these data have been given in detail in each faculty member’s Annual Biographical Supplement. It should be pointed out, however, that our faculty continue to excel in their research activities and to be productive in terms of publishing and presenting their work at professional meetings. A listing of the faculty and their research interests is presented in Appendix I.

Indeed, by whatever metric one might wish to apply, the faculty of the Department of Psychology is very good. A persistent threat to the quality of our faculty is the salary inequity in the Department, which for some faculty falls as much as 20% below national and regional norms. The situation was improved marginally this year by salary increases that averaged 5.2%. Nevertheless, the problem of salary inequity persists, and it will take several successive years with comparable salary increases before our faculty are compensated at a level comparable to our peers. While this problem is fully acknowledged by the administrations, and while the Dean has made several recent efforts to enhance the salary of our faculty, much more remains to be done. There should be no doubt that the highest priority for the Department is to see faculty salaries increased in the immediate future to the level of regional norms and in the near future to the level of national norms. This is the only way to preserve the excellence of our Department.

Professional Appointments. In addition to the part-time faculty who served the department this year (listed in Appendix D), there were a number of other people within UNM and the
professional community of Albuquerque who made major contributions to our teaching, training and research missions. Based on their service to the department, these individuals were awarded Professional Titles in Psychology. The 1997-1998 list of professional appointments is included as Appendix J. The department is grateful to these individuals for their unselfish support and productive assistance.

A number of psychologists from other universities and the private sector further enriched our educational programs by presenting research colloquia to our faculty and research students. Appendix K presents a record of this colloquium series. Special thanks go to the Colloquium Committee, Rob Sutherland and Mark McDaniel, for their efforts in arranging an outstanding colloquium series.

E. Department Clinic

A separate Annual Report of the Department of Psychology Clinic is presented in Appendix L. Once again this year the Clinic met its primary goals of providing quality training to our Clinical graduate students and affordable, high quality psychological services to the community. The report shows that the Clinic provided over 1450 hours of therapy and intakes, and involved approximately 43 graduate students in the provision of those services. In addition, for the sixth consecutive year, the Clinic was able to operate within its allocated budget. This is a tribute to the able and caring leadership of Dan Matthews and the support of his experienced staff.

F. Staff

The Department of Psychology continues to benefit from an extremely competent support staff. With the addition of Dr. Melissa Behrens-Blake to the staff at the Psychology Clinic, the number of support staff increased this year from 13 to 14. So as to better inform those who may not
be familiar with the important duties of the staff in our department, Appendix M presents a brief job
description of each member of the administrative, instructional, research, and clinical support staff. It
should be mentioned that this staff is not rigidly bound by these formal descriptions, and willingly
share and take on new responsibilities in an effort to serve the needs of the Department.

Last year, through promotions, reclassification and replacements, there were several changes
to the administrative staff. These changes have provided the Department with a friendly, competent,
and cooperative group. Candace Blashak, Stan Bennett, Louis Carrillo, Nancy Chavez, and Jennifer
Lesh not only serve the Department very well, they are one of the best administrative staffs at the
University.

Dee Ann Quintana completed her sixth year as Project Coordinator for Grants, and was again
very ably assisted by Delilah Yao. Ms. Quintana added two new employees, Vic Zabala and
Rosabelle Denoi, to her staff this year. This group has done an excellent job of administering the
Department’s extramural grants.

The success of the Psychology Clinic are due in large measure to the administrative skills of
Dan Matthews, who completed his seventh year as Clinic Staff Director this spring. Dan continues
to be effectively assisted in his duties by Wanda Sharts, the Clinic Administrative Assistant.

Our research support staff again included Patrick Sharp, Research Engineer; DeLaine King,
Animal Research Coordinator; Ector Estrada and Gilbert Borunda, Laboratory Animal Technicians
IV; and our Veterinarian Linda Contos, DVM. The outstanding experience, skills and efforts of
these individuals clearly facilitated a wide range of research activities in our department, and the
Department is very grateful to them.

This year we and other departments experienced the implementation of UNMPact. Although
this University-wide effort to standardize job titles and rank resulted in some appropriate reclassifications and promotions, the efforts were not uniformly positive. In particular, our Laboratory Animal Technicians, Ector Estrada and Gilbert Borunda, have been adversely impacted. Unfortunately, and from the Department’s perspective, unjustifiably, new requirements for the position of Supervisor, Animal Facility includes a bachelor's degree. Essentially, this requirement precludes Mr. Estrada and Mr. Borunda from eventually moving up to this position, even though both clearly have the experience, skills, and knowledge to do the job well. The Department is currently protesting this requirement, but it should be noted that the decision to require a degree for the position has demoralized both Mr. Estrada and Mr. Borunda and effectively eliminates their hopes and chances for a meaningful career path at the University. If this decision leads either Mr. Estrada or Mr. Borunda to seek employment elsewhere, it would be a great loss to the Department.

G. Space

As has been highlighted in the Department’s Annual Report for the past eleven years, our department is not well accommodated by its current space allocation. We need a new building. Currently, we have insufficient staff space in order to function optimally and are unable to house all of our faculty in faculty offices. Furthermore, during the past few years we have had to continue to convert graduate student offices into faculty research space. Even at 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. Although our need for additional faculty is well documented and while our extramural funding and research output is rising dramatically, 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 a new building is now acknowledged on the University's Capital Projects list. However, there is little indication that funds will become available to initiate this project in the foreseeable future.

The Department continues to need financial support in order to initiate a furniture replacement program that would replace 50% of its classroom and laboratory furnishings per year over the next five years. The majority of our current furnishings came with the original building more than 20 years ago. It has become increasingly worn and has fallen into disrepair.

II. Future Plans and Comments

The names and faces in the Department have changed over the years, but what has remained constant is the Department's commitment to excellence and its outstanding faculty. The recent additions to our faculty make me confident that this tradition of excellence will continue. But we need to move forward, and for that to happen we will need the contributions of all of our faculty and the support of the university administration. At the departmental level, we need to work together to capitalize on our existing strengths and to make wise decisions about the directions we should take as we strive to be even better. At the administrative level, we need a tangible commitment to enhance the quality of what is clearly among the very best departments on campus. Quite simply, we need the resources to hire three additional faculty. The administration has been vocal in its desire to enhance the academic reputation of the university. One easy way to do that is to invest wisely in its existing areas of strength. By any measure this Department is an area of strength.

The faculty grappled with a few particularly difficult and potentially divisive issues this year. Nevertheless, for the most part, the faculty demonstrated a sense of trust and collegiality and showed a willingness to work toward the common good. I continue to be impressed with the intelligence,
thoughtfulness and generosity of so many individuals on this faculty. The bleak salary situation, however, is palpably demoralizing, and a source of great personal concern. Despite this, the faculty continue to do creative and interesting research, to participate in professional organizations, to serve the Department, College and University and to provide a first-rate education to our students in the classroom. These efforts symbolize the faculty’s great dedication to the academy.

I very much appreciate the commitment of all the faculty and staff who were willing to devote their time and talent on behalf of the Department. There are always those who go way beyond the call of duty and deserve special thanks. They are: Jane Smith, Harold Delaney, Rob Sutherland, Holly Waldron, Dick Harris, and Gordon Hodge. Thanks to all those who served so well on critical Department committees, especially the members of the Planning and Policy Committee, the Faculty Search Committee, the Admissions Committee, and the Salary Committee. The staff have just been excellent. I really do doubt whether there is a better group of staff on campus. Thanks also to the Dean of Arts and Sciences, Michael Fischer. He has taken over a very difficult job at a very difficult time, and he has done very well. The Department has certainly benefited from his efforts. Finally, I am especially grateful for the advice and support of my colleagues and friends in this Department.
APPENDIX A

COMMITTEE ASSIGNMENTS AY 1997-1998

Admissions:  Waldron, Amrhein, Blanchard, Gluck, Harris, Sutherland

Animal Facilities and Use:  Contos, Feeney, Gluck, Hodge, Sutherland

Behavioral Neuroscience:  Sutherland, Ciesielski, Gangestad, Egly, Feeney, Hodge, Stansbury, Tang, Yeo

Clinical:  Smith, Arroyo, Blanchard, Ciesielski, Dougher, Gangestad, Gluck, Miller, Padilla, Roll, Ruebush, Waldron

Cognitive/Learning:  McDaniel, Amrhein, Delaney, Dougher, Egly, Goldsmith, Sutherland

Colloquia:  McDaniel and Sutherland

Computer Use:  Goldsmith, Amrhein, Delaney, Harris

Developmental, Personality and Social:  Gluck, Cofer, Gangestad, Harris, Stansbury

Financial Aid:  Hodge, Blanchard, Feeney

Honors:  Delaney, Amrhein, Gluck

Human Subjects:  Egly, Stansbury, Blanchard

Policy and Planning:  Dougher, Delaney, Gluck, Harris, Hodge, Smith, Sutherland, Yeo, Amrhein

Quantitative:  Delaney, Amrhein, Gangestad, Goldsmith, Harris

Teaching Enhancement:  Hodge, Delaney, Gluck, Stansbury

Undergraduate Curriculum:  Hodge, Delaney, Gluck

PSI CHI:  Stansbury

Psych Club:  Hodge

Faculty Search Committee:  Waldron, Blanchard, Gluck, Padilla, Yeo
Faculty Salary Committee: McDaniel, Amrhein, Smith, Sutherland
APPENDIX B

-Part 1-

DEPARTMENT OF PSYCHOLOGY SUMMARY STATISTICS

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**APPENDIX B, Part 1 (cont)**

### Graduate Education

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### Research Activities

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*Extramural Support:*

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### General Information

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*Extramural funds budgeted for expenditure during a single AY.*
APPENDIX B
- Part 2 -


William Miller - Principal Investigator

Modeling & Modifying Motivation for Change, NIDA; $346,467 - 7/1/97-6/30/98 (Co-PI, Paul Amrhein)

NIH Research Scientist Award, NIAAA; $92,202 - 8/1/97-7/31/98

Alcohol & Drug Abuse Prevention and Treatment Evaluation, NIAAA, Predoctoral National Research Service Award (NRSA); $113,634 - 7/1/97-6/30/98

Strategies for Matching Clients to Treatments, NIAAA, No Cost Extension - 9/1/96-8/31/98

Unilateral Family Intervention for Drug Problems, NIDA; $401,636 - 9/1/97-8/31/98

Clinical Trial of Interventions with Significant Others, NIAAA, $273,398 - 2/1/97-1/31/98

Tim Goldsmith - Principal Investigator

Analysis and Training of Cognitive Skills in a Line-Oriented Flight Training Program, FAA; $200,000 - 10/1/97-9/30/99

Holly B. Waldron - Principal Investigator

Families of Alcohol Abusing Adolescents, NIAAA; No Cost Extension - 8/1/97-7/31/98

Drug Abuse Treatments for Adolescents, NIDA; $187,232 - 7/1/97-6/30/98

Mark McDaniel - Principal Investigator

A Componential Analysis of Prospective Memory & Aging, NIA, Furman University; $71,071 - 4/1/97-3/31/98

Michael J. Dougher - Principal Investigator

Assessment & Evaluation of Court Clinic Cases, Second Judicial District Court; $52,000 - 9/1/97-8/31/98
APPENDIX B, Part 2 (continued)

Jack Blanchard - Principal Investigator

Anhedonia & Emotion in Schizophrenia, NIMH; $114,944 - 5/1/97-4/30/98
## APPENDIX C

### DEPARTMENT OF PSYCHOLOGY COURSE OFFERINGS

**AY 1997-1998**

#### SUMMER 1997

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Colleen Dawn Madden | *Negative Memory Bias in Induced Depression*                           | Samuel Roll, Ph.D.          |
Christopher L. Dubuque | *Stimulus Equivalence Classes and the Transfer of Function of Appetitive Stimuli* | Michael Dougher, Ph.D.      |
Stacey M. Langfitt | *Dose Dependent Responses of d-Amphetamine on Recovery of Traumatic Brain Injury* | Dennis M. Feeney, Ph.D.     |
Dwight Adkins | *Behavioral Inhibition and Stress Reactivity: The Moderating Role of Maternal Sensitivity* | Kathy Stansbury, Ph.D.      |
Elisa A. Montrose | *Differences in Child and Adult Memory of Expected Target Objects in Pictures of Both Familiar and Unfamiliar Rooms* | Mark A. McDaniel, Ph.D.     |
John Paul Goodman | *Effects of Hippocampal Damage on Solving the Transverse Patterning Problem* | Robert J. Sutherland, Ph.D. |
John Steiner | *Motivational Interviewing as an Enhancement to Treatment Engagement with Patients Participating in Alcohol Detoxification* | Melanie Bennett, Ph.D.      |
Lisa M. Amodeo | *The Model of Conceptual Similarity*                                   | Timothy E. Goldsmith, Ph.D. |
Unconscious Priming and Facial Recognition Activation: Quantifying Covert Recognition
APPENDIX F

DOCTORAL DEGREES AWARDED

DEPARTMENT OF PSYCHOLOGY
AY 1997 - 98

<table>
<thead>
<tr>
<th>NAME</th>
<th>TITLE OF DISSERTATION</th>
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<tr>
<td>Thomas Barbera</td>
<td>The Impact of Mood on Memory of a Family Discussion</td>
<td>Holly Waldron, Ph.D.</td>
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<td>Peter Barela</td>
<td>Theoretical Mechanisms Underlying The Trial-Spacing Effect in Pavlovian Fear Conditioning</td>
<td>William C. Gordon, Ph.D.</td>
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<td>Lauren Aubrey-Lawendowski</td>
<td>Motivational Interviewing with Adolescents Presenting for Outpatient Substance Abuse Treatment</td>
<td>William Miller, Ph.D.</td>
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<td>Anner Elliot</td>
<td>Enhancing Women's Body Image: A Comparison of Treatment Interventions</td>
<td>Jane Smith, Ph.D.</td>
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<td>Seth Friedman</td>
<td>Quantitative 1H MRS Predicts Long-Term Outcome Following Traumatic Brain Injury</td>
<td>Ron Yeo, Ph.D.</td>
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<tr>
<td>Birgitta Gabel</td>
<td>Just Talk: The Organization of Power Through Talk in a Post Partum Support Group</td>
<td>Judith Arroyo, Ph.D.</td>
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<tr>
<td>John Harlow</td>
<td>A Psychodynamic Experimental Analog of Individual Differences in Male College Students' Selective Use of Repression</td>
<td>Samuel Roll, Ph.D.</td>
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<td>Paul Loflin</td>
<td>Self-Concept Differences in Hispanic and Anglo-American Males and Females</td>
<td>Samuel Roll, Ph.D.</td>
</tr>
<tr>
<td>Brent Moore</td>
<td>Mood and Reality Monitoring</td>
<td>Henry Ellis, Ph.D.</td>
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# APPENDIX G

## MASTER'S DEGREES AWARDED

**DEPARTMENT OF PSYCHOLOGY**  
**AY 1997-98**

<table>
<thead>
<tr>
<th>NAME</th>
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<tr>
<td>James Edgar</td>
<td><em>Relationships Between M100 Anteroposterior Differences and Measures of Developmental Instability in Normal, Dyslexic, and Schizophrenia</em></td>
<td>Ron Yeo, Ph.D.</td>
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<td>Faith Hanlon</td>
<td><em>Changes in Adult Brain and Behavior Caused by Neonatal Limbic Damage: Implications for the Etiology of Schizophrenia</em></td>
<td>Robert Sutherland, Ph.D.</td>
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<tr>
<td>Derek Hamilton</td>
<td><em>Categorical Picture-Word Interference for Vocal and Manual Production Tasks: Evidence Against the Name Retrieval and Lexical Hypothesis</em></td>
<td>Paul Amrhein, Ph.D.</td>
</tr>
<tr>
<td>Paul Lesnik</td>
<td><em>MRI Morphometry of Anterior Cingulate Gyrus and Cognitive Deficits in Autism: Enhanced Data Analysis Using Effect and Interval Measures</em></td>
<td>Kristina Ciesielski, Ph.D</td>
</tr>
<tr>
<td>David Ley</td>
<td><em>Correlates and Predictors of Broken Appointments at a Family and Child Guidance Center and a Psychology Clinic</em></td>
<td>Britton Ruebush, Ph.D.</td>
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<tr>
<td>Peggy Rice</td>
<td><em>Maternal Attachment and Relationships to Emotion Regulations and Coping Skills in Children</em></td>
<td>Kathy Stansbury, Ph.D.</td>
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<td>Denise Walker</td>
<td><em>The Influence of Religiosity and Parenting on Alcohol Use of College Students</em></td>
<td>William Miller, Ph.D.</td>
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<tr>
<td>Michael Thomas</td>
<td><em>The Effect of Prenatal Exposure to Moderate Levels of Ethanol on Learning, Memory, and Dentate Gyros Synaptic Inhibition in Adult Rats</em></td>
<td>Robert Sutherland, Ph.D.</td>
</tr>
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<td>Name</td>
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<tr>
<td>James Story</td>
<td>Therapist Countertransference Where Combat-Related Guilt is a Central Factor Involved in Psychological Treatment of Combat Veterans</td>
<td>Michael Dougher, Ph.D.</td>
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<tr>
<td>Virginia Waldorf</td>
<td>The Relationship Between Neuropsychological Deficits and Spouse Abuse: An Examination of Both Abuser And Victim</td>
<td>Robert J. Sutherland, Ph.D.</td>
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<td>Michael Weisend</td>
<td>Retrograde and Anterograde Amnesia After Hippocampal Damage in Rats</td>
<td>Robert J. Sutherland, Ph.D.</td>
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<td>Laura Zimmermann</td>
<td>Relations Between Temperament, Emotion Regulation, and the HPA System in Three-Year-Old Children</td>
<td>Kathy Stansbury, Ph.D.</td>
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</table>
### APPENDIX H

**GRADUATE STUDENTS ACCEPTED FOR AY 1997-98**

<table>
<thead>
<tr>
<th>NAME</th>
<th>ADVISOR</th>
<th>AREA</th>
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<tr>
<td>Carrie Cole</td>
<td>Robert Sutherland, Ph.D.</td>
<td>Behavioral Neuroscience</td>
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<tr>
<td>New Mexico</td>
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<tr>
<td>Noa Glotter</td>
<td>Lynette Cofer, Ph.D.</td>
<td>Developmental</td>
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<tr>
<td>New Mexico</td>
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<tr>
<td>David Wilson Haley</td>
<td>Kathy Stansbury, Ph.D.</td>
<td>Developmental</td>
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<td>California</td>
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<tr>
<td>Yoshimi Hayashi</td>
<td>Michael Dougher, Ph.D.</td>
<td>Clinical</td>
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<td>California</td>
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<tr>
<td>Jennifer Harrington</td>
<td>Michael Dougher, Ph.D.</td>
<td>Clinical</td>
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<tr>
<td>Arizona</td>
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<td>Patricia Juarez</td>
<td>William Miller, Ph.D.</td>
<td>Clinical</td>
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<td>Mexico</td>
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<td>Melissa Amory Meade</td>
<td>Jane Smith, Ph.D.</td>
<td>Clinical</td>
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<td>Ohio</td>
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<tr>
<td>Sandra Moses</td>
<td>Robert Sutherland, Ph.D.</td>
<td>Behavioral Neuroscience</td>
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<tr>
<td>Canada</td>
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<tr>
<td>Daniel Douglas Squires</td>
<td>Jack Blanchard, Ph.D.</td>
<td>Clinical</td>
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<td>New Mexico</td>
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<tr>
<td>Megan Laura Tripp</td>
<td>Holly Waldron, Ph.D.</td>
<td>Clinical</td>
</tr>
<tr>
<td>California</td>
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</tbody>
</table>
APPENDIX I

THE FACULTY
DEPARTMENT OF PSYCHOLOGY
UNIVERSITY OF NEW MEXICO

AMRHEIN, PAUL C.
Cognitive psychology: psycholinguistics; picture-word processing; aging, cognition and motor control. Current language research concerns the representation and function of pragmatic, semantic and syntactic information in discourse. Ongoing picture-word processing research concerns the development of ‘hybrid’ models that account for cognitive processes involved in episodic and semantic memory-production tasks (i.e., drawing, writing, speaking) in monolinguals and bilinguals. Current aging research concerns age- and dementia-based changes in cognitive processes that pertain to the preparation and execution of movements, and picture-word processing.

ARROYO, JUDITH A.
Assistant Professor. Ph.D. University of California, Los Angeles, 1989.
Clinical psychology. Primary interests are in Hispanic ethnic identity. Current research involves measurement of ethnic identification with orthogonal models of adaptation to Mexican and non-Hispanic white cultures; and the mental health implications of ethnic identity for alcohol and substance use.

BLANCHARD, JACK J.
Assistant Professor of Psychology and Psychiatry. Ph.D. State University of New York at Stony Brook, 1991.
Clinical Psychology. Research interests are in adult psychopathology with an emphasis on schizophrenia. Current NIMH funded research is directed at determining the role of emotion in schizophrenia and how emotion is related to the social and neurocognitive dysfunction characteristic of this disorder. The potential neuropsychological mechanisms underlying emotional and social disturbances in schizophrenia are also being examined in collaborative projects employing Magnetoencephalography (MEG) and Magnetic Resonance Imaging (MRI). Finally, research is being conducted to examine etiological models of comorbid substance abuse in schizophrenia and bipolar disorder.
CIESIELSKI, KRISTINA T.
Associate Professor. Ph.D. Polish Science Academy (Nencki Institute of Experimental Biology), 1978.
Cognitive and clinical neuropsychology; brain event-related potentials; MRI and brain morphometry; development of normal and disordered human brain. Experimental approach is based on information-processing models and neuropsychological models of cognition, and integrates neurobehavioral, electrophysiological, neuroimaging and modeling techniques. A major goal is to describe the normal and pathological development of the frontal-cerebellar subsystem in humans with a particular focus on changes in mechanisms of selective inhibition.

COFER, LYNETTE FRIEDRICH
Professor. Ph.D. Cornell University, 1965.
Developmental psychology, human circadian rhythmicity as a mediator of personality development and cognitive performance, social development and gender differences, mediation of television effects, analyses of theoretical and empirical approaches to applied developmental research and family public policy. Current research includes analyses of Swedish longitudinal data base and new data collection in Sweden on individual differences in circadian rhythmicity and personality development and school performance.

DELANEY, HAROLD D.
Methodology, quantitative. Current research is in statistical methods, particularly those that are useful in investigations involving individual difference variables. Issues in experimental design and philosophy of science are also of interest. Interests in substantive areas include the psychology of religion, and individual differences in values and in cognition.

DOUGHER, MICHAEL J.
Professor and Department Chair. Ph.D. University of Illinois at Chicago, 1980.
Experimental and clinical behavior analysis. Primary research focuses on the experimental analysis of complex human behavior including stimulus equivalence and rule-governed behavior. Other interests include contextualistic methods of psychotherapy and psychotherapy research, and integrative psychotherapies.
EGLY, ROBERT
Assistant Professor. Ph.D. Arizona State University, 1990.
Cognitive neuroscience. My research focus is on understanding the cognitive processes and neural systems of visual attention and perception. A major component of my research program is the use of neurological patients (e.g., stroke, tumor, trauma) to identify the brain structures that control attending and perceiving in normal cognition, and to examine how various neuropathologies affect attending and perceiving.

FEENEY, DENNIS M.
Professor (and Professor of Physiology). Ph.D. University of California, Los Angeles, 1968.
Behavioral neuroscience, brain injury, recovery of function and epilepsy. In my laboratory we are conducting interdisciplinary studies of experimental brain injury in animals using a variety of methods, including electrophysiology, liquid chromatography, pharmacology, histological and behavioral measurements. Our goal is to understand and enhance behavioral recovery after brain damage in humans, and determine what commonly prescribed drugs may slow behavioral recovery.

GANGESTAD, STEVEN W.
Associate Professor. Ph.D. University of Minnesota, 1986.
Evolutionary psychology; social/personality psychology. General interests concern the ways in which humans' current psychological design is a product of evolutionary selection. Current research generally concerns this issue in regard to phenomena that occur within close relationships such as sexual relationships, friendships, and familial relationships. Other research concerns the developmental expressions of adaptations. Additional interests include individual differences, behavior genetics, psychometric theory, and philosophy of science.

GOLDSMITH, TIMOTHY E.
Assistant Professor. Ph.D. New Mexico State University, 1984.
Applied cognitive psychology, human factors, and statistics. My present research is focused on developing and validating methods for assessing and representing knowledge and skill. Under a grant from the FAA, I am currently attempting to improve the training and assessment of commercial airline pilots. Other research interests of mine include: psychological scaling, similarity, computer modeling, and human decision making.
GLUCK, JOHN P.
Clinical psychology, general experimental psychology. Interests include value changes during psychotherapy and the effects of early experience on development. In addition, I am very interested in the general area of bioethics, particularly professional clinical conduct and the ethics of human and animal research.

HAALAND, KATHLEEN Y.
Associate Professor. Ph.D. University of Rochester, 1972.
Clinical and experimental neuropsychology. Motor deficits are a common outcome of brain damage (e.g., stroke, Parkinson's disease, Huntington's disease). My research program focuses upon understanding the different cognitive processes (e.g., motor programming; encoding, storage and retrieval of motor programs; scheduling movements) which produce complex motor deficits after damage to cortical and subcortical areas of the brain. We have emphasized the dominance of the left hemisphere for controlling movements in both hands. We study the changes in motor processes in (1) stroke patients with focal damage to different parts of the left hemisphere, basal, ganglia and cerebellum, using structural imaging to relate area of brain damage and behavior; (2) Parkinson's disease; and (3) Alzheimer's disease. In our laboratory strong emphasis is placed on the integration of cognitive and neuropsychological approaches.

HARRIS, RICHARD
Professor. Ph.D. Stanford University, 1968.
Experimental social psychology, game theory, equity theory. Primarily interested in relatively formal (mathematical and computer simulation) models of social psychological phenomena, with emphasis so far on post-decision dissonance reduction, experimental games, and equity theory. A secondary interest is in the development of multivariate statistical techniques.

HODGE, GORDON K.
Presidential Teaching Fellow, Associate Professor, and Associate Chair for Undergraduate Education. Ph.D. University of California, Los Angeles, 1977.
Psychopharmacology, behavioral neuroscience, and teaching technologies. Current research is directed toward developing multimedia technologies for teaching in general and for the teaching of psychology in particular. This includes development and authoring of CD-ROM disks for use by both faculty in the classroom and students studying independently, as well as publishing on the World Wide Web.
MC DANIEL, MARK A.
Cognitive. Major research interests center on how encoding and retrieval processes influence learning and memory. Current projects are focused on 1) text processing and memory; 2) recall processes; 3) investigating prospective memory processes in younger and older adults and neuropsychological underpinnings; 4) understanding how people learn functional relations between stimulus and response variables; and 5) investigating causal concept learning in multivariate environments.

MILLER, WILLIAM R.
Regents Professor (and Professor of Psychiatry) and UNM Center on Alcoholism, Substance Abuse, and Addictions. Ph.D. University of Oregon, 1976.
Treatment, prevention, and assessment of addictive behaviors; program evaluation research; cognitive-behavior therapies; motivation and self-regulation; psychology and spirituality.

PADILLA, ELIGIO R.
Associate Professor (and Associate Professor of Psychiatry). Ph.D. University of Washington, 1974.
Clinical, cross-cultural and community. Current work focuses on higher educational policy and practice and the validity of traditional instruments for the assessment of intelligence among minority populations.

ROLL, SAMUEL
Professor (and Professor of Psychiatry). Ph.D., ABPP, ABFP. Pennsylvania State University, 1968.
Clinical psychology, developmental psychology, forensic psychology. Using a psychoanalytic framework as a base, I am exploring cultural influences on the development of personality and cognition. This involves work in the area of dreams, early memories, cognitive assessment, personality assessment and psychotherapy. My research involves Anglo, Chicano, American Indian and South American subjects.

RUEBUSH, BRITTON
(Primary appointment is outside the psychology department).
Professor (and Professor of Psychiatry). Ph.D. Yale University, 1960.
Clinical, child development, family therapy. Research interests include evaluation of clinical programs and services; the effects of child-rearing methods and other family variables on child and family behavior; and the relationship between personality variables such as anxiety and defensiveness, and cognitive, learning and physical functions.
SMITH, JANE E.
Associate Professor and Director of Clinical Training Program. Ph.D. State University of New York at Binghamton, 1985.
Clinical psychology. Research interests: psychophysiological assessment, assessment and treatment of eating disorders (bulimia, obesity and anorexia), alcoholic homeless individuals, dual diagnosis (substance abuse and chronic mental illness) and implosive (flooding) therapy.

STANSBURY, KATHY
Assistant Professor. Ph.D. University of California, Los Angeles, 1990.
Developmental psychology and behavioral neuroscience; emotional and neurohormonal development. My work focuses on developmental competencies, and individual differences in social, emotional, and neurohormonal domains in preschool age children. More specifically, how do children learn to regulate their emotional states and what impact does this process have on later developing skills? In creating and testing a model of these developmental processes, I have made use of several different paradigms, such as children's entry into new peer and social situations, and commonly occurring frustration situations, and studied a variety of systems that may be contributing to this development, including caregiver relationships, temperamental differences, psychophysiological factors (primarily hypothalamic-pituitary-adrenocortical hormones), behavioral-risk contexts, and differences in linguistic skills. I am also interested in prenatal influences on brain development and later behavior, depression and neurohormones in mothers and children, and developmental psychoneuroimmunology, as well as in basic theoretical questions in the area of emotion in humans.

SUTHERLAND, ROBERT J.
Professor of Psychology and Neuroscience. Ph.D. Dalhousie University, 1980.
Cognitive and behavioral neuroscience, neuropsychology, learning and memory. Primarily interested in exploring the anatomical and functional organization of memory and related cognitive processes. The research includes combinations of behavioral analyses, electrophysiological recording, neurotoxins, and neuropharmacological techniques. Other goals are to understand in detail the function of the hippocampal formation, the nature of amnesic symptoms in Alzheimer’s disease, Korsakoff’s syndrome, epilepsy, cerebral trauma, and other disorders. We also explore factors related to cognitive recovery after brain damage.
TANG, AKAYSHA C.
Assistant Professor. Ph.D. Harvard University, 1995.
Cognitive neuroscience, behavioral neuroscience, computational neuroscience. My research focuses on the role of neuromodulation in cognitive functions, specifically, learning and memory, and neural coding. A combination of behavioral, electrophysiological, and computational methods is used to study the effect of neuromodulators/neurotransmitters, such as Ach and GABA, at the cellular, network, and behavioral levels. Examples of specific research questions on learning and memory include: how are learning and memory affected in rats treated with the GABAb agonist baclofen (behavioral study)? How are synaptic transmission and neuronal excitability affected by the same treatment (brain slice electrophysiology)? How can the cellular effects be related to the effects on learning and memory (computational models)?

WALDRON, HOLLY B.
Clinical psychology. Research interests focus on family interaction theories of psychopathology, family therapy process and outcome, and developing and evaluating effective assessment and treatment strategies for adolescent substance abuse and related behavior problems. Current research projects include evaluating cognitive-behavioral and family-based interventions for disturbed adolescents and examining family communication behaviors and cross-cultural variations in families of disturbed and nondisturbed adolescents.

YEO, RONALD A.
Associate Professor and Associate Chair for Graduate Education. Ph.D. University of Texas, Austin, 1983.
Clinical and experimental neuropsychology. Research interests include individual differences in brain organization, neuroimaging, cerebral lateralization, genetic and environmental factors influencing brain development, and the neuropsychological bases of neurodevelopmental disorders.
## APPENDIX J

### PERSONS HOLDING PROFESSIONAL TITLES IN PSYCHOLOGY

**1997 - 1998**

<table>
<thead>
<tr>
<th>Name and Address</th>
<th>Phone</th>
<th>Professional Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles Cofer, Ph.D.</td>
<td>3600 Vista Grande NW&lt;br&gt;Albuquerque, NM 87120</td>
<td><strong>Professor (PT)</strong></td>
</tr>
<tr>
<td>Phillip W. Day, D.V.M.&lt;br&gt;Director, Animal Resource Facility&lt;br&gt;University of New Mexico&lt;br&gt;School of Medicine&lt;br&gt;Basic Medical Science Building, G32&lt;br&gt;Albuquerque, NM 87131</td>
<td>277-3936</td>
<td><strong>Assistant Professor (PT)</strong></td>
</tr>
<tr>
<td>Peter DiVasto, Ph.D.&lt;br&gt;Family Practice/Psychiatry 307&lt;br&gt;Albuquerque, NM 87107-4811</td>
<td>277-4257&lt;br&gt;277-2165</td>
<td><strong>Clinical Associate</strong></td>
</tr>
<tr>
<td>Charles H. Elliott&lt;br&gt;403 Dartmouth SE&lt;br&gt;Albuquerque, NM 87106</td>
<td>843-2190</td>
<td><strong>Clinical Associate</strong></td>
</tr>
<tr>
<td>Al Fedoravicius, Ph.D.&lt;br&gt;Behavioral Medicine&lt;br&gt;Veterans Administration Medical Center&lt;br&gt;2100 Ridgecrest Drive SE&lt;br&gt;Albuquerque, NM 87108</td>
<td>265-1771&lt;br&gt;ext. 2425</td>
<td><strong>Adjunct Assistant Professor</strong></td>
</tr>
<tr>
<td>William E. Foote, Ph.D.&lt;br&gt;4308 Carlisle NE, Suite 208&lt;br&gt;Albuquerque, NM 87107-4849</td>
<td>255-9494</td>
<td><strong>Clinical Assistant Professor</strong></td>
</tr>
<tr>
<td>Kathleen Haaland, Ph.D.&lt;br&gt;Psychology Services&lt;br&gt;Veterans Administration Medical Center&lt;br&gt;2100 Ridgecrest Drive SE&lt;br&gt;Albuquerque, NM 87108</td>
<td>265-1711&lt;br&gt;ext. 2440</td>
<td><strong>Associate Professor (Secondary, nonprobationary appointment)</strong></td>
</tr>
<tr>
<td>Name and Address</td>
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<tr>
<td>Deborah Harrington, Ph.D.</td>
<td>265-1711</td>
<td>Associate</td>
</tr>
<tr>
<td>Veterans Administration Medical Center</td>
<td></td>
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<tr>
<td>2100 Ridgecrest Drive SE</td>
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<td>Albuquerque, NM 87108</td>
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<tr>
<td>Mary Harris, Ph.D.</td>
<td>277-2925</td>
<td>Professor</td>
</tr>
<tr>
<td>Education Foundations</td>
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<td>(Secondary appointment)</td>
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<tr>
<td>University of New Mexico</td>
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<td>Albuquerque, NM 87131</td>
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<tr>
<td>Reid Hester, Ph.D.</td>
<td>884-3002</td>
<td>Clinical Associate</td>
</tr>
<tr>
<td>4300 San Mateo NE</td>
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<tr>
<td>Albuquerque, NM 87110</td>
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<tr>
<td>Frances Koenig, Ph.D.</td>
<td>242-0439</td>
<td>Clinical Associate</td>
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<tr>
<td>121 Wellesley SE</td>
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<td>Albuquerque, NM 87106</td>
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<tr>
<td>P. W. Kodituwakku, Ph.D.</td>
<td>272-1981</td>
<td>Clinical Associate (PT)</td>
</tr>
<tr>
<td>P. O. Box 4820</td>
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<tr>
<td>Albuquerque, NM 87196</td>
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<tr>
<td>Marcia Landau, Ph.D.</td>
<td>266-8488</td>
<td>Clinical Associate</td>
</tr>
<tr>
<td>300 San Mateo Blvd. NE, Suite 805</td>
<td></td>
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</tr>
<tr>
<td>Albuquerque, NM 87108</td>
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</tr>
<tr>
<td>Milton Lasoski, Ph.D.</td>
<td>266-3070</td>
<td>Clinical Associate</td>
</tr>
<tr>
<td>1817 Morningside Drive NE</td>
<td></td>
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</tr>
<tr>
<td>Albuquerque, NM 87110</td>
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</tr>
<tr>
<td>George Luger, Ph.D.</td>
<td>277-3204</td>
<td>Professor</td>
</tr>
<tr>
<td>Department of Computer Science</td>
<td></td>
<td>(Secondary appointment)</td>
</tr>
<tr>
<td>University of New Mexico</td>
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<tr>
<td>Albuquerque, NM 87111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edward Maclin, Ph.D.</td>
<td>268-7043</td>
<td>Research Assistant</td>
</tr>
<tr>
<td>727 Morningside Drive NE</td>
<td></td>
<td>Professor (PT)</td>
</tr>
<tr>
<td>Albuquerque, NM 87110</td>
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</tbody>
</table>
### APPENDIX J (continued)

<table>
<thead>
<tr>
<th>Name and Address</th>
<th>Phone</th>
<th>Professional Title</th>
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<tbody>
<tr>
<td>Charlene McIver, Ph.D.</td>
<td>265-8800</td>
<td>Clinical Associate</td>
</tr>
<tr>
<td>4600-A Montgomery NE, 102</td>
<td></td>
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</tr>
<tr>
<td>Albuquerque, NM 87109</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theresa Moyers, Ph.D.</td>
<td>265-1711</td>
<td>Adjunct Clinical Assistant Professor</td>
</tr>
<tr>
<td>Psychology Service</td>
<td></td>
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<tr>
<td>VA Medical Center</td>
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<tr>
<td>2100 Ridgecrest Drive SE</td>
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<td>John Owen, Ph.D.</td>
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<td>Karen Ruebush, Ph.D.</td>
<td>268-5240</td>
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<td>Edward W. Snyder, Ph.D.</td>
<td>265-1711 ext. 2270</td>
<td>Clinical Associate</td>
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<td>Scott Tonigan, Ph.D.</td>
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<td>Albert V. Vogel, M.D.</td>
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<td>Carolina Yahne, Ph.D.</td>
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### APPENDIX K

**DEPARTMENT OF PSYCHOLOGY COLLOQUIA**  
**AY 1997 - 1998**

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<th>COLLOQUIUM PRESENTED BY</th>
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| Dr. William McIlvane  
Professor of Psychology  
Northeastern University and  
Kennedy-Shriver Center | "Behavior Analytic Contributions to Interdisciplinary Approaches to Intellectual Functioning"  
November 3, 1997 |
| Dr. Brenda Milner  
Professor of Psychology  
Montreal Neurological Institute and Hospital  
McGill University  
Montreal, Canada | *Eleventh Annual Quad-L Lecture*  
"Memory in the Human Brain: Perspectives on the Past and Future"  
December 5, 1997 |
| Dr. Robert Kreuger, Ph.D.  
Clinical Psychology Internship  
Brown University  
Providence, Rhode Island | "Personality Traits and Mental Disorders: A Rapprochement"  
December 16, 1997 |
| Dr. Jan Faust, Ph.D.  
Associate Professor of Psychology  
Nova Southeastern University  
Ft. Lauderdale, Florida | "Child Sexual Abuse: Intervention and Prevention of Re-Traumatization"  
December, 17, 1997 |
| Dr. Nader Amir  
Department of Psychiatry  
Eastern Pennsylvania Psychiatric Institute | "The Role of Inhibitory Mechanisms in Anxiety"  
January 28, 1998 |
| Dr. Larry Riso  
Department of Psychiatry  
Western Psychiatric Institute and Clinic  
University of Pittsburgh Medical Center | "What Makes Chronic Depression Chronic? An Exploration of Personality and Developmental Determinants"  
February 5, 1998 |
| Dr. Hyman Hops  
Professor of Psychology  
Oregon Research Institute | "Adolescent Peer Relations and Depressive Symptomatology: From Macro to Micro to Macro"  
April 22, 1998 |
APPENDIX K (continued)

Seth Friedman, Ph.D.
Post Doctoral Fellow
University of Washington
School of Medicine

*Benjamin Franklin Haught Memorial Research Lecture*
“Quantitative Magnetic Resonance Spectroscopy Predicts Long-Term Outcome Following Traumatic Brain Injury”
May 1, 1998

**COLLOQUIA COSPONSORED BY CASAA**

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<td>Dr. Damaris J. Rohsenow</td>
<td>“Coping Skills Training, Motivational Enhancement, and Relapse”</td>
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<tr>
<td>Brown University Center for Alcohol and Addiction Studies</td>
<td>October 20, 1997</td>
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<tr>
<td>Dr. Thomas Ashby Wills</td>
<td>“Temperament Effects on Adolescent Substance Use: Mediation Through Self-Regulation and Risk Taking Constructs”</td>
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<tr>
<td>Yeshiva University</td>
<td>November 10, 1997</td>
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The Department of Psychology Clinic continues to be a valuable and challenging part of the Psychology Department's educational environment. On the one hand, it is a fully functioning outpatient mental health clinic, providing quality therapeutic and assessment services to the Albuquerque community. At the same time, it is a training facility where graduate students in clinical psychology receive practical experience in this area. The challenge is to keep both missions functioning at a high level of excellence; neither training nor services can be seen as secondary if the Clinic is to fulfill its function.

The nature of the challenge may be seen in the fact that the combined services provided at the Clinic would provide a reasonable workload for about three full-time clinicians. Here, however, those services are provided by 43 student-clinicians at various stages of training and performing different functions. All of them must follow ethical and professional standards of practice of psychology. The reason this is possible is the academic preparation provided by the Department's faculty, especially the clinical faculty, and the on-going supervision donated by supervisors from the professional community. Each student-clinician, carrying a caseload of two or more cases, receives at least one hour of face-to-face supervision per week, usually individually and sometimes in small groups. Because of bright and responsible graduate students, competent educational preparation, and dedicated faculty and outside supervisors, the Clinic is a place where both of its missions can be carried out without contradiction.

SERVICES

Individual adult therapy remains the primary service of the Clinic, with a client population that is varied in terms of age, ethnicity, employment status, education and presenting problems. Generally the severity of referral issues is from mild to moderate. There is a frequent misperception that we serve primarily a University population; in fact, our referrals come from other agencies and practitioners, the Court, and self-referrals provide a cross-section of the community. Because of a sliding fee scale ($10 to $60 per hour), we do have a selection factor toward low-income individuals, but even this is not universal. The Clinic has had increased involvement in family, child and couples therapy over the years.

The closing of outpatient therapy services by the New Mexico Hospital Mental Health Center in 1990 has produced an apparently permanent waiting list of referrals, changing our intake procedures and, to some extent, affecting our services. This presents a challenge to our existing
commitment to long-term therapy as a valuable service and training modality. In response to the waiting list and also because of the demands of treatment in the current health care environment, we have attended to issues of shorter-term treatment, time-limited models and the empirical foundations of various approaches in clinical meetings. The need for each student to have some experience in time-limited treatment will be a focus in the coming year.

At the same time, we continue to see the value of long-term treatment where this is appropriate, both in terms of proper treatment and for excellence of training. The tension among therapy models, rationales and methods to which students are exposed reflects an educational value of the department and will prepare students for the difficult challenges now facing the profession of clinical psychology whether in academic or treatment settings. Quite properly, for our research-based discipline, issues of empirical support and measurement of outcomes are expected to be increasingly emphasized in the years ahead at the Clinic.

Two programs with which the Clinic has had close involvement continued in 1997-98, but will not be available to our student-clinicians in the coming year. The contract with the Metropolitan Court Probation Department for dispositional evaluations has been transferred by the Probation Department to a unit of UNM Hospital Mental Health in hopes of providing an easier route for getting services at UNM-MHC for some of the offenders. After this, the seventh year of Second Judicial District Family Court Clinic’s domestic violence assessment and treatment program, that program has been discontinued. These services in both settings, carried out by students under the supervision of licensed psychologists have provided valuable assessment and treatment experiences with populations not usually seen at the Clinic, while providing valuable services to the city and state. These have been excellent training opportunities for our students, and we regret the loss of these placements for our students.

As some opportunities have been lost, we are building another. The specific new program is our adult attention deficit/hyperactivity disorder (ADHD) assessment program. As ADHD has been classified as a disability under the Americans with Disabilities Act and with more concern about this diagnosis, schools, businesses and individuals are turning to psychologists for better assessment. Clinic personnel Melissa Behrens-Blake, M.S. and Lynn Farmer have collaborated with Sigifredo Saenz, M.S.W. of the UNM Counseling Assistance and Referral Service to develop a program which draws from previous experience at UNM with an adult population and on current research and theory. Ms. Blake, our educational diagnostician, and Mr. Saenz were involved with another adult ADHD program at UNM and got the project started. Ms. Farmer has extensive experience in this area, primarily with children, and is doing doctoral research on this topic. In summer 1998, we began performing assessments for various referral sources in the Albuquerque community. This project is now finding one graduate assistantship at the Clinic, and we anticipate it may provide paid work for others as it develops. An exciting aspect of the program is that recent theory and research in this area implicates deficits in executive functioning of the brain, and places this area of research and practice clearly within the subdiscipline of cognitive neuropsychology which is an increasing area of specialization within the Department. Special thanks are due to Kari Ward-Carr, Ph.D., Director of CARS for loaning us Mr. Saenz as a
consultant during startup, and to Mr. Saenz, whose time, training skills, knowledge, passion and interest have been valuable beyond measure in this phase of the program.

PERSONNEL

The staff of the Clinic has consisted of Dr. Dan Matthews, Director (since fall 1988); Wanda Sharts, Office Manager (who moved from the Department in June 1991); Lynn Farmer, who has managed two programs at the Clinic; Margaret Morris, evaluator for the Metropolitan Court Probation Division; and Yvette Obregon, work-study student.

Ms. Obregon is leaving the Clinic after two years as our office assistant. She has graduated and is going on to do graduate work in counseling psychology in Austin, TX. She has been the most reliable and dedicated of our work-study students in my experience at the Clinic, and her dependable work and friendly nature will be missed.

Margie Morris has performed the Metropolitan Court assessments this year, and described it as an excellent clinical experience with exposure to a wide variety of individuals and problems. She has been reliable in this role and provided reflective, well-written and timely assessments. She goes on to internship in San Francisco next year.

Last year’s addition to our staff, Melissa Behrens-Blake, has proved a very fortunate serendipity of our move to the new facility in spring 1997. Ms. Blake is an educational diagnostician specializing in the assessment of adult learning disabilities and the educational portion of ADD/ADHD evaluations. What began as an administrative arrangement to share space has become a valued working relationship with compatible aims. Ms. Behrens-Blake has knowledge and skills that complement and enhance the services and training we have traditionally provided. She has a strong interest in the neurological bases of the conditions she assesses and has provided consultation for our students and with our clients. The community’s need for an ADHD assessment program (see above) was brought to our attention by Ms. Blake, and she has been one of three prime movers in its development.

Wanda’s reorganization of the Clinic continues to provide a steady foundation for our work here. She has provided not only an increase in the efficient operation of the Clinic, but also a calm and quieting presence that facilitates all our efforts in a sometimes stressful work environment. Her duties are numerous and varied, and she carries out each with productively and graciously. She is currently developing the accounting and billing system which will be needed for our ADHD assessment program.

Lynn Farmer has been a key part of the Clinic’s functioning for the past year and a half. She coordinated a treatment program for boys temporarily housed in a correctional facility at Grants, NM and provided services and administrative support for that program. As the boys left that facility and our program wound down, she began working with Ms. Blake and Mr. Saenz to develop the assessment package itself, the system of flow through the program, referral contacts
and administrative matters. She began in the summer to carry out testing of clients. She has served, in effect, as a student assistant director for over a year. Her knowledge, energy, organizational skills and laughter will be missed next year as she departs for internship.

I (Dan Matthews) am close to completing my tenth year as Clinic Director and completed my term as President of the New Mexico Psychological Association in December 1997. That role kept me involved with the changing status of psychology under movement to managed health care and with legislative and regulatory issues affecting our profession. I continue to enjoy the Interviewing and Case Formulation practica for first year students, Introduction to Therapy for second year students, and group as well as individual supervision of student-clinicians. My own clinical work is entirely through the Clinic, where I provide therapy and mediation. I am working closely with the ADHD team and refreshing my knowledge of theory, research and assessment in that area.

This is the time each year that we experience the loss of our "senior staff" - those who graduate or go on internship. Nichole Andrews, Janet C de Baca, Jennifer Eldridge, Lynn Farmer, Vanessa Lopez, Margaret Morris, Rick Perkins, and Brenda Wolfe have terminated or transferred their Clinic work and left for internship. Five others who have provided conscientious and compassionate therapy over the years will not be at the Clinic this fall. Their work in the Clinic, their support for other students and the regular contacts in conversation and supervision are already sorely missed.

Finally, the quality of our services depends critically on the efforts of our clinical faculty and adjunct faculty who supervise therapy and assessment cases and support the knowledge, professional development and personal growth of the student therapists. These individuals deserve special thanks (they are listed elsewhere in this report, and need not be individually named here).

PHYSICAL SETTING

On March 1, 1997 construction began on a new classroom building which will occupy the entire block on which the building housing the Clinic formerly stood. The move necessitated by this construction has resulted in more space and in some respects a better facility for the services we provide. Located at 1716 Las Lomas NE in a converted residence, the present building has offices for our three full-time staff, five therapy rooms, a waiting area and a student work space. Three therapy rooms are equipped for videotaping and live supervision is possible through remote video. A large converted garage is available for future use as classroom/ research/group-therapy space, and has received some use for research and training. Clinic funds allowed the purchase of new furniture throughout the building and the remodeling of the building for our use, though minimal, made it into livable and workable space. Like our previous location, the homelike setting presents an inviting and comfortable environment for our clients and our work.

The building is also a work-in-progress. It lacks the observation room of our previous building
and videotape equipment is currently awkwardly placed within two of the rooms rather than in remote locations. One therapy room is quite small (necessitated by the remodeling of the building) and would be improved with a borrowed light window and translucent glass door. We have only recently been given a firm commitment by the University that we will stay in this location, and remodeling is depending on need and finances.

RESEARCH

Almost continuously over the past seven years, students and faculty are using the Clinic facilities for their research. Although there is presently no active research project taking place at the Clinic, our computers are in use for data analysis and we anticipate research projects developing out of the ADHD program. David Ley has expressed interest in case outcome research here for his doctoral research as well.

SUMMARY

The Department of Psychology Clinic continues to be a pleasant and supportive environment for providing psychological services to the Albuquerque community. Each year, some of our services remain the same and we take on new projects while completing others. The Clinic is a congenial setting to develop the experience and skill of being a therapist and psychological evaluator. Through the efforts of faculty, student-clinicians, supervisors and staff, an atmosphere is maintained that is supportive of this sometimes stressful work. It is a good place to work, learn and grow.

Prepared by

Dan Matthews, Ph.D. Clinic Director
and his assistant
Wanda Sharts
APPENDIX M

SUPPORT STAFF
DEPARTMENT OF PSYCHOLOGY
AY 1997 - 1998

ADMINISTRATIVE SUPPORT STAFF

Department Administrator: Candace Blashak
Assists the Department Chair; administers all personnel and budgetary decisions necessary to execute University policies and procedures set by the Department Chair and faculty; oversees all budgetary activities in the Department; hiring and supervision of all staff; assists in hiring students, and technical personnel; coordinates with various University administrators on a variety of complex matters, including faculty contracts, student financial aid, staff compensation, and other matters; drafts policies, procedures, correspondence for the Chair; takes minutes at faculty meetings. Office management, preparation of a variety of administrative and instructional documents, faculty recruitment, tenure and promotion files, coordination of the department convocation activities, departmental receptions, and other special events. Bookholder and Paymaster.

Accounting Tech: Stan Bennett
Maintains records of fiscal and budgetary controls, ledgers, and other transactions for the Department. Processes routine financial documents and accounting transactions. Reconciles accounting records and analyzes routing accounting data. Serves as department bookholder. Assists in the development and coordinates the maintenance of area budgets. Processes part-time and full-time faculty contracts, GA and TA contracts. Building key coordinator. Responsible for the monthly tagging of department inventory and maintains inventory control.

Academic Advisor: Jennifer Lesh
Serves as department’s graduate admissions coordinator; primary liaison with public and prospective graduate and undergraduate students; responsible for administering student degree checks, counsels and advises graduate and undergraduate students in Psychology program regarding policies, requirements, academic standing, and related matters; maintains all graduate student files and records; coordinates comprehensive examinations and thesis and dissertation defenses; interfaces with Graduate Studies Office in policy areas; coordinates with Scheduling Office, Continuing Education Office, regarding department class schedules; assists top administration with hiring part-time faculty; is official liaison between department and visiting faculty; coordinates with Graduate Studies Office, College of Arts and Sciences, Curriculum Change Committee, and Office of Scheduling regarding revisions for University catalogs; prepares reports for outside
APPENDIX M (continued)

agencies such as the American Psychological Association as requested. Performs other duties as requested by the department chair or department administrator.

Editorial Tech: Nancy Chavez
Edits and word processes complex manuscripts and grant proposals; provides word processing for department faculty prepares department annual report; writes and edits department quarterly newsletter; prepares information for “Faculty Publications and Creative Works”; serves as department representative for the United Way drive; is a bookholder with back-up duties for department administrator, academic advisor, and administrative assistant and is a paymaster.

Administrative Assistant: Louis Carrillo
Represents the department as first point of public contact; directs telephone calls and foot traffic as appropriate; has responsibility for maintaining supplies inventory, security of classroom equipment inventory, and maintenance of office copier; backup for Academic Advisor, back-up for Editorial Assistant for typing of syllabi, exams and correspondence; maintains department classroom schedule, and supervises two student employees, first contact for building keys.

Project Coordinator for Grants: DeeAnn Quintana
Coordinates all phases of extramural funding requests; examines all proposals for accuracy; trains and supervises project personnel; monitors and reports on direct and indirect costs associated with research grants; department liaison to the Office of Research Administration and Contract and Grant Accounting.

RESEARCH SUPPORT STAFF

Research Engineer: Patrick Sharp
Supports faculty, staff and graduate students with computer needs; responsible for electronic design, fabrication, troubleshooting, installation, computer upgrades, consulting, repair, and preventive maintenance for a vast assortment of electronic equipment; fabricates wood and metal products using a variety of equipment; responsible for annual department equipment inventory; advises Chair and department faculty regarding purchase, installation and maintenance of electronic equipment.

Laboratory Animal Technician IV: Ector Estrada
Supervises the daily operations of the Psychology Department’s animal colony, including animal husbandry and environmental control; functional supervisory responsibility for the other Animal Technician IV and two student employees; works with department’s veterinarian in treatment of laboratory animals and in
monitoring compliance with the Animal Welfare Act; works under general supervision of Department Chair, Veterinarian, and Chair of Animal Care and Use Committee.

**Laboratory Animal Technician IV: Gilbert Borunda**
Under limited supervision, maintains and breeds laboratory animals and functions as a section leader of student assistants; primarily responsible for daily care and preparation for surgery of laboratory animals; assists department veterinarian in all animal treatment; back-up for senior Laboratory Animal Technician IV.

**Animal Research Coordinator: DeLaine King**
Coordinates and supports all operational facets of a laboratory animal research facility, ensuring optimum usage of facilities and equipment, in compliance with all federal and state regulations pertaining to the conduct of animal research. Carries out specified research/experimental protocol and procedures as appropriate, and trains, guides, and oversees the activities of students engaged in animal research.

**Veterinarian: Linda Contos, DVM**
Provides preventive, acute and on-call medical treatment to a variety of departmental laboratory animals; provides professional management of animal research facility and monitors compliance with the Animal Welfare Act; provides relevant instruction to faculty, graduate and undergraduate students concerning care and treatment of laboratory animals; reports to Department Chair and Chair of Animal Use and Care Committee.

**PSYCHOLOGY CLINIC SUPPORT STAFF**

**Clinic Director: Daniel Matthews, Ph.D.**
Has overall administrative and fiscal responsibility for the Clinic and executes Clinic policies as set by the Department faculty; reports to the Department Chair through the Associate Chair for Clinical Training. Duties include triage of referrals to the Clinic, supervision of doctoral students, report writing, community relations and some direct clinical services, including assessment.

**Administrative Assistant: Wanda Sharts**
Works under general supervision and in support of Psychology Clinic Director, Psychology Department Chair, and Department Administrator. Assists in the formulation of Clinic policies and procedures; performs a wide variety of duties in the areas of budget, personnel, payroll, and related matters, and performs administrative work at the paraprofessional level; supervises student employee.
Certified Educational Diagnostician: Melissa Behrens-Blake

Participates in research projects conducted through the Department of Psychology as related to general disorders of neurological processing (including but not limited to dyslexia, learning disabilities, traumatic brain injury, schizophrenia and stroke/aphasia). Responsibilities include conducting extensive educational diagnostic evaluations as directly related to the specific requirements of the research project. Also serves as certified educational diagnostician in the department’s Psychology Clinic with diagnostic evaluations to be integrated into the client’s overall treatment program.
APPENDIX N

PROPOSAL TO REVISE THE UNDERGRADUATE CURRICULUM IN PSYCHOLOGY

After considerable deliberation and with the full consent of the faculty, the Department of Psychology is proposing to revise its undergraduate curriculum. This proposal contains a rationale for our proposed changes, an overview of the proposed changes, a revised description of the requirements for a major in psychology, and a listing of our proposed course offerings.

Rationale

It has been many years since the Psychology Department took a comprehensive look at its undergraduate curriculum. In that time, the ad hoc addition of courses, changes in the field of psychology, and changes in the composition of our faculty have left us with an undergraduate curriculum that is lacking in a coherent structure and is unrepresentative of the current philosophy and expertise of our faculty. Moreover, the current curriculum does not allow us to optimize our relatively limited teaching resources and actually impedes our attempts to provide the best undergraduate training experience we can.

At the undergraduate level, our educational objectives are threefold: 1) To expose our students to the broad range of scientifically based content areas in psychology while offering them the opportunity for in-depth study in those areas where the Department has particular expertise; 2) To staff as many of our undergraduate courses as possible with full-time faculty; and 3) To increase the amount of writing and library research required across our curriculum. It is our contention that the revisions listed below will greatly facilitate our attempts to reach these objectives.

Our Current Curriculum

To give some background information, our undergraduate course offerings are grouped into seven content areas: General, Behavioral Neuroscience, Clinical, Developmental, Learning/Cognition, Quantitative, and Social. There are individual faculty affiliated with each of these areas, but our areas of focus are in Behavioral Neuroscience, Clinical, Learning/Cognition and Quantitative. Currently we offer both a BA and BS degree. Students pursuing the BA degree are required to take 34 (or 33 if an upper division lab is taken) credit hours in psychology including: Psych 105 (Introductory Psychology – 3 credits), Psych 106L (Introductory Psychology Lab – 1 credit), Psych 200 (Statistical Principles – 3 credits), two courses from each of two groups (12 credits) of three 200 level courses, either four courses (12 credits) at the 300 level or above or three courses (9 credits) at the 300 level or above and one upper division lab (2 credits), and one elective (3 credits). One of the two groups of 200 level courses includes Psych 220 (Child Psychology), Psych 232 (Clinical Psychology), and Psych 271 (Social Psychology). The other includes Psych 240 (Brain and Behavior), Psych 260 (Learning and Memory, and Psych 265 (Cognitive Psychology). The BA track also requires a minor in an A&S area other than biology, chemistry, computer science, mathematics, or physics.

Students opting for a BS degree must fulfill the same requirements as the BA major except they must complete a minor in biology, chemistry, computer science, mathematics, or physics, they must take an upper division lab, and they must take Psych 302 (Psychological Research
Overview of Proposed Changes

The changes outlined below reflect our attempt to attain the Department's undergraduate educational objectives and to create a more systematic and logical sequence and range of courses. In our view, this will require modifications of the requirements for a major in psychology, the elimination of some courses and the addition of others, the addition of prerequisites for some courses, and the renumbering and/or renaming of several courses. Each of these is discussed separately below.

Modifications of the requirements for a major in psychology.

The specific requirements for a major and minor in psychology as they would appear in the next UNM Catalog are attached to this proposal. Presented here is a summary of those requirements. Under the proposed curriculum, the Department would continue to offer both a BA and BS degree in psychology. The BA track would be as follows: 36 (35 if an upper division lab is taken) credit hours in psychology and a minor in any A&S eligible department. The 35 credits must include: Psychology 105 (Introductory Psychology - 3 credits), Psychology 200 (Statistical Principles - 3 credits), four courses (12 credits) selected from among our five core 200 level courses (220 - Developmental Psychology, 240 – Brain and Behavior, 260 – Learning and Memory, 265 – Cognitive Psychology, and 271 – Social Psychology), Psychology 302 (Psychological Research Techniques - 3 credits), four courses (12 credits) at the 300 level or above, and one 2 or 3 credit elective. Students would be encouraged but not required to take an upper division lab as an elective. The BS track would be the same as that for the BA, with two exceptions: 1) The student must complete a minor in or distributed among Biology, Chemistry, Computer Science, Mathematics, or Physics; and 2) The student must take an upper division lab.

The major differences between the existing and proposed requirements are: a) the total number of credits required for a degree in psychology would increase from 34 (or 33) to 36 (or 35), b) students would no longer be required to take an introductory level lab (Psych 105L), c) students would be required to take a broader sampling of our 200 level core courses, and d) all students would be required to take a research methods course (Psych 302). Another change, discussed more fully below, is that all but one of our 300 and 400 level courses would have at least one 200 or 300 level prerequisites, respectively.

Elimination and addition of courses.

To put into context the discussion of the courses we are proposing to eliminate and add, the attached Table displays our proposed course offerings grouped by content area. The level of each course (100, 200, 300, etc.) is identified by the first digit of the course number, and the content area is identified by the second digit. General psychology and quantitative courses are identified by either 0 or 1, developmental psychology courses are identified by 2, clinical courses by 3, behavioral neuroscience courses by 4, special topics by 5, learning/cognition courses by 6, and social psychology courses by 7. In the Table, general and quantitative courses are listed separately, and special topics courses (Psych 450) and independent study (Psych 499) are listed under general. This proposed list of courses can be contrasted with the 1997-98 catalogue to get an overall sense of the proposed changes we are proposing, but specific changes in the course
offerings of each content area are presented below. Reasons for eliminating or adding specific courses or groups of courses are also presented below.

Perhaps the biggest change to our current curriculum would be the elimination of our introductory level lab (Psych 106L). To be sure, there is plenty to recommend the lab; after all, psychology is fundamentally a research discipline, and a good deal of psychological research is laboratory based. However, there are some real costs associated with the lab, and it is our contention that the costs clearly outweigh the benefits.

First, introductory students typically do not have enough psychology under their belts to derive much value from the introductory lab. Too much time is spent in the lab disabusing students of their preconceptions of psychology, teaching them the basics of experimental design, and teaching them to write in APA (American Psychological Association) style. All of this could be accomplished far more efficiently by requiring a course in research methods, requiring more writing in our core courses, and offering a series of upper division labs that provides students with the opportunity to do real experiments in their specific areas of interest. Moreover, staffing the introductory lab sections is a huge drain on our already limited TA resources. We have been offering roughly 14 lab sections every semester, most of which are taught by first-year graduate students. This leaves us with an insufficient number of TAs to service the relatively large number of large enrollment undergraduate courses that we also offer every semester. As a result, there is an over reliance on multiple choice exams in these courses and a minimal amount of writing. We believe that we could greatly enhance the writing requirements in our undergraduate courses if we dropped the lab and assigned those TAs to other courses. If this were done, we could probably provide TAs for every psychology course with enrollments over 50.

Another factor to consider in this regard is that the University’s new core curriculum no longer allows students to use the introductory psychology lab to satisfy the laboratory science requirement. Thus, the elimination of the introductory lab is likely to have little effect on students not majoring in psychology. The effect on psychology majors, however, would be positive.

In addition to the introductory lab, there are a number of 200, 300, and 400 level courses that we would also like to eliminate. These courses were selected for a number of reasons including redundancy, being outside the faculty’s areas of expertise and focus, requiring teaching resources beyond the Department’s capacity, and not contributing to the Department’s educational objectives. In addition, we have seen a proliferation of highly specialized, low-enrollment lab courses over the years which has led to an unsystematic and unbalanced range of lab offerings. Most of the courses we want to eliminate are electives and not currently required for completion of an undergraduate degree, and several are offered only sporadically. The courses we are proposing to eliminate are: Psychology 210 (Educational Psychology), 211 (Applied Psychology), 230 (Adjustment and Interpersonal Relations), 232 (Clinical Psychology), 321 (Introduction to Child Research), 333L and 334L (Abnormal Behavior Lab), 338L (Family Psychology Lab), 364L (Perception lab), 402 (Multivariate Statistics), 413 (Industrial and Organizational Psychology), 414 (Human Factors Psychology), 415 (Environmental Psychology), 421L (Advanced Developmental Psychology Lab), 433L (Child Psychopathology Lab), 435L (Behavior Therapies Lab), 436L and 437L (Alcoholism Lab), 440 (Advanced Physiological Psychology), 441L (Advanced Physiological Psychology Lab), 442 (Neural Plasticity and Behavior), 463 (Human Performance), 464L (Human Performance Lab), and 472 (Social
Cognition).

The elimination of Psych 232 (Clinical Psychology) deserves further comment because it is currently one of our core 200 level courses. The clinical faculty agree that there are clear limits to what can be taught about clinical psychology at the undergraduate level. In some ways, an undergraduate course in clinical psychology is a bit like offering undergraduate biology majors a course in clinical medicine. Partly as a result of these limitations, the content of this course is substantially redundant with the content of Psychological Testing (310), Personality (331) and Abnormal Behavior (332). Because of the inherent interest in a topic like clinical psychology, many of our students opt to take this course rather than some of the other 200 level core courses, which are more scientifically based and academically demanding. For these reasons, we are proposing that clinical psychology be dropped from our list of courses and students be required to take at least four of the remaining five 200 level core courses.

Another issue that deserves further elaboration is the decision to eliminate a number of specialty labs, especially in the clinical area. This change is not as drastic as it may appear. As we note below, we are proposing to offer upper division lab courses in all six of our major content areas (Note: general psychology, one of our seven course groupings, is not a major content area). Moreover, students seeking a more advanced or specialized lab experience may take an independent study (Psych 499) course and work directly in the research labs of individual faculty. In this way, students wanting to work in, for example, an alcoholism, neuropsychology, or computational modeling lab will have the opportunity to do so. Under the requirements of the new curriculum, however, students would not be allowed to substitute a Psych 499 specialty lab for one of our upper division labs, but the opportunities for more specialized and advanced lab experiences would remain for students wishing to take them.

While we are proposing to eliminate several courses from our list of offerings, we are also proposing to add several courses. The courses we wish to add are intended to: a) create a systematic progression of 200, 300 and 400 level courses in each of our six major content areas; b) provide a general upper division lab course in each of our six major content areas; c) capitalize on the strengths and areas of focus of our faculty, and d) minimize the proliferation of specialty courses that will only have to be deleted in future years as the composition of the faculty changes. Toward these ends, we are proposing to add permanent courses that are rather central to our content areas and are very likely to be offered regularly for many years.

The new courses (italicized in the Table) within each area are as follows: Behavioral Neuroscience: Psych 341L (Behavioral Neuroscience Lab), Psych 342 (Evolution, Brain, and Behavior), and Psych 343 (Developmental Neuroscience); Clinical: Psych 333L (Clinical Psychology Lab); Learning/Cognition: Psych 365 (Applied Experimental Psychology); Quantitative: Psych 301L (Quantitative Psychology Lab). Descriptions of these courses are included as attachments. There are a number of 500 level courses that have also been added, but all of these are just graduate numbers for undergraduate courses offered for graduate credit. If the proposed course deletions and additions are approved, there will be a total of 16 fewer courses than is currently offered.

Renumbering and renaming of courses.

As it stands, there is an inconsistent offering of courses across our six content areas, and
this pattern is not reflective of our faculty's focus and strength. For example while we have several 300 and 400 level courses in developmental psychology, we have no 300 level courses in either behavioral neuroscience or social psychology. In addition, there appears to be no consistent method by which courses were assigned to their respective levels. For instance, cognitive development is a 400 level course, but social development, which is of the same general level of difficulty and has the same prerequisites, is a 300 level course. Likewise, cross-cultural psychology (411), a sub-area of social psychology, is a 400 level course, but perception, a sub-area within cognitive psychology, is a 300 level course. In the past, courses were assigned numbers based primarily on the instructor's request. There was some vague notion that 400 level courses should be more advanced or presume more basic knowledge than 300 level courses. But, clearly this is not reflected in the enrollments of these classes, their respective workloads, nor the prerequisites required of the classes offered at different levels. In order to reduce confusion among students and bring some coherence to our course offerings, we need a more systematic way of assigning courses numbers.

In light of the above, we have decided to base our course numbering system on the level of the prerequisites required for courses. For example, all 200 level course should require at least one 100 level prerequisite, all 300 level course should require at least one 200 level prerequisite, and so on. There is one exception to this numbering scheme and that is Psych 332 (Abnormal Psychology). Psych 332 is required or recommended as an upper division course by several other departments, and instituting a 200 level prerequisite at this point could cause problems for these departments. For this reason, we decided to leave Abnormal Behavior as a 300 level course and not list any 200 level prerequisites. Some of our courses have been assigned a 400 number because they are available for graduate credit. In line with recent recommendations from the Provost's office, however, we will assign two numbers, one undergraduate and one graduate (e.g., 347/547), to all undergraduate courses that are also available for graduate credit. Students requesting graduate credit will enroll in the 500 level course. In some cases, there are already graduate level courses on the books that have the same two last digits as an undergraduate course offered for graduate credit but are not on the same topic. For example, Psych 337 is a course in family psychology, but Psych 537 is a seminar in child psychopathology. In an attempt to keep the second two digits of the undergraduate and graduate levels of these courses the same, it will be necessary to renumber some of the undergraduate courses that will be offered for graduate credit. The following is a list of courses we wish to renumber: Psych 324 – Infancy (formerly Psych 325), Psych 328 – Cognitive Development (formerly Psych 428), Psych 344 – Human Neuropsychology (formerly Psych 444), Psych 347 – Drugs and Behavior (formerly Psych 447 – Psychopharmacology: Drugs of Abuse), Psych 364 – Perception (formerly Psych 363), Psych 374-Cross-Cultural Psychology (formerly Psych 411), Psych 376L – Social Psychology Lab (formerly Psych 475L), Psych 377 – Attitudes and Persuasion (formerly Psych 471), Psych 378 – Social Interactions (formerly Psych 473), Psych 421 – Advanced Developmental Psychology (formerly Psych 420), Psych 436 – Family Psychology (formerly Psych 337), Psych 439 – Child Psychopathology (formerly Psych 432).

In addition to changes in course numbers, we are proposing to change the names of a few existing courses. These changes are intended to reflect changes in the field and the current content of these courses. With this in mind, we are proposing to rename the following courses:

Differences between proposed and existing course offerings.

Below is a list of the proposed changes in course offerings in each of the Department’s content areas.

In behavioral neuroscience, advanced physiological psychology (441), the associated lab (441L), and neural plasticity and behavior (442) would be eliminated. An upper division behavioral neuroscience lab (341) and courses in evolution, brain and behavior (342) and developmental neuropsychology (343) would be added.

In clinical, courses in adjustment and interpersonal relations (230), clinical psychology (232), and advanced labs in abnormal behavior (333L and 334L), family psychology (338L), alcoholism (431L and 432L), child psychopathology (433L) and behavior therapies (435L) would be eliminated. An upper division clinical psychology lab (Psych 333L) would be added.

In developmental, introduction to child research (321) and the advanced developmental lab (421L) would be eliminated. An upper division developmental psychology lab (Psych 322) would be added.

In Learning/Cognition courses in human performance (463) and the human performance (464L) and perception (364L) labs would be eliminated. A course in applied experimental psychology (364), which includes topics from human factors, perception, and human performance, would be added.

In social, social cognition (372), would be eliminated, and the social psychology lab would simply be renumbered.

More classes would be eliminated from the Quantitative area than from any other area. Educational psychology (210) would be eliminated, along with applied psychology (211), industrial and organizational psychology, human factors psychology (411), and environmental psychology. Some of the content of these classes will be included in applied experimental psychology (364), which will be offered through the learning/cognition area. The quantitative area would also gain an upper division lab (301L).

Anticipated Impact of Proposed Changes

Course enrollments and student credit hours.

It isn’t possible to estimate precisely the impact of the proposed changes on our course enrollments and student credit hours (SCH), but there are no obvious reasons why enrollments would be adversely affected. As it stands, Psychology is second only to Biology in terms of the number of majors (close to 800) and total SCH (almost 10,000 per year) the Department generates. These numbers are due primarily to students’ inherent interest in the subject matter of psychology, and it is hard to imagine that the proposed changes would affect that interest or the number of students who choose to major in psychology or take psychology courses. As far as majors are concerned, the proposed changes in the curriculum are relatively minor and essentially entail eliminating the requirement of an introductory lab, requiring a research methods course, and
requiring students to take a broader offering of 200 level core courses. The actual number of required 200 level courses would not change, but the elimination of Clinical Psychology (Psych 232) would require students to take an additional course in one of the empirically based content areas in order to fulfill their core requirements. With the exception of Clinical Psychology, we are proposing to eliminate generally low enrollment courses and specialized labs that are infrequently offered. While some students might prefer that we continue to offer Psych 232, its elimination is not likely to dissuade students from majoring in psychology. Non-majors tend to take courses that are either of general interest or supplement their majors. Classes with the highest percentage of non-majors are: Introductory Psychology (Psych 105), Statistics (Psych 200), Developmental Psychology (Psych 220), Brain and Behavior (Psych 240), Infancy (Psych 325), Social Development (327), Adolescence (Psych 329), Human Sexuality (Psych 330), Abnormal Behavior (Psych 332), and Family Psychology (Psych 337). Inasmuch as all of these classes will be retained, the proposed changes are not likely to affect the numbers of non-majors enrolled in our classes.

The elimination of the introductory lab requirement will reduce our SCH, but the lab is only a 1-credit course, and the greater number of upper division, 2 credit labs, should partially offset that loss. Also, by requiring all majors to take Psych 302, we estimate an increase in enrollments in that course from roughly 60 to 125 per semester. The elimination of Psych 220 should have no discernible effects on enrollments because it the vast majority of students who take it are psychology majors, and they will be required to enroll in one of our other 200 level core courses. As stated previously, most of the other courses we want to eliminate have relatively low-enrollments and are not offered very frequently. We do not believe that their elimination will have much impact on our enrollments.

Although we are proposing prerequisites to determine course numbers, this will actually result in the addition of very few new prerequisites for either our proposed or existing courses. The main effect of using prerequisites to determine course numbers would be the renumbering of several courses. In fact, the only courses for which the prerequisites will change will be the upper division labs (prerequisites: Psych 200 and Psych 302) and Psych 331, Personality (prerequisite: Psych 200). Accordingly, proposed changes in the prerequisites for our courses is not likely to affect enrollments.

In view of the above and given the expected increase in enrollments in Psych 302, a 3-credit course, the proposed changes to our curriculum and course offerings should result in a small net increase in our SCH.

Impact on other departments and programs.

As stated previously, there are several departments and programs across campus that either require or strongly recommend that their students take some of our undergraduate courses. The departments include: Radiography, Pre-professional Medicine, Emergency Medical Science, Nursing, Nuclear Medicine Imagery Certification Program, Anderson School of Business, Family Studies, Health Education, Community Health Education, Nutrition, Psychical Education, Athletic Training, Exercise Science, Construction Management, Music Education, Dental Hygiene, Occupational Therapy, and Physical Therapy. The psychology courses required or recommended by these various programs are Psych 105, Psych 200, Psych 220, Psych 230, Psych
240, Psych 260, Psych 271, and Psych 332. Only Psych 230 (Adjustment and Interpersonal Relations) would be eliminated under the present proposal, and it is currently required by Family Studies, Health Education, and Exercise Science. The Nuclear Medicine Imagery Certification Program requires either Psych 230 or Psych 240. These programs will have to alter their requirements, and we would recommend that Psychology 332 (Abnormal Behavior) be required instead. We have deliberately not included any prerequisites for this course, and much of the information contained in Psych 230 is included in Psych 332. Memos informing these Departments of our intent to eliminate Psych 230 are attached to this proposal.

With respect to the branch campuses, the impact of the proposed changes is likely to be small. They would not be required to offer any new courses, and would no longer be required to offer Psych 231 (Adjustment and Interpersonal Relations) or Psych 232 (Clinical Psychology). They could, of course, continue offering these classes if they found them to be useful for their students, but they would only count as electives toward a degree.

**Library**

There is no foreseeable impact on the Library.

**CIRT**

The is no foreseeable impact on CIRT.

**Benefits to students.**

As was stated previously, it is the Department’s view that the proposed changes would be of considerable benefit to our students and would offer several advantages. Eliminating the introductory lab would free up a number of TA position that could be put to better use in our core and large-enrollment courses. Having more TAs available would reduce the need to rely on multiple-choice exams in these courses, and would allow instructors to give essay exams and more library-based writing assignments. Replacing the introductory lab with upper-division labs in each of the content areas would give students a wider choice of lab opportunities and enhance the quality, depth, and rigor of their lab experiences. The requirement that students take a broader range of 200 level core courses and a course in research methods, would give them a better introduction to the range of content areas in psychology and equip them to be better consumers of the psychological literature. Eliminating the relatively large number of highly specialized courses, courses that are not in line with the faculty’s educational objectives, and courses that are outside the faculty’s areas of strength will allow us to assign more of our full-time faculty to our core courses and to use our part-time faculty to help reduce the number of large-enrollment courses we are forced to offer. Together, these changes should add logic and coherence to our undergraduate program and bring it more in line with the educational philosophy and objectives our faculty. Moreover, theses changes should provide our students with a better educational experience and better prepare them for more advanced study and to apply their knowledge in their personal and professional lives.

**Timetable for Implementation**

We are hoping to have the curriculum approved and included in the new UNM Catalogue
so that it could be implemented in the Fall of 1999. Students entering before that time would be given the option of satisfying the old or new curriculum. To accommodate those students opting to continue under the old curriculum, we would continue to offer the courses necessary to complete the degree (i.e., Psych 106L, Psych 232) for two semesters.
COURSES TO ELIMINATE

Psych 106L – Introductory Laboratory
Psych 210 – Educational Psychology
Psych 211 – Applied Psychology
Psych 230 – Adjustment and Interpersonal Relations
Psych 232 – Clinical Psychology
Psych 321 – Introduction to Child Research
Psych 333L and 334L – Abnormal Behavior Lab
Psych 338L – Family Psychology Lab
Psych 364L – Psychology of Perception Lab
Psych 402 – Multivariate Statistics
Psych 413 – Industrial and Organizational Psychology
Psych 414 – Human Factors Psychology
Psych 415 – Environmental Psychology
Psych 421L – Advance Developmental Psychology Lab
Psych 433L – Child Psychopathology Lab
Psych 435L – Behavior Therapies Lab
Psych 436L and 437L – Alcoholism Lab
Psych 440 – Advance Physiological Psychology
Psych 441L – Advanced Physiological Psychology Lab
Psych 442 – Neural Plasticity and Behavior
Psych 463 – Human Performance
Psych 464L – Human Performance Lab
Psych 472 – Social Cognition
COURSES TO ADD

Psych 301L – Quantitative Psychology Lab
Psych 333L – Clinical Psychology Lab
Psych 341 – Behavioral Neuroscience
Psych 342 – Evolution, Brain and Behavior
Psych 343 – Developmental Neuroscience
Psych 365 – Applied Experimental Psychology
COURSES TO RENUMBER

Psych 324 (Infancy) from Psych 325
Psych 328 (Cognitive Development) from Psych 428
Psych 344 (Human Neuropsychology) from Psych 444
Psych 347 (Drugs and Behavior) from Psych 447
Psych 360 (Human Learning and Memory) from Psych 361
Psych 364 (Perception) from Psych 363
Psych 376L (Social Psychology Lab) from Psych 475L
Psych 377 (Attitudes and Persuasion) from Psych 471
Psych 378 (Social Interactions) from Psych 473
Psych 421 (Advanced Developmental Psychology) from Psych 420
Psych 436 (Family Psychology) from Psych 347
Psych 439 (Child Psychopathology) from Psych 432

COURSES TO RENAME

Psych 220 – Developmental Psychology from Child Psychology
Psych 322L – Developmental Psychology Lab from Child Research Lab
Psych 347 – Drugs and Behavior from Psychopharmacology
MAJOR STUDY REQUIREMENTS
(New Catalog Description)

The student wanting an introduction to psychology should take Psych 105. Students should then take multiple 200 level courses before registering for more advanced courses. In arranging their programs, students should be guided by the course numbering system. The first number indicates the level at which the material will be taught as well as the level of the prerequisites or corequisites for a course. The second number indicates the area within psychology with which the course is primarily concerned. The code is as follows:

- 0 and 1: general and quantitative psychology
- 2: developmental psychology
- 3: clinical/personality psychology
- 4: behavioral neuroscience/brain-behavior relations
- 5: special topics in psychology
- 6: psychology of learning and cognition
- 7: social psychology
- 9: individual research and honors seminars

The third number has no systematic meaning. Although the prerequisites for any course may be waived by permission of the instructor, it is strongly advised that students take the prerequisites in order to be adequately prepared for the course.

Acceptance of any transferred credits toward a major or minor in psychology must be approved by the Associate Chair for Undergraduate Education.

B.A. Track
To obtain a B.A. in psychology a student must complete satisfactorily (i.e., a grade of C or better) 36 credit-hours in psychology (35 credit hours if an upper-division lab is taken. See item 6 below) and should minor in an Arts and Sciences department. Other minors may be acceptable if approved in advance by the Associate Chair for Undergraduate Education. The 36 credit hours of psychology should include:

1. Psychology 105 (3 credits)
2. Psychology 200 (3 credits)
3. Four courses (12 credits) selected from our five 200 level core courses: Psych 220, Psych 240, Psych 260, Psych 265, and Psych 271.
4. Psychology 302 (3 credits)
5. Four courses at the 300 level or above
6. One psychology elective (2 or 3 credits). Students are encouraged but not required to take an upper-division lab as an elective.

Majors (B.A. only) in psychology who elect to minor in Human Services are required to complete 24 hours in Human Services consisting of the following courses: HS 252, 281, 352, 355, 359, 395, and 495. Students must apply to the Human Services Program for admission. For more information, call 277-4535.

B.S. Track
Same as B.A. track with the following two exceptions:
The student must complete a minor in or distributed among Biology, Chemistry, Computer Science, Mathematics or Physics.

70
The student must take an upper-division psychology lab.
For a distributed minor with either a B.A. or B.S., the student must take at least one upper-division course in each of two or more areas and a total minimum of 30 hours.

MINOR STUDY REQUIREMENTS

15 hours beyond general psychology (Psych 105).

Departmental Honors
Superior sophomores, especially those anticipating graduate study in psychology or interested in research training, are invited to apply for admission to the Undergraduate Honors Program to begin in the Fall semester of the junior year. Students participating in this program are eligible to graduate with departmental honors if recommended by the faculty on the basis of outstanding performance.

The Honors major requires 33 hours beyond 3 hours of general psychology, including 200, 302, 391, 392, 491, 492, and four courses from the five 200 level core courses. The usual requirement of an upper-division lab for B.S. majors is waived for honors majors.

Note: Psych 260 or 265 is a prerequisite, and 200 and 302 are pre- or corequisites for the first Junior Honors Seminar, Psych 391.
Memorandum

To: Professors Vic Delcloss and Mary Jo Campbell

From: Michael Dougher

Subj: Elimination of Psychology 230

Date: July 8, 1998

This is to inform you of a change in our future course offerings that may pertain to your course requirements. The Department of Psychology is in the process of revising its undergraduate curriculum, and the revisions call for the elimination of Psychology 230, Adjustment and Interpersonal Relations. As I understand it, Psych 230 is currently required of students majoring in Family Studies, Health Education, and Exercise Science. An alternative course that contains some of the same content and may serve the needs of your students is Psychology 332, Abnormal Behavior. We have deliberately kept the prerequisites for this course to a minimum, and require only that students have taken Introductory Psychology (Psych 105). We apologize for any inconvenience caused by this change in our course offerings.

Adopted Spring 1998
APPENDIX 0

SUGGESTED GUIDELINES FOR EVALUATING LEVEL OF GRADUATE STUDENT RESEARCH INVOLVEMENT

First, note that what is being evaluated is research involvement, not research productivity, though the latter is of course the goal of the former.

Ways to demonstrate research involvement

A. Developing skills relevant to research
   1. Quantitative/methodological coursework
   2. Quantitative/methodological self-instruction
   3. Quantitative/methodological apprenticeship

B. "Putting in the hours" on research
   1. Running subjects or simulations
   2. Analyzing data
   3. Carrying out library research
   4. Writing reports of the research
   5. Writing grant proposals (e.g., SRAC, NIMH, Sigma Xi), whether for self or on behalf of lab/advisor

C. Making original research contributions
   1. Identifying critical issues/controversies in the literature
   2. Developing research designs to address those issues
   3. Developing new theoretical explanations of the phenomena under investigation
   4. Developing new measurement protocols and/or the analytic methods

D. Communicating research contributions
   1. Level-1 dissemination
      a. PAL or other local (UNM, community) presentations
      b. Regional (RMPA, SWPA) presentations (e.g., talks, posters, symposia)
      c. Actively writing masters thesis (normally 3 or 4 months of active writing should yield a complete draft ready for circulation to your committee)
   2. Higher-level dissemination
      a. National (APS, Psychonomics, APA, AERA, SRCD, AABT, ABA, etc.) presentations (talks, posters, symposia, etc.)
      b. Actively writing dissertation (as with the thesis, good intentions and months of writer's block don't count)
      c. First- or co-authored manuscripts submitted to refereed journals
      d. First- or co-authored research-based chapters submitted to edited volumes

E. Receiving recognition of research quality, success
   1. Level-1 recognition
      a. Receipt of local (SRAC, etc.) grants on which you are PI or Co-PI
      b. Winning research-paper competitions at regional conferences
      c. Successful defense of thesis
   2. Higher-level recognition
a. Winning research-paper competitions at national conferences
b. Receipt of external grants for which you are PI or Co-PI
c. Winning local research awards (Haught, Mariani, etc.)
d. Winning national research awards (APA, SPSSI travel or dissertation awards, etc.)
e. Successful defense of dissertation -- especially if with distinction
f. Acceptance of research-based chapters
g. Acceptance of articles in refereed journals

**Parsing Credit for Research Behavior**

The ultimate goals of research involvement are to prepare the student for a professional lifetime of independent research contributions and to generate enough markers of that readiness to make it likely that the student can get a job that involves/requires independent research. It is thus expected that as students progress through the program they will also progress from assisting with others' research to making original contributions to others' research and to developing and carrying out research on the student's own areas of particular expertise. It follows from the above that research contributions that are seen as meriting co-authorship are valued more highly than those that would merit acknowledgement in a footnote, and that first-authored presentations and manuscripts and grants on which the student is PI are valued more highly than work on which the student is a junior author or contributor. It also follows that the minimum requirements for a given research-involvement “grade” should be higher, the longer one has been in the program.

Ultimately the student’s major adviser and area faculty must, with the help of as much input from the student as possible, weigh all of the above and factor in the student’s other commitments (teaching, course work, clinical work, writing comps) in coming up with the research-involvement grade. However, the following table is offered as a very rough guide.

Please note that a student hoping to get an academic job in today's competitive job market should strive for the “exemplary” level of research involvement throughout his or her sojourn in the program.

<table>
<thead>
<tr>
<th>Year in Program</th>
<th>Research Involvement Grade of...</th>
<th>Requires at least</th>
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<tbody>
<tr>
<td>First, 2nd</td>
<td>Satisfactory</td>
<td>An average of 12 hrs/wk in area B, C, D, or E; OR 6 hours in B, C, D, or E plus 9 in area A</td>
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<tr>
<td></td>
<td>Good</td>
<td>Average of 20 hrs/wk in area B, C, D, or E; OR 12 hours in B-E plus 9 in area A; OR any significant contribution in C or D; OR any recognition from area E</td>
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<tr>
<td></td>
<td>Exemplary</td>
<td>Noteworthy contribution in C; OR regional or national D (presentation or submitted manuscript); OR regional or national E (i.e., everything in E except thesis or dissertation defense)</td>
</tr>
<tr>
<td>Third</td>
<td>Satisfactory</td>
<td>Same as “Good” for first, second year</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>Same as “Exemplary” for first, second year</td>
</tr>
<tr>
<td></td>
<td>Exemplary</td>
<td>Any contribution in D2; OR any recognition at level E2</td>
</tr>
<tr>
<td>Fourth, fifth</td>
<td>Satisfactory</td>
<td>Same as “Good” for third year</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>Same as “Exemplary” for third year</td>
</tr>
</tbody>
</table>
Adjustments for differences in student's research opportunities

The area committee will adjust the above standards upwards or downwards in cases where the student's opportunities for research involvement are unusually favorable (e.g., receiving full financial support for carrying out one’s own research) or unusually unfavorable (e.g., heavy teaching load coupled with heavy therapy load, medical problems, currently inactive lab, and few colleagues with similar interests). If in doubt, the student should discuss with his or her major advisor (and possibly other area faculty) what level of research involvement will elicit a recommendation for a particular research-involvement grade that academic year.

At the end of each academic year each area committee will bring up for discussion by the Department faculty (and for consideration of appropriate action) any student whose research-involvement grade is Unsatisfactory. They will also bring to the Department faculty’s attention (for commendation) students whose research involvement for that academic year has been deemed exemplary.

Finally, although these guidelines focus on research involvement, each student is, of course, expected to continue and will be evaluated on his or her development as a teacher, as a scholar, and as a member of a professional community — a balancing act that will only be intensified by receipt of the Ph.D.

Adopted by Faculty
June 1, 1998
American Psychological Association
Committee on Accreditation

1998 Annual Report for Doctoral Program

Date Submitted: May 28, 1998

College/University/School: University of New Mexico

Department or Division: Psychology

Name of Regional Accrediting Body: North Central Agency

Current Regional Accreditation Status: Accredited (with commendation)

Director of Training/Program Director: Jane Ellen Smith

Telephone: (505) 277-2650
Email: janellen@unm.edu

Fax: (505) 277-1394

Signature of Director of Training/Program Director: [Signature]

Name of Person Completing this Form: Jane Ellen Smith

Q1 Program specialty: (circle appropriate response)

1. Clinical
2. Counseling
3. School
4. Combined (specify): __________________________
5. Other (specify): __________________________

Q2 Indicate type(s) (e.g., Ph.D., Psy.D., Ed.D.) and number of degrees granted by your program in the 1996-97 academic year:

<table>
<thead>
<tr>
<th>TYPE OF DEGREE</th>
<th>NUMBER OF DEGREES AWARDED</th>
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<tbody>
<tr>
<td>1. Ph.D.</td>
<td>3</td>
</tr>
<tr>
<td>2. Psy.D.</td>
<td>0</td>
</tr>
<tr>
<td>3. Ed.D.</td>
<td>0</td>
</tr>
</tbody>
</table>
Q3 What was the average number of years to complete the program for students who graduated in 1996-97? 7.7

Q4 For the 1997-98 academic year:
1. Number who applied to program 136
2. Number who were offered admission 11
3. Number who enrolled in program 5

Q5 To date in 1997-98, how many of your students:

a. applied for internships for 1998-99 11
b. were accepted by an internship for 1998-99 10
   (b1) Of those accepted, how many will be placed in accredited programs? 10
   (b2) How many received full-time funded internships? 10
   (b3) How many received full-time unfunded internships? 0
   (b4) How many received part-time funded internships? 0
   (b5) How many received part-time unfunded internships? 0
c. have not been accepted by an internship for 1998-99 1

PLEASE PROVIDE INFORMATION AS DESCRIBED IN TABLES 1-7:

Table 1 Student Demographic Information
Table 2 Student Professional Activities
Table 3 Faculty Demographic Information
Table 4 Faculty Professional Activities
Table 5 Students Admitted to the Doctoral Program
Table 6 Students Who Dropped Out of the Program
Table 7 Students Graduated from the Program
Table 1
Student Demographic Information

Please give the number of students currently in the program (including those on internship) by academic year of entry, who identify themselves as:

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>African American/Black</td>
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<td>F</td>
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</tbody>
</table>
Table 2
Student Professional Activities

Please give the number of students currently in the program (including those on internship) by academic year of entry, who are:

|--------------------------|---------|---------|---------|---------|---------|---------|------------------------
| Members of professional/research societies (including student affiliates) | 1       | 3       | 5       | 5       | 7       | 7       | 11                     |
| Authors/co-authors of papers or workshops at professional meetings | 1       | 4       | 5       | 5       | 5       | 5       | 2                      |
| Authors/co-authors of articles in professional and/or scientific journals | 1       | 2       | 3       | 3       | 2       | 4       | 4                      |
| Involved in grant-supported research (Including RA's) | 0       | 1       | 1       | 2       | 3       | 0       | 1                      |
| Involved in teaching (Including TA's) | 1       | 1       | 4       | 3       | 3       | 2       | 3                      |
| Involved part-time in delivery of professional services on or off campus (excluding internship) | 0       | 4       | 8       | 7       | 8       | 7       | 7                      |
| Total Number Currently Enrolled for Each Year of Entry | 5       | 4       | 8       | 7       | 8       | 8       | 12                     |

* Missing data for 2 students who did not respond. These 2 are not included in the total number reported for the 1991 column.
Table 3
Faculty Demographic Information

Please give the number of faculty who identify themselves as:

<table>
<thead>
<tr>
<th></th>
<th>Core Program Faculty*</th>
<th>Other Program Faculty</th>
<th>Other Contributors³</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>African American/Black</strong></td>
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<td>M</td>
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</tr>
<tr>
<td><strong>Caucasian</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>M</td>
<td>5</td>
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</tr>
<tr>
<td>F</td>
<td>3</td>
<td>1²</td>
<td>2</td>
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<tr>
<td><strong>Hispanic/Latino</strong></td>
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<tr>
<td>M</td>
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<tr>
<td><strong>Asian/Pacific Islander</strong></td>
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<tr>
<td><strong>American Indian/Alaska</strong></td>
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<td><strong>Multiethnic</strong></td>
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<td><strong>Foreign Nationals</strong></td>
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<td><strong>Total Number of Faculty</strong></td>
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<td>M</td>
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<td>1</td>
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<td><strong>Total Number Subject to ADA</strong></td>
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</tr>
</tbody>
</table>

* Faculty who are committed for approximately 50% or more of their time to the program.

1 Experimental faculty (core course instructor)
2 Visiting Professor (5 years)
3 Director of Clinic, adjunct faculty (core course instructor), and practicum coordinators
Table 4
Faculty Professional Activities

Please give the number of faculty who are:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Core Program Faculty*</th>
<th>Other Program Faculty</th>
<th>Other Contributors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Members of Professional/Research Societies</td>
<td>11 (100%)</td>
<td>2 (100%)</td>
<td>5 (83%)</td>
</tr>
<tr>
<td>Authors/co-authors of papers at professional meetings</td>
<td>10 (91%)</td>
<td>2 (100%)</td>
<td>2 (33%)</td>
</tr>
<tr>
<td>Authors/co-authors of articles in professional and/or scientific journals</td>
<td>10 (91%)</td>
<td>2 (100%)</td>
<td>1 (17%)</td>
</tr>
<tr>
<td>Recipients of grants or contracts</td>
<td>6 (55%)</td>
<td>0 (0%)</td>
<td>3 (50%)</td>
</tr>
<tr>
<td>Involved in undergraduate teaching</td>
<td>9 (82%)</td>
<td>2 (100%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Involved in masters teaching</td>
<td>11 (100%)</td>
<td>2 (100%)</td>
<td>2 (33%)</td>
</tr>
<tr>
<td>Involved in doctoral teaching</td>
<td>11 (100%)</td>
<td>2 (100%)</td>
<td>2 (33%)</td>
</tr>
<tr>
<td>Involved in research supervision</td>
<td>11 (100%)</td>
<td>2 (100%)</td>
<td>6 (100%)</td>
</tr>
<tr>
<td>Involved in professional service supervision</td>
<td>10 (91%)</td>
<td>1 (50%)</td>
<td>6 (100%)</td>
</tr>
<tr>
<td>Engaged in delivery of professional services</td>
<td>8 (73%)</td>
<td>1 (50%)</td>
<td>6 (100%)</td>
</tr>
<tr>
<td>Total Number of Faculty</td>
<td>11</td>
<td>2</td>
<td>6¹</td>
</tr>
</tbody>
</table>

* Faculty who are committed for approximately 50% or more of their time to the program.

¹ Data not available for one regular practicum coordinator.
Table 5  
Students Admitted to the Doctoral Program

*Please provide the following information for ALL students admitted to the program for academic year 1997-98. DO NOT PROVIDE STUDENT NAME; instead please number students by year of admission (i.e., 97.001, 97.002, 97.003, etc.).*  

<table>
<thead>
<tr>
<th>Identification Number</th>
<th>Undergraduate Institution</th>
<th>Year of Undergraduate Degree</th>
<th>Undergrad GPA</th>
<th>Other Admissions Data</th>
<th>Graduate Semester-Hour Equivalent Credits Transferred (if applicable)</th>
<th>Part- or Full-time Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>97.01</td>
<td>Eastern Michigan University</td>
<td>1994</td>
<td>3.45</td>
<td>470 560 550 450</td>
<td>-</td>
<td>Full</td>
</tr>
<tr>
<td>97.02</td>
<td>University of Calif., LA</td>
<td>1993</td>
<td>3.10</td>
<td>420 540 560 610</td>
<td>-</td>
<td>Full</td>
</tr>
<tr>
<td>97.03</td>
<td>University of Texas, El Paso</td>
<td>1997</td>
<td>3.91</td>
<td>530 560 570 680</td>
<td>-</td>
<td>Full</td>
</tr>
<tr>
<td>97.04</td>
<td>Kenyon College</td>
<td>1995</td>
<td>3.82</td>
<td>720 690 710 690</td>
<td>-</td>
<td>Full</td>
</tr>
<tr>
<td>97.05</td>
<td>University of New Mexico</td>
<td>1997</td>
<td>3.50</td>
<td>500 570 600 580</td>
<td>-</td>
<td>Full</td>
</tr>
<tr>
<td>97.06</td>
<td>Yale University</td>
<td>1996</td>
<td>3.50</td>
<td>710 690 720 720</td>
<td>-</td>
<td>Full</td>
</tr>
</tbody>
</table>
Table 6
Students Who Dropped out of the Doctoral Program

Please provide the following information for ALL students who dropped out of the program during academic year 1996-97. DO NOT PROVIDE STUDENT NAME; instead please number students by year of admission (i.e., 89.001, 92.001, 92.002, etc.).

<table>
<thead>
<tr>
<th>Identification Number</th>
<th>Date Left Program</th>
<th>Reason for Leaving</th>
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<td>96.01</td>
<td>5/97</td>
<td>Switched to a graduate program in medical epidemiology</td>
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</tbody>
</table>
Please provide the following information for students who graduated from the program in the past seven years. DO NOT PROVIDE STUDENT NAME; instead please number students by year of entry (i.e., 88.001, 88.002, 88.003, etc.). If initial employment is in a postdoctoral residency, indicate the name of the place of employment and the corresponding code setting under “Initial Employment/Postdoctoral Setting” and enter “postdoctoral resident” under “Initial Job Title/Activity.” Please use the codes provided in the appendix following this table for internship (Column 1), employment setting (Column 2), and activity code(s) (Column 3).

<table>
<thead>
<tr>
<th>Identification Number</th>
<th>Year of Entry</th>
<th>Internship Setting</th>
<th>Initial Employment/Postdoc Setting</th>
<th>Initial Job Title/Activity</th>
<th>Current Employment Setting</th>
<th>Current Job Title/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Name</td>
<td>Name</td>
<td>Code</td>
<td>Name</td>
<td>Code</td>
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<tr>
<td>81.01 1981</td>
<td></td>
<td>Atascadero State Hosp.</td>
<td>WA Dept. of Corrections</td>
<td>10 Staff</td>
<td>AZ Dept. of Corrections</td>
<td>4,2,3 Staff Psychologist</td>
</tr>
<tr>
<td>82.01 1982</td>
<td></td>
<td>Dallas VAMC</td>
<td>Private Practice</td>
<td>14 Psychologist</td>
<td>Dallas VA &amp; Pri. Prac.</td>
<td>4,14 Psychologist</td>
</tr>
<tr>
<td>82.02 1982</td>
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<td>St. Elizabeths' 5 Hospital</td>
<td>DC General Hospital</td>
<td>6 Psychology Associate</td>
<td>DC General Hospital</td>
<td>6 Attending Psychiatrist</td>
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<tr>
<td>84.01 1984</td>
<td></td>
<td>Palo Alto VAMC</td>
<td>Palo Alto VAMC</td>
<td>7 Case Manager</td>
<td>Palo Alto VAMC</td>
<td>7 Clinical Psychologist</td>
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<tr>
<td>Identification Number</td>
<td>Year of Entry</td>
<td>Internship Setting</td>
<td>Initial Employment/Postdoc Setting</td>
<td>Initial Job Title/Activity</td>
<td>Current Employment Setting</td>
<td>Current Job Title/Activity</td>
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<tr>
<td>84.02</td>
<td>1984</td>
<td>Stanford's Children's Hosp.</td>
<td>Private Practice</td>
<td>Psychological Assistant</td>
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</tr>
<tr>
<td>84.03</td>
<td>1984</td>
<td>Seattle VAMC</td>
<td>Seattle VAMC</td>
<td>Psychology Technician</td>
<td>(same)</td>
<td></td>
</tr>
<tr>
<td>84.05</td>
<td>1984</td>
<td>Silas B. Hayes Army Comm. Hosp.</td>
<td>Fort Riley</td>
<td>Army Psychologist</td>
<td>2,4,3</td>
<td>US Military Academy</td>
</tr>
<tr>
<td>Identification Number</td>
<td>Year of Entry</td>
<td>Internship Setting</td>
<td>Initial Employment/Postdoc Setting</td>
<td>Initial Job Title/Activity</td>
<td>Current Employment Setting</td>
<td>Current Job Title/Activity</td>
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<tr>
<td>35.01</td>
<td>1985</td>
<td>UCSD VA Consortium</td>
<td>Univ. of NM Mental Health Ctr.</td>
<td>Clinical Psychologist</td>
<td>Univ. of NM Mental Health Ctr.</td>
<td>Clinical Psychologist</td>
</tr>
<tr>
<td>35.02</td>
<td>1985</td>
<td>Dartmouth Med. School</td>
<td>University of Wyoming</td>
<td>Assistant Professor</td>
<td>(same)</td>
<td>(same)</td>
</tr>
<tr>
<td>35.03</td>
<td>1985</td>
<td>Atascadero State Hosp.</td>
<td>Atascadero State Hosp.</td>
<td>Staff Psychologist</td>
<td>(same)</td>
<td>(same)</td>
</tr>
<tr>
<td>Identification Number</td>
<td>Year of Entry</td>
<td>Internship Setting</td>
<td>Initial Employment/Postdoc Setting</td>
<td>Initial Job Title/Activity</td>
<td>Current Employment Setting</td>
<td>Current Job Title/Activity</td>
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</tr>
<tr>
<td>85.05</td>
<td>1985</td>
<td>Salt Lake City VAMC</td>
<td>7 St. Joseph's Hospital</td>
<td>Staff Psychologist</td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>86.01</td>
<td>1986</td>
<td>Univ. of NM Stud. Health Ctr.</td>
<td>12 Behavioral Medicine Assoc.</td>
<td>Postdoctoral Resident</td>
<td>4,5 Private Practice</td>
<td>Psychologist 4,5</td>
</tr>
<tr>
<td>86.02</td>
<td>1986</td>
<td>Knoxville VAMC</td>
<td>7 Medical Coll. of Georgia</td>
<td>Postdoctoral Fellow</td>
<td>2,5 Private Practice &amp; Columbia Med./Dental</td>
<td>Neuropsychologist 2,5</td>
</tr>
<tr>
<td>86.03</td>
<td>1986</td>
<td>Univ. of NM Child. Psy. Hospital</td>
<td>3 St. Joseph's Rehab. Hosp.</td>
<td>Postdoctoral Resident</td>
<td>4,2,3 Univ. of NM Child. Psy. Hospital</td>
<td>Psychologist 4,1,2,3, 6</td>
</tr>
<tr>
<td>Identification Number</td>
<td>Year of Entry</td>
<td>Internship Setting</td>
<td>Initial Employment/Postdoc Setting</td>
<td>Initial Job Title/Activity</td>
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</tr>
<tr>
<td>i.04</td>
<td>1986</td>
<td>Halle-Brooke Hospital</td>
<td>Menninger Clinic</td>
<td>Psychologist</td>
<td>St. John Vianney Hosp.</td>
<td>Psychologist</td>
</tr>
<tr>
<td>i.05</td>
<td>1986</td>
<td>Med. Univ. of So. Carolina</td>
<td>Univ. of So-Western Louisiana</td>
<td>Assistant Professor</td>
<td>(same)</td>
<td>(same)</td>
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<tr>
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<td>Med. Univ. of So. Carolina</td>
<td>3 Univ. of OK Health Sci. Ctr.</td>
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<td>3 Health South Rehab. Hosp.</td>
<td>5 Staff Psychologist</td>
<td>4,2,3 Salt Lake City VAMC</td>
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<td>Wilford Hall Med. Ctr.</td>
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<td>10</td>
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Appendix
Codes for Internship Setting, Employment Setting, and Activity

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<tr>
<th>Column 1--Internship Setting Codes</th>
<th>Column 2--Employment Setting Codes</th>
<th>Column 3--Activity Codes</th>
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<tr>
<td>1. Community Mental Health Center</td>
<td>1. Community Mental Health Center</td>
<td>1. Administration</td>
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<td>3. Medical Center</td>
<td>3. Medical Center</td>
<td>3. Consultation</td>
</tr>
<tr>
<td>4. Military Medical Center</td>
<td>4. Military Medical Center</td>
<td>4. Psychotherapy</td>
</tr>
<tr>
<td>5. Private General Hospital</td>
<td>5. Private General Hospital</td>
<td>5. Research</td>
</tr>
<tr>
<td>7. Veterans Affairs Medical Center</td>
<td>7. Veterans Affairs Medical Center</td>
<td>7. Teaching</td>
</tr>
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<td>8. Private Psychiatric Hospital</td>
<td>8. Private Psychiatric Hospital</td>
<td>33. Other (e.g., community-based intervention)--please specify</td>
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<td>9. State/County Hospital</td>
<td>9. State/County Hospital</td>
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<tr>
<td>12. University Counseling Center/Clinic</td>
<td>12. University Counseling Center/Clinic</td>
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<tr>
<td>13. University Teaching Faculty</td>
<td>13. University Teaching Faculty</td>
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<tr>
<td>33. Other (e.g., consulting)--please specify</td>
<td>33. Other (e.g., consulting)--please specify</td>
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<tr>
<td>44. Student</td>
<td>99. Not Currently Employed</td>
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</table>
I am pleased to submit this report covering the second year of my second term as department chair. The main office was characterized by stability this fiscal year. Rose Muller continued to serve as the Departmental Administrator and Karen Majors continued in the position of Administrative Assistant II. The 1997/98 academic year witnessed several important developments with respect to our faculty and students.

A. Significant Achievements

Among the achievements and accomplishments of the Sociology Department in 1997/1998, there are several of which we are especially proud.

The Sociology Convocation was held in the Student Union Ballroom on Saturday, May 16th at 3:30 p.m. A total of 60 undergraduates received Bachelor of Arts degrees from the Department of Sociology with the following substantive breakdown: 16 Sociology majors; 44 Criminology majors. An estimated 800 persons were in attendance including family and friends. The ceremony began with a brief tribute to Dr. Larry Ross, who passed away last September, and the presenting of a plaque to retiring professor Dr. Patrick McNamara in appreciation of 28 years of service, research, and teaching. This year, the Department heard presentations from two Sociology graduating seniors, Jessica Gallagher and Clovis Thorn. Christopher T. Linn was awarded the McGee award for the best long essay by an honors student. Sara T. Clark was awarded the McGee award for the best long essay by a non-honors student. Maria A. B. Sanchez was awarded first prize in the McGee Award for best short essay while second prize for best short essay was awarded to both Sarah Berlant and Rick Morrow. The Department also awarded honors to six Sociology Honors students; Christopher T. Linn (magna cum laude), Yevette M. Brown (cum laude), Keren Fenderson (cum laude), Silvia Salina (cum laude), Clovis Lee Thorn (cum laude), and Cynthia Gayle Woodard (cum laude). In addition, the Department recognized the accomplishments of graduating seniors with grade point averages above 3.50: Lucia Anglada, Donna Buffet, Jacklyn Marie Endsley, Rae Lynn Victoria Garcia, Joanna Hughes, Brandon Cooper Lane, Michele Mancuso-Nelson, John Martin, Seth A. Romero, and Carlene Adele Sanchez. Master of Arts degrees were awarded to Andrea Begel, Kristine Denman, Erika Derkas, Mara Fridell, Thomas Macias, Mary Notbohm-Forbes, and Aki Takeuchi. Ph.D. degrees were awarded to Jan Gossage, Margaret Greenberg, Paul Guerin, and M. Christine Rack.

Dr. Patrick McNamara was featured in the Fall 1997 edition of UNM’s “Inside Arts & Sciences” newsletter. The article discussed Dr. McNamara’s involvement in an interdenominational study of factors affecting church giving. The study was financed by a grant from the Indianapolis-
based Lilly Endowment. The study also yielded a book, *Money Matters: Personal Giving In American Churches*, co-authored by Dr. McNamara and nominated for two national awards, one by the Society for the Scientific Study of Religion, the other by the National Society of Fund-Raising Executives.

### B. List of Faculty Publications, Research, Committee Participation

#### Dodd H. Bogart

**Committee Participation**

- Faculty Senate Budget Committee
- Sociology Curriculum Committee

#### Beverly H. Burris

**Research and Creative Works**


---. "Computerization of the Workplace." Forthcoming in *Annual Review of Sociology*.

---. "Between Craft And Science: a Review." Forthcoming in *Contemporary Sociology*.

**Committee Participation**

- A & S Senior Promotion Committee, 1997
- A & S Women’s Caucus, Co-Chair (Fall 1997)

#### Richard M. Coughlin

**Publications**


Coughlin, Richard M. 1997. “How Different is the United States?” *Journal of Policy History*
Research Projects or Creative Work


Work in progress: Revision of paper on attitudes toward the welfare state in Sweden.

Work in progress: Edited volume on the future of socio-economic theory.

Committee Participation

Member, University Software Site License Committee

Robert A. Fiala

Research Projects or Creative Work

Updating data collection for projects examining educational expansion around the world in the second half of the twentieth century.

Committee Participation

Member, Sociology Department Committees (Curriculum, Fall 1996)

Phillip B. Gonzales

Publications


Research Projects or Creative Work

a. monograph manuscript was submitted to the University of Texas Press
b. work on a major book length study progressed

c. first draft of an article progressed

Committee Participation

UNM Faculty Senate Library Committee

Jane C. Hood

Publications


Other Research Projects or Creative Work

a. Continued work on articles about sampling for ethnographic research and developed a prospectus for a book manuscript on this topic to send to publishers.

b. Began a new research project challenging assumptions being made about historical trends in the relationship between provider role enactment and provider role values over the past 150 years. The first working paper on this project was delivered at the ASA meetings in August, 1997.

c. A second working paper was presented at the PSA meetings in April, 1998.

d. Submitted first half of manuscript for *Prospectives on Gender* to Wadsworth and worked on second half for July 24, 1998 submission.

Committee Participation

Chair, Undergraduate Committee, (1997-98)

Research and Computer Use Committee (1996-97)

George A. Huaco

Research Projects or Creative Work

Completed book manuscript on Marx. Looking for a publisher.
Committee Participation

1997-98 Associate Chair
Member Recruitment Committee
Reading Room/Library Liason

Miguel Korzeniewicz

Research Projects or Creative Work

Research on the global footwear industry and on Nike Corporation.

Committee Participation

1996-97 Executive Committee Department of Sociology
1995-97 Chair, Comparative/Latin America Task Force
1997-98 Computer Use Committee

Gary D. LaFree

Publications


Research Projects or Creative Work


**Committee Participation**

Chair of the Education Committee for the UNM Accreditation Report

Member of the University Human Subjects Committee

**Philip A. May**

**Publications**


**Research Projects or Creative Work**


University of New Mexico, $120,000, “Supplement (from Associate Provost for Research and Arts and Science) to the New Mexico Access to Research Careers Program,” July 1995 - June, 2000. FY 1997 = $24,000.


NIAAA, $93,000, “Fetal Alcohol Syndrome Epidemiology in South Africa: A Pilot


Center for Substance Abuse Treatment (CSAT) and Navajo Nation. Evaluation and Technical Assistance for Alcohol Treatment Programs. $371,000, April, 1995 - March, 1999. FY 1997 = $75,000.

Committee Participation

Member, Minority Scholarship Committee, America Sociological Association, 1996-1998.


Chairman - CASAA Executive Committee, 1991 - present.

Patrick H. McNamara

Publications


Research Projects or Creative Work

Lilly Endowment writing grant for book based on 1996 research regarding churches sponsoring stewardship programs, $22,000, 1997.

Gilbert W. Merkx

Publications


Research Projects or Creative Work


Director, "The Economies of Latin America: Electronic Database Design and Implementation," funded by the Andrew W. Mellon Foundation. Amount, $200,000.

Committee Participation

Chair, UNM Campus Planning Committee.

Chair, UNM Committee on Governance.

Advisory Committee to the Associate Provost for Research.
Sociology Department Committee on Comparative Sociology.

Chair, Latin American Institute Program Committee.

Chair, Latin American Institute Foreign Language and Area Studies Fellowships Selection Committee.

Latin American Institute Policy Committee.

Member, Latin American Institute Grants and Awards Committee.

**John M. Roberts, Jr.**

Research Projects or Creative Work


Official representative for Inter-University Consortium for Political and Social Research (ICPSR).

Committee Participation

Chair, Department Research and Computer Use Committee

Member, Department Recruitment Committee

**Paul D. Steele**

Research Projects or Creative Work

A. Contacted Research:


B. Grants submitted:
National Institute on Justice, “The Unintended Consequences of Incarcerating Parents.” With John Hagan and Christopher Stone, 24 months, $753,000.

National Institute on Drug Abuse, “Incidence, Prevalence and Impact of Workplace Drug Use.” With Tyler Hartwell, 36 months, $1,236,000.


C. Technical Reports

D. Works in progress

Steele, P. D., “Issues in the Development of Children’s Advocacy Centers.” (being prepared for submission).

Steele, P. D., “From Good Ideas to Implementation: The Process of Translating New Approaches to Child Abuse into Widespread Practice.” (being prepared for submission).

Committee Participation
Member, Departmental Curriculum Committee: August, 1997 forward.

Susan B. Tiano

Research Projects or Creative Work

Developed a proposal to study non-formal support networks in Albuquerque. Funded by the City of Albuquerque.

Served as internal reviewer for Office of Graduate Studies Review of the Community and Regional Planning Program, February 1997.
Reviewed fellowship proposals for Office of Graduate Studies, April, 1997.

Served as special consultant to Associate Provost.


Committee Participation

Membership on Committee for International Sociology

Graduate Committee, Sociology (Spring, Fall)

Recruitment Committee, Sociology (Fall)

Intracollegiate Committee for Latin American Studies (ICLAS) (Spring, Fall)

Vice-President, Faculty Concilium on Latin America, Latin American Institute (Spring, Fall)

Bert Useem

Publications


Committee Participation

Member, Committee on Committee, American Sociological Association.

Chair, Department Recruitment Committee.

Chair, Department Undergraduate Committee.
Nelson P. Valdés

Publications


Research Projects or Creative Work


Created ADEC homepage for the University of Puerto Rico.

“Cuba: la Transición en el Socialismo - Creando Nuevos Espacios.” Revista TEMAS (Havana). No. 9, 1997. (12 pages). This is the leading social science journal in the country, referral. UNM-LAI is the distributor of the journal in the US.

Committee Participation

1997 Member of Latin American Studies Association’s Task Force on “LASA in the 21st Century”

Served in the ATLANTEA Committee of the University of Puerto Rico during my stay at the University. ATLANTEA provides university funding to do research. It is a sort of Research Allocations Committee for six university campuses.

Richard Wood

Publications


Research and Creative Works


“Religious Networks and Immigration to the U.S. from Urban Neighborhoods in Mexico.” research funded by UNM’s Research Allocations committee and by the Latin America Institute. Field research completed in summer 1996. Article scheduled to be written in 1997, but not completed.

Doctoral dissertation was scheduled to be revised and submitted as a book manuscript in 1997; revisions still being completed. Submission scheduled 1998.

Chapter on community organizing in bilingual (Spanish/English) volume Constructores de cultura y Sociedad (Minnesota: St. Mary’s Press 1998).

“Researching Political Culture: On the Streets and Among the Cops,” guest lecture in colloquium series of the UNM Department of Sociology (September 1997).

NIJ grant (see above) provides $27,000 in indirect cost money to department, ISR, and the University. Also provides computer equipment, instructional money, and travel funds.

Committee Participation

Member of departmental Executive Committee, 1997-98.
Member of departmental Graduate Committee, 1997-98.
Member of departmental Ombuds Committee, 1997-98.
Member of Latin America Institute Library Committee, 1997-98.
Member of Latin America Institute Publications Committee, 1997-98.
### C. Graduate Program

**Awarded Doctoral Dissertations, Masters’ Theses**  
Sociology Department/Summer '97, Fall '97, Spring '98

<table>
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<tr>
<th>Author</th>
<th>Title</th>
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<tr>
<td>Jan Gossage, Ph.D.</td>
<td>An Examination of the Relationship of Acculturation to High Risk Behaviors Among Hispanic Women of Childbearing Age in New Mexico</td>
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<tr>
<td>Margaret Greenburg, Ph.D.</td>
<td>Work and Social Determinants of Women’s Health in Ciudad Juarez, Mexico</td>
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<tr>
<td>Paul Guerin, Ph.D.</td>
<td>Motor Vehicle Crashes in New Mexico: Developing Risk Profiles Utilizing Alcohol Involvement and Race/Ethnicity</td>
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<tr>
<td>M. Christine Rack, Ph.D.</td>
<td>Culture, Structure and Choice: The Influence of Ethnicity, Gender, Class and Role on Negotiating Behavior in Small Claims Mediation</td>
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<tr>
<td>Andrea Begel, M.A.</td>
<td>An Analysis of Organizational Decision-Making: The Iran Hostage Rescue Attempt and ATF Raid at Waco as Case Studies</td>
</tr>
<tr>
<td>Kristine Denman, M.A.</td>
<td>Predicting the Prosecution of Child Sexual Abuse Cases</td>
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<td>Erica Derkas, M.A.</td>
<td>The Los Lunas High School Walkout and Protest: A Case of Ethnic Collective Action</td>
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<td>Mara Fridell, M.A.</td>
<td>Power/Waste: Technocracy and Traditional Authority in the Struggle Over Corporate Hegemony</td>
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<tr>
<td>Thomas Macias, M.A.</td>
<td>Environmental Conflict Between Hispanics and Environmentalists in Northern New Mexico: Implications for an Understanding of Ethnic Group Support of Environmental Campaigns</td>
</tr>
<tr>
<td>Mary Notbohm-Forbes, M.A.</td>
<td>The Process of Societal Reaction to Chronic Illness: A Focus on Systemic Lupus Erythematosus</td>
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</table>
The graduate program in Sociology continued to make substantial progress with 15 new admissions, 4 readmits, and 1 transfer for 1998/99. Out of those 15 admitted, 12 students joined the program with 9 being supported during their first semester on GA/TA assistantships. The Sociology Graduate Student Association (SGSA) remained active with Karen Washburn remaining as President.

The Fifth Annual Graduate Student Colloquium was held on November 7, 1997 at 2:00 p.m. in the Sociology Commons. The presenters were as follows: Andrea Begel, “An Analysis of Organizational Decision Making: The Iran Hostage Rescue Attempt and ATF Raid at Waco as Case Studies,” Maggie Greenberg, “Women’s Roles and Social Determinants of Health in Ciudad Juarez, Mexico,” and Tassy Parker, “Characteristics of the Difficult Doctor-Patient Relationship in an Urban Indian Health Service Primary Care Clinic.”

In other news, Meredith Martin was elected to a one-year term as a student representative for the Medical Sociology section of the American Sociological Association.

D. Appointments

Dr. Richard Coughlin continued to serve as the Chair of Sociology.

Dr. Felipe Gonzales continued to serve as the Director of the Southwest Hispanic Research Institute.

Dr. Gary LaFree continued to serve as the Director of the Institute for Social Research (ISR).

Dr. Raymond Liedka remained as a full-time Visiting Assistant Professor for Spring 1998. Dr. Liedka obtained his Ph.D. from Cornell University. Dr. Liedka will remain teaching sociological methods and statistics; this appointment fills the vacancy created by the resignation of Assistant Professor David Rhodes to pursue a research career at the Pelavin Research Center in Washington, D.C.

Dr. Phillip May continued to serve as the Director of the Center for Alcoholism, Substance Abuse and Addictions.

Dr. Gil Merkx continued to serve as the Director of the Latin American Institute.

Dr. Susan Tiano continued to serve as Associate Dean of the College of Arts and Sciences.

Dr. Nelson Valdes continued to serve as the Director of the Latin American Data Base.
E. Leaves of Absence, Sabbaticals, Departures

Professor Patrick McNamara retired in December of 1997.

Associate Professor Keiko Nakao spent the year teaching at Tokyo Metropolitan University in Japan. She resigned her tenure-track position at the University of New Mexico in June 1997.

Professor Larry Ross passed away September 25, 1997 after an extended illness. He was considered to be one of the world's leading authorities on drunken driving. He had been a member of the department since 1983. The memorial service for Dr. Ross was held Wednesday, October 15, 1997 at the UNM Alumni Memorial Chapel.

Professor Arthur St. George was granted a one-year leave of absence to direct the Competency and Research section of the National Science Foundation in Washington, D.C.

Paul Steele was on leave without pay for January - August, 1997.

Nelson Valdés was on special assignment from January - December, 1997 in Cuba and Puerto Rico.

F. Visiting Faculty

Dr. Raymond Liedka remained as a full-time Visiting Assistant Professor for Spring 1997. Dr. Liedka obtained his Ph.D. from Cornell University. Dr. Liedka will remain teaching sociological methods and statistics; this appointment fills the vacancy created by the resignation of Assistant Professor David Rhodes.

G. Colloquia Series

Dr. Robert Fiala gave a proseminar to the Sociology Department graduate students titled, "Studies of the Organizational and Institutional Dynamics of the International System" from 12-1 pm on Wednesday, September 3, 1997.

Dr. Jane Hood gave a proseminar to the Sociology Department graduate students titled, "Revisioning the Male Provider Role: The Dangers of Chronocentrism" from 12-1 pm on Wednesday, September 10, 1997.

The Institute for Social Research hosted a brown bag lecture by Dr. David Jackson titled, "Fuzzy Logic, Fuzzy Sets, and Fuzzy Bears — All very cuddly once you get to know them" from 12-1:30 pm on Wednesday, September 10, 1997.
Dr. Richard Coughlin gave a proseminar to the Sociology Department graduate students titled, “Old and New Conceptions and Measures of Political Ideology” from 12-1 pm on Wednesday, September 17, 1997.

Dr. Richard Wood gave a proseminar to the Sociology Department graduate students titled, “Researching Political Culture: On the Streets and Among the Cops” from 12-1 pm on Wednesday, September 24, 1997.

Dr. Susan Tiano gave a proseminar to the Sociology Department graduate students titled, “Women and Industrial Restructuring: A Case from Northern Mexico” from 12-1 pm on Wednesday, October 1, 1997.

Dr. Beverly Burris gave a proseminar to the Sociology Department graduate students titled, “Computers in the Workplace and the Home” from 12-1 pm on Wednesday, October 8, 1997.

Dr. Bert Useem gave a proseminar to the Sociology Department graduate students titled, “Breakdown Theories of Collective Action” from 12-1 pm on Wednesday, October 15, 1997.

The Institute for Social Research hosted a brown bag lecture by Scott Goold, MA, titled, “Pursuing Public Opinion” from 12-1:30 pm on Monday, October 20, 1997.

Dr. Philip Gonzales gave a proseminar to the Sociology Department graduate students titled, “The Hispano Cause: Politicized Ethnicity, Race Relations, and Social Change in New Mexico, 1888-1935” from 12-1 pm on Wednesday, October 22, 1997.

Dr. Paul Steele gave a proseminar to the Sociology Department graduate students titled, “Unanticipated Consequences of Incarceration: The Impact of Sentencing on the Children of Criminal Offenders” from 12-1 pm on Wednesday, October 29, 1997.

Dr. Tomás Atencio and Dr. Tony Mares (UNM English Department) co-lectured a talk titled, “La Resolana and Distance Learning,” at 2 pm in the Special Events room of Zimmerman Library on Wednesday, October 29, 1997.

Dr. Gary LaFree gave a proseminar to the Sociology Department graduate students titled, “Losing Legitimacy: Crime and the Decline of Social Institutions in Postwar America” from 12-1 pm on Wednesday, November 5, 1997.

Dr. George Huaco gave a proseminar to the Sociology Department graduate students titled, “Marx on Ideology” from 12-1 pm on Wednesday, November 12, 1997.

Dr. John Robert gave a proseminar to the Sociology Department graduate students from 12-1 pm on Wednesday, November 19, 1997.
Dr. Richard Wood presented a colloquium titled, "The Social Role of Intellectuals and Universities in the Americas," at 4 pm in the Newman Center on Thursday, November 20, 1997.

Dr. Dodd Bogart gave a proseminar to the Sociology Department graduate students titled, "Organizational Stress" from 12-1 pm on Wednesday, December 3, 1997.

The Sociology Department and the College of Arts & Sciences co-hosted a colloquium presented by Dr. Immanuel Wallerstein titled, "What's Old About Globalization? What's New About World Disorder?" at 4 pm on Thursday, December 4, 1997.

Dr. Howard Waitzkin, Professor and Director of the UNM Department of Family and Community Medicine presented a colloquium to the Sociology Department titled, "Is Our Work Dangerous? Should It Be?" from 4-5 pm on Friday, December 5, 1997.

Dr. Milagros Pena, Assistant Professor of Sociology at NMSU, gave a talk sponsored by the Southwest Hispanic Research Institute titled, "Latina Religious Practice: Expanding Measures of Religiosity," at 2 pm in the Special Events room of Zimmerman Library on Friday, March 27, 1998.

The Institute for Social Research hosted a brown bag lecture by Dr. Charles Ragin of Northwestern University titled, "Comparing social systems: a fuzzy set approach" from 12-1:30 pm on Wednesday, June 3, 1998.

H. Institute for Social Research

The organizational structure of the Institute for 1997/1998 is shown in Table 1. The ISR Director, in consultation with an executive committee, is responsible for the overall operation of the Institute. Members of the 1997/98 Executive Committee are shown in Table 2. Robert Wilson, research Coordinator, is responsible for maintaining relationships with granting agencies and generating new contracts and grants. Bob is now working for the ISR on a half-time basis. Accounting, payroll, publishing, reception, community relations and an array of other activities are the responsibility of the central administrative unit which had been under the supervision of Stella Anagnostakos most of this year. However, Stella resigned to attend school full-time in July. Judith Bernhard has replaced Stella until a permanent hire is completed. Okchu Lee has also joined the ISR during the past year as an accountant. Okchu is responsible for doing monthly budget reports on the approximately thirty-five active ISR accounts. Okchu is working for the ISR on a half-time basis. (Tables 1 and 2 are found at end of the text.)

Most current research occurs within one of nine centers within the Institute. Below is a brief description of each center, its activities, and its contribution to the research and teaching mission of the ISR.
ISR Research Centers

Criminal and Juvenile Justice Coordinating Council, (CJJCC), Dr. Chris Birkbeck

The Institute for Social Research provided research and (CJJCC) executive support to the New Mexico Criminal and Juvenile Justice Coordinating Council during 1997-1998. ISR staff prepared four working papers for the Council, undertook data analysis to estimate the impact of proposed changes in New Mexico’s criminal justice system, represented the Council at all public discussions of its policy proposals, and continued to develop the Council’s website by providing updated information and online working papers. The ISR will continue to provide research and executive support for the CJJCC for the next fiscal year.

ISR staff working on council projects during 1997/1998 included: Christopher Birkbeck, Susan Brumbaugh, Melissa Pacheco, Nora Wilson, Stella Anagnostakos, Amelia Rouse, Luis Gabaldon (visiting researcher), Andrea Bassin, and Jeff Mix.

In addition, Professor Birkbeck conducted a study of dispositions to use force among uniform police officers on the Mexican-U.S. border during the past academic year. With support from the ISR, Chris Birkbeck, Luis Gabaldon, and Mike Norris (a doctoral candidate in UNM’s Department of Sociology) were able to complete data collection and analysis for a project on police officers’ dispositions to use force. The study is an extension of Birkbeck and Gabaldon’s previously published work on police use of force in Venezuela, and involves samples of approximately 350 officers in the border cities of El Paso, Texas and Ciudad Juarez, Mexico. Birkbeck, Gabaldon, and Norris will present a paper on their findings at the 1998 meeting of the American Society of Criminology in Washington, DC.

Publications and research activities related to the CJJCC for this year include:


Christopher Birkbeck, Chair and Disscussant, panel on “Towards a Caribbean Criminology: Prospects and Concerns.” Annual meeting, American Society of Criminology, San Diego, November 1997.

During 1997/98, the CJJCC supported a number of graduate and undergraduate students. In particular:

♦ Aki Takeuchi worked with the CJJCC during 1997/1998 conducting data preparation and analysis (in SAS) on a large set of records for juvenile justice referrals in New Mexico. During the academic year, Aki obtained her M.A. in Sociology and is now working on her doctorate.

♦ Amelia Rouse worked on office of Juvenile Justice and Delinquency Prevention (OJJDP) projects during 1997/1998 and was one of the co-authors of a CJJCC working paper on probationers and parolees in New Mexico. Amelia performed various advanced and specialized tasks including data analysis (in SPSS), project design (for the OJJDP projects), instrument design, data collection, and report drafting. Amelia is working on her doctoral dissertation in Political Science and plans to defend the dissertation during the summer of 1998.

♦ Martha Fernandez worked as a research assistant on several CJJCC-related projects during 1997/1998. Throughout the year Martha also continued her undergraduate studies at UNM (major: criminology) and plans to graduate in December 1998. Martha has received training in data collection techniques (using self-report questionnaires with juvenile delinquents: compiling criminal history and related information from files in the adult and juvenile justice systems). She has also been trained in SPSS, specifically in the areas of data file creation, data entry, data quality checks, and statistical analysis.

Los Pasos Evaluation/Disparity Studies, Dr. Richard Boyle

During 1997-98, Dr. Boyle’s research group completed a final report titled “Affirmative Action Predicate Study: Examining Minority Participation in Oregon’s Legal Profession.” Dr. Boyle and sociology graduate student Rebel Palm presented the report at the meeting of the Board of Governors of the Oregon State Bar in Bend, Oregon, in July 1998.
Dr. Boyle, with the assistance of sociology graduate students Mary Forbes and Michelle Downey, completed a project titled “Family Support Services for Grandparents and Other Relatives.” This project has received funding for four years. In 1997/1998 project staffing switched from Mary Forbes (who completed her M.A. in Sociology and took a new position in Dallas, Texas) to Michelle Downey. Undergraduate students Heather Whitesides and, later, Ian McKay have assisted Michelle in interviews and data compilation tasks. Using an improved database system developed for a related project, Dr. Boyle’s group has been filing quarterly reports with the National Abandoned Infants Assistance Research Center. Dr. Boyle attended the annual meeting of this organization in Arlington, Virginia in May 1998.

Dr. Boyle’s group also initiated a new project this year called “Starting Early, Starting Smart” (SESS). This project has primarily involved Dr. Boyle, sociology graduate student Shannon Morrison, and undergraduate student Elena Letourneau. These three project members represented the Institute for Social Research on a steering committee of the thirteen sites that have been funded as part of the SESS national program. Steering committee meetings were held monthly from November 1997 to May 1998, in Baltimore or Bethesda. Dr. Boyle served as chair of one of the subcommittees, and along with Elena Letourneau, developed a database system which nine of the 13 sites have chosen to use in their program. Shannon Morrison played a key role as part of the services integration subcommittee. Elena Letourneau attended a special training session held in Chicago for instruction in the administration of the instruments to use for cross-site evaluation research.

Students attached to these projects continue to make progress toward their academic goals. In particular, Mary Clark received her M.A. in December; Shannon Morrison completed her dissertation in May and will be formally awarded a degree in August; Rebel Palm and Elena Letourneau have continued their graduate studies; and Heather Whitesides completed her undergraduate degree in May and has applied for graduate work in the counseling program.

The Center for Criminal Justice Studies (CCJS), Dr. Peter DiVasto

One of the first projects in the precursor to the ISR - The Institute for Criminal Justice Studies - was to provide psychological testing and evaluation of applicants for positions within the New Mexico Department of Correction. That project lasted for seven years, ending in 1994 with more than 4,000 completed interviews. The CCJS was formed in 1993 as the unit responsible for carrying out the last round of psychological interviews and has been involved in providing psychological testing and evaluation for other criminal justice agencies in New Mexico.

Dr. DiVasto has actively worked with two students during the past year:

♦ Carlos Maldonado, a graduate student in Public administration, and the captain in charge of State Police internal affairs, took a problems course under Dr. DiVasto in the spring and Dr. DiVasto provided a great deal of input into the agency’s current promotional process.
Dr. DiVasto has assisted Sharon Foltz in Counseling Psychology with her dissertation research. Her dissertation will use police cadets as subjects.

**The Center for Applied Research and Analysis, Dr. Paul Guerin**

The Center for Applied Research and Analysis (CARA) focuses on applied social research, especially dealing with youth. CARA’s recent diversification has included the addition of several research projects in criminal justice, including contracts with the Administrative Office of the New Mexico Courts, the Administrative Office of the Courts (2nd Judicial District), and the New Mexico Corrections Department (Probation, Parole, and Community Corrections). Additionally, CARA was successful in securing a National Institute of Justice “ADAM” contract which is a multi-year drug and alcohol data collection and analysis effort.

Between July 1997 and June 1998, CARA had 9 funded projects. Three of these projects were funded by the National Institute of Justice. The remaining six projects were funded by the State of New Mexico. Altogether, these projects represent $530,000.

During 1997/1998 CARA completed a comprehensive Crime in New Mexico report, containing data from all reporting police agencies in New Mexico. Most of CARA’s projects are multi-year and ongoing.

Between July 1, 1998 and June 30, 1998 CARA has completed a number of reports and other scholarly activities:

<table>
<thead>
<tr>
<th>Project</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crime in New Mexico 1997</td>
<td>April 1998</td>
</tr>
<tr>
<td>Community Corrections Alpha IV Data Analysis</td>
<td>June 1998</td>
</tr>
<tr>
<td>Status Report: A Preliminary Analysis of the Probation and Parole Officer Survey</td>
<td>June 1998</td>
</tr>
<tr>
<td>Status Report: Unit Cost System for Services</td>
<td>June 1998</td>
</tr>
<tr>
<td>Alpha IV Training Workshop at New Mexico Corrections Department Annual Conference</td>
<td>October 1997</td>
</tr>
<tr>
<td>Introduction to Micro Soft Access at New Mexico Corrections Department Annual Conference</td>
<td>October 1997</td>
</tr>
<tr>
<td>Academy of Criminal Justice Workshop</td>
<td>March 1998</td>
</tr>
<tr>
<td>“Update on National Institute of Justice’s Residential Substance Abuse Treatment for State Prisoners Research Agenda”</td>
<td>April 1998</td>
</tr>
</tbody>
</table>
Approximately 23 students have been regular staff at CARA between July 1, 1997 and June 30, 1998. They are listed below. In addition, we have employed another approximately 15 undergraduate and graduate students as interviewers for the ADAM project.

<table>
<thead>
<tr>
<th>Name</th>
<th>Degree</th>
<th>Date Awarded/ Expected</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debbie Allnok</td>
<td>Ph.D</td>
<td>5/01</td>
<td>Sociology</td>
</tr>
<tr>
<td>Gabe Archibeque</td>
<td>BA</td>
<td>5/98</td>
<td>Criminology</td>
</tr>
<tr>
<td>Laurel Carrier</td>
<td>MA</td>
<td>8/98</td>
<td>MPA</td>
</tr>
<tr>
<td>Kristine Denman</td>
<td>Ph.D.</td>
<td>5/01</td>
<td>Sociology</td>
</tr>
<tr>
<td>Erin Donaldson</td>
<td>BA</td>
<td>12/97</td>
<td>Sociology</td>
</tr>
<tr>
<td>Rebecca Frerichs</td>
<td>Ph.D.</td>
<td>5/01</td>
<td>Sociology</td>
</tr>
<tr>
<td>Stormi Grefhenreed</td>
<td>BA</td>
<td>5/99</td>
<td>Criminology</td>
</tr>
<tr>
<td>Rebecca Griego</td>
<td>BA</td>
<td>5/99</td>
<td>Education</td>
</tr>
<tr>
<td>Jeff Halsted</td>
<td>MA</td>
<td>12/98</td>
<td>Criminal Justice - NMSU</td>
</tr>
<tr>
<td>Rachel Heisler</td>
<td>BA</td>
<td>5/00</td>
<td>English</td>
</tr>
<tr>
<td>Sarah Horton</td>
<td>Ph.D.</td>
<td>5/00</td>
<td>Anthropology</td>
</tr>
<tr>
<td>Robert Hyde</td>
<td>MA</td>
<td>12/98</td>
<td>Recreation</td>
</tr>
<tr>
<td>Sarah Kurhajetz</td>
<td>BA</td>
<td>5/99</td>
<td>Criminology/Psychology</td>
</tr>
<tr>
<td>Felicitas Marquart</td>
<td>BA</td>
<td>5/99</td>
<td>Biology</td>
</tr>
<tr>
<td>Audrey Merriweather</td>
<td>BA</td>
<td>5/99</td>
<td>Criminology/English</td>
</tr>
<tr>
<td>Jeff Mix</td>
<td>BA</td>
<td>5/99</td>
<td>Criminology/Psychology</td>
</tr>
<tr>
<td>Mercedes Murphy</td>
<td>BA</td>
<td>5/98</td>
<td>Criminology</td>
</tr>
<tr>
<td>Jessica Neely</td>
<td>BA</td>
<td>5/00</td>
<td>Psychology</td>
</tr>
<tr>
<td>Mike Patterson</td>
<td>MA</td>
<td>NA</td>
<td>transferred</td>
</tr>
<tr>
<td>Brock Perkins</td>
<td>BA</td>
<td>5/98</td>
<td>Sociology</td>
</tr>
<tr>
<td>Deinya Phenix</td>
<td>MA</td>
<td>12/98</td>
<td>Sociology</td>
</tr>
<tr>
<td>Jennifer Rioux</td>
<td>Ph.D.</td>
<td>5/00</td>
<td>Anthropology</td>
</tr>
<tr>
<td>Jeanette Valdez</td>
<td>BA</td>
<td>5/98</td>
<td>Criminology</td>
</tr>
</tbody>
</table>

The Statistical Analysis Center (SAC), Dr. Gary LaFree

The New Mexico SAC is supported by a basic grant from the Federal Bureau of Justice Statistics, which funds similar centers throughout the United States. The SAC has been funded at the ISR for 10 years. Recent changes in the Bureau of Justice Statistics funding format allow the SAC to propose specific research projects with appropriate budgets. This change has had the positive effect of allowing the New Mexico SAC to engage in specific research that is of interest to New Mexico criminal researchers and policy makers.

Gary LaFree served as SAC Director. Christopher Birkbeck and Susan Brumbaugh worked on SAC projects in 1997/98 as senior researchers. Students employed on SAC projects this year
included: Andrea Bassin, Aki Takeuchi and Martha Fernandez. Staff support included Nora Wilson, Bob Wilson and Stella Anagnastakos. The SAC was especially fortunate this year to include a visiting professor from Venezuela on several projects - Professor Luis Gerardo Gabaldon.

During the past year the SAC has worked on two major research projects. The first is a study of juvenile access to firearms and how the criminal justice system functions to regulate firearm use. The final report has received a good deal of enthusiastic praise from the Bureau of Justice Statistics, and we are in the process of revising it for publication in the Criminal Justice Policy Review. We are also planning to replicate this study in Caracas, Venezuela through the work of Luis Gerardo Gabaldon.

The second major project is a study of violent juvenile offenders in New Mexico’s adult and juvenile corrections systems. We began this project in October 1997 and are currently preparing the final report. The report compares the treatment of juvenile offenders who have been sentenced to either juvenile or adult probation or prison. With a national movement toward sentencing juveniles as adults, we are especially interested in how juveniles now being handled by the adult system are being treated.

The Institute, through the SAC, continues to supervise the research contract for the Criminal and Juvenile Justice Coordinating Council (CJJCC). The CJJCC is officially a state agency chaired by Gary LaFree, who was appointed by the Governor of New Mexico. The CJJCC is composed of representatives from most of the criminal justice agencies in New Mexico, with a mandate to advise and make recommendations on matters relating to criminal and juvenile justice. These include recommendations to the legislature concerning proposed changes in laws relating to criminal and juvenile justice, and making recommendations on policy concerning criminal sanctioning and sentencing guidelines. For 1997/1998, the Council had a budget of $300,000, of which $233,000 was allocated for research activities carried out within ISR. Dr. Christopher Birkbeck, formally of the UNM Sociology Department, is the Executive Director of the Coordinating Council.

SAC related publications for 1997-1998 include:


**Statistical Analysis, Dr. Raymond Liedka**

Although Dr. Liedka at present has no research projects of his own, he has been a consultant on several projects currently underway at ISR. He provided extensive consultation to Paul Guerin's "Probation and Parole Risk Needs Assessment" project and has also provided consultation to Susan Brumbaugh and Chris Birkbeck for the Criminal and Juvenile Justice Coordinating Council. In connection with Dr. Guerin's project, Dr. Liedka completed a status report that was presented to the New Mexico Probation and Parole Department.

Dr. Liedka also worked extensively with two ISR-affiliated graduate students this year. He assisted Kristine Denman with categorical data analysis, repeated measures, and related analysis issues. He assisted Aki Takeuchi with computer programming. Both students are now preparing for their comprehensive exams in Sociology.

**Religious Studies, Dr. Patrick McNamara**

Pat McNamara received a grant in the spring of 1997 to write a book on the findings of his previous research on "stewardship" churches. The book manuscript should be completed by November 1998. Two graduate students have been working intensively on this project, interviewing pastors in the Albuquerque area: Sandra Woerle and Doreen Neely. Both Sandy and Doreen have been enrolled in graduate courses and are making satisfactory progress academically. A grant from the Lilly Foundation to the Hartford seminary supports this research, titled "Organizing Religious Work." The objective of the project is to map the connections local churches have to other institutions in their communities. The research will answer important questions such as how ministries impact local churches and communities. Albuquerque is one of seven cities in the United States that has been included in this project. Completion of data collection is expected by the end of September, 1998.
The APD-UNM research partnership began in January 1997 with a $150,000 research grant from the National Institute of Justice (NIJ). Dr. Wood trained five graduate students in participant observation and interview research methods, and familiarized them with research on police in community settings, with institutional review board procedures, and with interpretive data analysis methods. The project completed data collection in community settings in July 1997 and finished data collection in police settings in June 1998. Researchers also collected more than 120 in-depth interviews with Albuquerque Police Department (APD) officers, 50 in-depth interviews with community leaders and city personnel, and 30 interviews of focus groups with APD civilian personnel. The research personnel spent more than 2,000 hours in participant observation with APD officers, in city meetings, in community meetings, and in the police academy. Dr. Wood is now writing a final report from this project, titled “Transitions: Creating a Culture of Community Policing.” The report focuses on the changes in the police culture within APD under the implementation of community policing, including important organizational changes. The report also points out the relative lack of transformation in the daily work or grass roots culture of the department.

Dr. Wood is currently writing an article on research design, research methods and relational strategies in studying police organization. The article is titled, “Getting In, Getting Accepted: Strategies for Research Access in Police Settings.” Dr. Wood is also preparing an article and a subsequent book manuscript on the current transition to community policing models in American urban police departments. The book is tentatively titled, “Transitions: Creating a Culture of Community Policing.” During the past year, Dr. Wood participated in two National Institute for Justice-sponsored conferences on community policing in Washington, DC.

Several graduate and undergraduate students have worked with the APD-UNM research partnership during the past year. Students include Amelia Rouse, who is a doctoral student in political science; Mariah Davis, who served first as an undergraduate research associate on the project and upon completing her B.A. in Sociology, became a Master’s student in public administration; Rob Wright, a doctoral student in political science is currently working on his dissertation; and Steve Smith, completed an M.A. while working on the project, and is now working in Chile.

In addition, Arthur Jaynes completed his B.A. while employed on the project and is now a graduate student at the University of Chicago, Department of Sociology. Brock Perkins, who was an undergraduate research associate on the project in 1997, and participated extensively in the field research and in related meetings, finished his B.A. in the University of New Mexico Sociology Department in December of 1998.
Other Affiliated Projects

In addition to these individual centers that make up the Institute at present, there are several other affiliated projects which will undoubtedly play a larger role in the Institute in the years ahead. Dr. Bert Useem has obtained a large National Institute of Justice-sponsored research project evaluating the impact of prison work programs on inmates' future recidivism and employment prospects. Dr. Useem has also submitted several other grant applications dealing with the relationship between imprisonment and crime rates. These other applications involve collaborative research between Dr. Useem, Dr. Liedka, and Anne Piehl from Harvard University. In addition, Dr. Useem worked last summer with Gilbert Ramirez, an undergraduate student in a special summer research program.

Amelia Rouse, who is currently working on her dissertation and has been employed on several large Institute research projects, was the coauthor of a published paper during the last academic year: Waterman, R., A. Rouse, and R. Wright. 1998. “The Venues of Influence: A New Theory of Political Control of the Bureaucracy,” Journal of Public Administration Research and Theory, 1:13-38.

Summary: Graduate Students at ISR

One of our major institutional goals has been to advance the educational careers of the students affiliated with the ISR. An indication of this commitment is the number of students who either completed or substantially advanced their Ph.D.s and M.A.s while working at the ISR during the past year. Table 3 shows a summary. In 1997/98 ISR was directly involved in supporting nine MA theses and six doctoral dissertations. (Table 3 is located at the end of the text.)

Current Projects and Research

The ISR currently has 29 active contracts and grants, totaling about 1.5 million dollars. Six additional grant applications are pending. These grants and contracts are summarized in Table 4. Table 4 shows that the ISR, counting multi-year totals, currently has $5.4 million in contracts and grants. However, when we take into account projects that are already partially completed, and multi-year projects, the current annual value of ISR projects is about $2.5 million. (Table 4 is located at the end of the text.)

Table 4 also shows that we have been successful at moving our funding focus toward the federal level. Of the 29 active projects, 15 are now federally funded. While the ISR is still characterized by relatively low IDC returns, we also have made progress here. At present, 21 (72.4%) of our projects have IDC rates of 20% or higher.
Lecture Series and Distinguished Visitors

Another important role of the ISR is to support the exchange of knowledge between faculty researchers and students. During the past year, the ISR has supported several lectures that have attracted students from many different departments:

"Comparative Cross-National Research: A Fuzzy Set Approach." Dr. Charles Ragin Northwestern University

"Fuzzy Logic, Fuzzy Sets, and Fuzzy Bears: All very cuddly once you get to know them." Dr. David Jackson New Mexico Epidemiology Unit

"Using Snowball Sampling Methodologies to Study a Drug Using Population." Dr. Charles Kaplan, University of Maastricht, The Netherlands

"Vectors of Dominance: Intersections and Interactivism in Overt and Covert Competition." Dr. Chris Rack Marian College

In addition, the ISR has employed several distinguished visiting faculty on a full or part-time basis during the past year:

Christopher Birkbeck
Luis Gerardo Gabaldon
Charles Kaplan
Ray Liedka
Christine Rack

Overhead and Other Support to Sociology

Based on earlier agreements, the ISR returns 8.8% of all overhead from projects generated by Sociology faculty back to the Sociology Department. In addition, individual faculty members occasionally seek course reductions by paying the Department to release them from classroom responsibilities for courses. Last year, the ISR paid the Sociology Department $9,039 in overhead funds and $9,800 in course buy-outs (one each for Professors LaFree and Wood).
Table 1.
ISR Organizational Chart

UNIVERSITY OF NEW MEXICO

COLLEGE OF ARTS & SCIENCES
Michael Fischer, Ph.D., Dean

DEPARTMENT OF SOCIOLOGY
Richard Coughlin, Ph.D., Chair

INSTITUTE FOR SOCIAL RESEARCH
Gary LaFree, Ph.D., Director

RESEARCH COORDINATOR
Robert Wilson

ADMINISTRATIVE UNIT
Stella Anagnostakos, Admin. Mgr.
Monica Tapia
Briana Chavez
Okchu Lee, Accountant

CENTER FOR CRIMINAL JUSTICE STUDIES
Peter DiVasto, Ph.D.,

Criminal & Juvenile Justice
Coordinating Council
Christopher Birkbeck, Ph.D.

CENTER FOR APPLIED RESEARCH & ANALYSIS
Paul Guerin, Ph.D.

APD/UNM PARTNERSHIP
Richard Wood, Ph.D.

STATISTICAL ANALYSIS CENTER
Gary LaFree, Ph.D.

LOS PASOS EVALUATION DISPARITY STUDIES
Richard Boyle, Ph.D.

STATISTICAL ANALYSIS
Ray Liedka, Ph.D.

RELIGIOUS STUDIES
Patrick McNamara, Ph.D.
Table 2. ISR Executive Committee, 1997-1998

Gary LaFree, Ph.D., Director
Christopher Birkbeck, Ph.D.
Richard Boyle, Ph.D.
Pete DiVasto, Ph.D.
Paul Guerin, Ph.D.
Raymond Liedka, Ph.D.
John Roberts, Ph.D. (representing Sociology Department)
Paul Steele, Ph.D.
Bert Useem, Ph.D.
Richard Wood, Ph.D.

Non-Voting Members

Judith Bernhard
Susan Brumbaugh, Ph.D.
Okchu Lee
Melissa Pacheco, J.D.
Amelia Rouse, ABD
Robert Wilson
Table 3. Graduate Student M.A. and Ph.D. Progress at the ISR. 1997/1998


Michelle Hussong, Ph.D., Sociology, "Male and Female Crime Rates in 100 Large U.S. Cities." 1997.


Table 4.
Active Projects at the ISR 1997/98

<table>
<thead>
<tr>
<th>Project Name</th>
<th>P.I.</th>
<th>Status</th>
<th>Source of Funds</th>
<th>Total Award</th>
<th>Status / Term</th>
<th>Contract Amount</th>
<th>Current Portion</th>
<th>IDC Rate</th>
<th>ID of First Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juvenile Adjudication</td>
<td>LaFree</td>
<td>Awarded w/contract</td>
<td>Federal NIJ</td>
<td>70,036</td>
<td>current 7/30/98</td>
<td>70,036</td>
<td>24%</td>
<td>5,964</td>
<td></td>
</tr>
<tr>
<td>Juvenile Firearms</td>
<td>LaFree</td>
<td>Awarded w/contract</td>
<td>Federal NIJ</td>
<td>56,148</td>
<td>ended 12/30/97</td>
<td>56,148</td>
<td>24%</td>
<td>4,781</td>
<td></td>
</tr>
<tr>
<td>Start Early Start Smart</td>
<td>Boyle</td>
<td>Awarded w/contract</td>
<td>Federal Pass through</td>
<td>361,014</td>
<td>current 09/30/00</td>
<td>361,014</td>
<td>22%</td>
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<td>Los Angeles Boyle</td>
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<td>152,400</td>
<td>current 09/30/01</td>
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<td>18%</td>
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<td>Useem</td>
<td>Awarded w/contract</td>
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<td>200,000</td>
<td>begin 4/98 03/00</td>
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<td>ADAM Guerin</td>
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<td>345,000 (est)</td>
<td>begin 7/98 multi year</td>
<td>115,000</td>
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<td>Guerin</td>
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<td>49,206</td>
<td>begin 3/98 12 mos</td>
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<td>Residential Substance Abuse</td>
<td>Guerin</td>
<td>Awarded w/contract</td>
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<td>current 12 mos / extended</td>
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<td>Boyle/Palm</td>
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<td>Federal USDEd</td>
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<td>Comparative McNamara Study</td>
<td>McNama</td>
<td>Awarded w/contract</td>
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<td>Eval PAL</td>
<td>LaFree/Birkbeck</td>
<td>Awarded w/contract</td>
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<td>1,000,000</td>
<td>current 36 mos</td>
<td>268,356</td>
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<td></td>
<td></td>
<td></td>
<td>600,000</td>
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Active Projects at the ISR 1997/98

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<th>current 151,396</th>
<th>08/31/98 will renew 151,396</th>
<th>24% 12,892</th>
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<td>State DPS</td>
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<td>Birkbeck Awarded w/contract</td>
<td>State</td>
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<td>City / Fed pass through</td>
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<td>City</td>
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<td>current 43,225</td>
<td>06/30/98 43,225</td>
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<td>Awarded w/contract</td>
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<td>current 24,817</td>
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<td>Character Guerin Counts</td>
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<td>City APD</td>
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<td>09/30/98 25,000</td>
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Subtotals .................................................. $3,570,915 ................................ $2,263,321 .... $1,605,441 ........... $143,512
### Table 4.
Active Projects at the ISR 1997/98

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<th>Project Description</th>
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<th>Federal Agency</th>
<th>Amount</th>
<th>Duration</th>
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<td>City of Tampa, Fla.</td>
<td>$156,000</td>
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<td>Validation Risk/Needs</td>
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<td>Head Start Partnership</td>
<td>Boyle/Morrison</td>
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**Subtotals (this page)**

- $1,866,697
- $1,296,697
- $894,970
- $93,789

**Totals**

- $5,437,612
- $3,560,018
- $2,500,411
- $233,426

---

*Includes renewal of 2nd Judicial District Drug Court contract*
I. TEACHING FACULTY AND STAFF

A. Tenured and Tenure Track Faculty

Spanish

John Bergen 
Garland Bills
Anthony Cárdenas
John Lipski
Tey Diana Rebolledo
Enrique Lamadrid
Antony Higgins
Mary Carmen Iribarren
Michael Kidd
Kimberle López
Susan Rivera

Professor
Professor
Professor
Professor
Professor
Associate Professor
Assistant Professor
Assistant Professor
Assistant Professor
Assistant Professor

Portuguese

Jon Tolman
Margo Milleret

Professor
Assistant Professor

B. Visiting Professors

María Dolores González Velásquez
Judy Maloof

Assistant Professor
Assistant Professor

C. Lecturers

Andrés Armijo
Karen Christian
Hilma Espinosa
Raquel Martínez
Patricia Rosas Reed
D. Emeritus Professors

Rubén Cobos
Robert Duncan
Pelayo Fernández
Rosa Fernández
Angel González
Tamara Holzapfel
Albert Lopes
Raymond MacCurdy
Marshall Nason
Alfred Rodríguez
Sabine Ulibarri

E. Graduate Assistants

Elvira Desachy-Godoy
James Eric Jewell

F. Teaching Assistants

Ph.D.
Tracie Batson
Stephanie Becker
Rosa Campos-Brito
José Juan Colín Alcántar
Gabriela Díaz
Myriam Egusa
Fernanda Ferreira
Robin Fetters
Kristina Galindo Knudsen
Paul Goldberg
Devin Jenkins
Sangsuk Kim
Eduardo López
Shigeko Mato
Martha Ruiz-García
Xochitl Shuru Estrada
Jean Silesky
Luis Soto
Cathleen Tarp
Rena Torres-Cacoulls
Gueli Ugarte
M.A.
Jorge Andrade
Laura Araujo-Salinas
Laura Borns
Veronica Calvillo
Yamile Cox
Marfa De Abajo
Mario Encinias
Beth Epstein
Arthur Fowler
Rachel Gersh
Elka Ghosh
Zeferino Gómez Martínez
Antonio Grau-Sempere
Donetta Hines
Ana Marfa King
Ronit Melleras Elliot
Valeriane Mofatto
Gina Morales
María Reyes Muñoz
Lisa O’Grady
Benito Quintana
Meredith Rininger
Olga Rfos
Guadalupe Rivera
Marcos Romero
Susanna Schaller
Sutter Sugar
Andrew Tistadt
Heather Wyatt

G. Office Staff

Rosario Johnson, Department Administrator
Ivana Černa, Administrative Assistant III
Esther Marquez, Administrative Assistant II
Ana Zazueta, Administrative Assistant II
Rosita Pickle, Administrative Assistant I
H. Work Study Team

Carolyn Aparici-Law
Gretchen Boon
Javed Church
Zeferino Gomez Martínez

I. Degrees Awarded

Ph.D. in Romance Languages/Spanish


Fall 1997    Ramsdell, Lea, Dissertation title: “The Family Narrative as an Oral and Written Genre of Female Resistance in Latin American Cultures.”


Master of Arts/Spanish Fall 1997

Arthur Fowler

Master of Arts/Spanish Spring 1998

Jorge Andrade
Laura Araujo-Salinas
Laura Boms
Beth Ann Epstein
Rachel Gersh
Antonio Grau-Sempere
Donetta M. Hines
Yvonne Keller
Valeriane Mofatto
Gina María Morales
Marcos Anthony Romero
Elizabeth Sklenar
Bachelor of Arts/Spanish Major Fall 1997

Kathryn A. Eastwood
Soledad García-King
Heather L. Lovaglio
Margaret B. Reniers
Charlie Zapien

Bachelor of Arts/Spanish Major Spring 1998

Keith Louis Buchanan
Charles S. Cisneros
Teresa P. Fernández
Roberta Teresa Griego
Michael Robert Hejtmanek
María Lucía Garro Leen
Juliana Mora
Anthony Rael
Anthony Manuel Romero
Kelly B. Watson
Jon C. Williams

Bachelor of Arts/Portuguese Major Spring 1998

Eric-Christopher García

BA/BS-Spanish as a Second Major Summer 1997

Claire Haston
Rachael Montoya
Melissa Ortega

BA/BS-Spanish as a Second Major Fall 1997

Jennifer R. Baca
Freddy N. Chacon
Danica D’Emilio
Cathy C. Fresquez
Maria G. Jasso
Jacob Knight
Amery D. Martinez
Antonia P. Montoya
Felicia A. Nagle
Ivan R. Romero
Adrienne L. Scott
Linda M. Trujillo
Tomas Velasquez, Jr.
Franci A. Washburn

BA/BS-Spanish as a Second Major Spring 1998

Lucia M. Anglada
Camille Yvonne Brito
Yevette Marie Brown
Suzanne Marie Buck
Peter Kismadi Celnicker
Carolee Jennifer Friday
Katrina Maria Ganster
Eric-Christopher Garcia
Kevin Michael Golden
Bernadette J. Gomez
Jason Thomas Gonzales
César Alejandro Gonzalez
Erin L. Hagenow
André Brian King
Melissa Ann Lucero
Margaret E. Maier
Alicia Lueras Maldonado
Heidi Ho McKinnon
Todd Russell Meinecke
Noe Mejia
Joseph L. Monasterio
Vanessa Michelle Ortega
José Roberto Pavón
Gregorio Valentino Peña
Joseph Patrick Pesce
Gilbert Andrew Ramirez
Gira J. Ravelo
Dajon Ricci
Frances Angela Romero
Luis Armando Romero
Seth A. Romero
Carlene A. Sánchez
Juan Diego Serna
Carmen C. Sherman
Shane Kyle Stromei
II. COURSES OFFERED

A. Summer 1997

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| Portuguese                           |                     |                       |
| 335, Braz Popular Culture            | 1                  | 6                     |
| 551, Graduate Problems               | 1                  | 3                     |
### Spanish

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**Portuguese**

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**C. Spring 1998**

**Spanish**

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The academic year 1997-1998 was a year of transition for the Department of Spanish and Portuguese, and the events of the past year will shape the profile of the department for many years to come. During the 1997-1998 year the department was successful in hiring three new assistant professors, all promising young scholars and teachers, who will replenish the teaching and research strength of the department. Adriana Estill (Ph. D. Cornell), Miguel López (Ph. D. UC Berkeley), and Judy Maloof (Ph. D. UC San Diego) greatly strengthen the department’s offerings in Latin American narrative, feminist studies, Chicano literature, Mexican literature, and Central American literature.

In February of 1998, the Department hosted the 7th Conference on Ibero-American Culture and Society, with the topics “Spanish and Portuguese in Contact with Other Languages,”
and "Spanish in the United States." The conference was a resounding success, bringing to the UNM campus over 100 top linguists from around the world, as well as giving graduate students the opportunity to present their own papers and interact with this community of scholars.

The year 1997-1998 was a year of continued growth in undergraduate Spanish courses. In addition to experiencing significant growth in the lower-division courses (first and second year), the department gained new Spanish majors and offered a variety of new undergraduate courses, including sections of Spanish 301 and Portuguese 311 in which dramatic performances were a key part of the course activities.

In the Spring of 1998, our Spanish Lower Division Coordinator, Professor Mary Carmen Iribarren, announced her resignation, thus ending the year on the verge of another transition. This position has been filled by a visiting faculty member, and the department anticipates a permanent tenure-track hire during the upcoming 1998-1999 academic year.

A. Visiting Professors

The Department of Spanish and Portuguese was joined by two Visiting Assistant Professors in the fall: Professor María Dolores Gonzales Velásquez, received her Ph.D. from the University of New Mexico and Professor Judy Maloof, received her Ph.D. from the University of California at San Diego.
B. Resignation

Professor Mary Carmen Iribarren resigned to her position as an Assistant Professor in June 1998.

C. Staff Changes

The vacant position of Administrative Assistant II of Spanish Lower Division was filled by Ms. Esther Marquez.

D. Awards

1. Professors

Tey Diana Rebolledo, was the recipient of a fellowship from the Bogliasco Foundation, Centro Studi Ligure per le Arti e le Lettere. While at the Center (located near Genoa, Italy) with seven other fellows (a poet, opera composer, sculptor, artist, philosopher, archaeologist and a novelist), Rebolledo continued her work on “For I am As Good as She: The Struggle for Representation. In Pursuit of a Literary and Historical Heritage of Hispanas in the West/Southwest, 1550-1950.” As a Bogliasco Fellow, Rebolledo completed several chapters for the project. In addition, she practiced her Italian and explored Italian culture.

Sabine Ulibarrí, was honored by Zimmerman Library with a literary event and reception held at Zimmerman Library, Special Events Room on November 6, 1997 at 4:00 pm.
2. Graduate Students

Rena Torres-Cacoullos received a Latin American Institute Ph.D. Fellowship for the second academic year (1997-98).

IV. DEPARTMENTAL ACTIVITIES

A. Lectures and Conferences Sponsored by the Department of Spanish and Portuguese

Crisol-Bufons, Troubadors from Spain & Chimayo presented “Los Valientes: Three Cultural Heroes of New Mexico. "Padre Antonio Jose Martinez," on October 20 at Woodward Hall 147 at 11:00 am; "Dora Ortiz Vasquez" on October 21, 1997 at Ortega Hall Room 153 at 3:00 pm; and “Aurelio M. Espinosa” on October 22, 1997 at Ortega 153 at 3:00 pm.

Celia López-Chávez, “La Mujer Mexicana: Simbolo Histórico de Crisis y Encuentro” on October 30, 1997 in Ortega Hall Room 335 at 7:00 pm.

Devin Jenkins, “Grammaticization of Spanish Prepositions: Por and Para” on November 24, 1997, 3:00-4:00 pm in the Reading Room Ortega Hall 335.


Dr. Javier Duran, candidate for the 20th Century Spanish American Narrative position,
"Narrar a México: (re) visiones de la nación en la narrativa de escritoras contemporáneas" read on Tuesday, January 27, 1998 at 3:00 pm in Ortega Hall Reading Room.

Annual Conference: On February 12-14, 1998, the Department of Spanish and Portuguese hosted its 7th annual Conference on Ibero-American Culture and Society. This year it was the turn of the linguistics section (Profs. John Bergen, Garland Bills, Mary Carmen Iribarren, John Lipski, and Neddy Vigil), and the conference had a double focus: Spanish and Portuguese in Contact with Other Languages, and the 16th Conference Spanish in the United States/El español en los Estados Unidos. These conferences—which have been held at various universities—had languished in recent years, and the UNM conference was a resounding success, with 65 scholars from around the world presenting papers and participating in the discussions. Departmental graduate students assisted in conference preparation and registration, and many graduate students also chaired sessions and presented papers.

Marguerite Harrison, from Brown University presented, "Bittersweet Brew: A Pictorial History of Coffee in Brazil" on April 23, 1998 at 4:00 pm in Ortega Hall room #153.

B. Invited Talks

Garland Bills, "New Mexican Spanish," for the Spanish Immersion Workshop at the New Mexico Highlands University, Las Vegas, New Mexico, August 1, 1997.


C. Papers Read by Faculty


María Dolores Gonzales Velásquez, “Deshaciendo enredos: Language and power imbalances in mediation,” at the Seventh University of New Mexico Conference on Ibero-


Michael Kidd, 1) "The Performance of Desire: Acting and Being in Lope de Vega's El laberinto de Creta at the Institute of Romance Studies at the University of London, February 17-22, 1998; 2) "Jugando con fuego: el conflicto entre el deseo y verdad en la Electra de Benito Perez Galdos," at the IX Coloquio internacional de Filología griega, at the Universidad Nacional de Educación a Distancia (UNED), Madrid, Spain, March 4-7, 1998; 3) "From the Golden Ass to the Golden Age: A Critique of Hispanist Nomenclature," at the Cultural Studies Colloquium Series Features at the University of New Mexico, April 6, 1998.

Kimberle López, 1) "Moriscos and Conversos in the Conquest: Abel Posse's El largo atardecer del caminante at the First FIU-um Conference on Iberian/Iberian-American Literatures, Florida International University, October 23-25, 1997 and 2) "The Figure of
the Converso in the New Latin American Novel of the Conquest" at the Cultural Studies Colloquium, in Ortega Hall Reading Room 335 at 12:00 noon, October 20, 1997.


D. Papers Read by Graduate Students

Laura Araujo-Salinas, 1) “Homosocial Desire in Cherríe Moraga’s ‘Shadow of a Man’,” at the Seventh Annual American Writers of Color Conference, Ocean City, Maryland, November 1, 1997; 2) “Jugando a la Tablita: Autobioethnography in Norma Cantú’s ‘Canícula’,” at New Mexico Women Studies Conference at Las Cruces, New Mexico, March 20, 1998; 3) “Loving and Hating with the Same Passion: The Formation of the Lesbian Identity in Roffiel’s ‘Amora’ and Terri de la Peña’s ‘Margins’,” at XXV Annual
National Association of Chicana/Chicano Studies at Mexico City, Mexico, June 25, 1998;


Rosa Campos-Brito, 1) "Limitaciones sociales del bildungsroman femenino: una comparación entre Trini de Estela Portillo Trambley y Bless Me, Ultima de Rudolfo Anaya" at the I Congreso de los Estudios de la Mujer de la Frontera Norte, at the Universidad de Monterrey, Monterrey, Nuevo Leon, México, October 1997;
Arturo Fernández-Gibert, 1) "La voz del pueblo: El español en la prensa nuevomexicana en los años previos a la estatalidad (1890-1912)," at the Seventh University of New Mexico Conference on Ibero-American Culture and Society: "Spanish and Portuguese in Contact with Other Languages," Albuquerque, New Mexico, February 12, 1998; 2) "Las políticas lingüísticas en Nuevo México y sus efectos: monolingüismo y bilingüismo en español e inglés desde 1848 hasta el presente," at the First International Symposium on Bilingualism: Bilingual Communities and Individuals at the Universidade de Vigo, Vigo, Spain, October 21-25, 1997.


Eric-Christopher García, 1) "Guillermo Gómez-Peña: Dragging Representation" at The Dolores Gonzales Colloquy Series, April 16, 1998; 2) "Y a estos quien los invito: Maricones and the Joto Caucus de NACCS, a historical perspective" National


E. Other Research Projects or Creative Works in Progress or Completed during period


Antony Higgins, Developed work on research project on parodic and satirical literature written in Spanish America during the colonial period, titled "Questioning Authority: the Role of Satirical Literature in the Formation of a Public Sphere in Colonial Mexico."

F. Activities in Learned and Professional Societies

Garland Bills, 1) "The New Mexico-Colorado Spanish Survey: Documenting a major language of the United States" (with Neddy Vigil); 2) Executive Director, Linguistic Association of the Southwest; 3) Attended 26th Annual Meeting of the Linguistic Association of the Southwest, Los Angeles, California, October 3-5, 1997.

Maria Dolores Gonzales Velásquez, was a panel member and a commentator at the National Association of Chicano Studies' Conference at the Universidad Nacional Autónoma de Mexico, June 24-28, 1998.
John M. Lipski, Chaired discussion session for Ph.D. granting departments, Association of Departments of Foreign Languages (ADFL), New York City, New York, June 3-5, 1998.

Margo Milleret, 1) Talk to freshman during Summer Orientation on preparing for college; 2) Participation on panel discussion after performance of "The Walls" at UNM Experimental Theatre.


G. Other Professional Activities (exhibits, off campus talks, etc.)

John Bergen, Referred two articles for Hispania.

Garland Bills, 1) External evaluator of candidates for tenure/promotion: New Mexico State University, University of Colorado-Denver; 2) Reviewer of research proposal for

Anthony Cárdenas, Editorial Board: "Romance Quarterly"

Antony Higgins, 1) Served as reader and book reviewer for the journal Colonial Latin American Historical Review; 2) Served as reader for journal Latin American Research Review.

Enrique Lamadrid, 1) "Angeles, Pastores y Comanches Cantan Al Resplandor/Angels, Shepherds and Comanches Sign to the Light: Nuevomexicano Christmas Music," community concert with Brenda Romero, Magnífico Albuquerque Festival of the Arts, San Felipe Church, Old Town, December 21, 1997; 2) Cuarto Centenario Commission, City of Albuquerque; 3) ¡MAGNIFICO! Creative Writing Workshops for Community Center Youth, Dennis Chávez Community Center, Albuquerque, 1997; 4) Senior Arts, Writing and Folklore Workshop, La Amistad Center, Albuquerque, 1997; 5) "Música del Corazón: New Mexican Folk Music," NM Endowment for the Humanities Speakers Bureau Lecture Series.

John M. Lipski, 1) Served as judge for the Premio Nacional de Lingüística sponsored by the Ministerio de Cultura, Bogotá, Colombia, October 1997.


H. Non-teaching University, College, and Department Service

John Bergen, 1) Served on the university honorary degree committee and 2) the department advisory and activities committees.

Garland Bills, 1) Department of Linguistics: chair; 2) Latin American Institute: member, Grants and Awards Committee; 3) College of Arts & Sciences: member, Interdisciplinary Committee for Latin American Studies; 4) College of Education: member, Coordinating Committee for Educational Linguistics: member; 5) Faculty Review panel for Jan Näslund; 6) University: member, Faculty Senate Budget Committee.
Anthony Cárdenas, 1) Undergraduate Advisor for the Department of Spanish and Portuguese; 2) Chair, Search Committee for the Latin American Position.

Antony Higgins, 1) Served on Undergraduate Committee, for the Department of Spanish and Portuguese; 2) Served on Graduate Committee, for the Department of Spanish and Portuguese; 3) Served on Activities Committee, for the Department of Spanish and Portuguese.

Mary Carmen Iribarren, 1) Proposed and promoted through International Studies and in cooperation with the Public University of Navarre (Spain) a Summer Session in Pamplona which took place in June 1998; 2) Served on Graduate Committee, 3) Undergraduate Committee and 4) Merit and Evaluation Committee for the Department of Spanish and Portuguese.

Michael Kidd, 1) Undergraduate Committee, for the Department of Spanish and Portuguese; 2) served on the Advisory Committee, for the Department of Spanish and Portuguese.

Enrique Lamadrid, Graduate Advisor, for the Department Spanish and Portuguese; 2) General Honors Council, Chair; 3) UNM Press Committee; 4) College of Fine Arts: Regional & Folk Arts Steering Committee; 5) Southwest Hispanic Research Institute Faculty Associate; 6) Dissertation Committees: Chair: Lea Ramsdell, Elvira Desachy,
Josué Sánchez; Member: Barbara Mauldin, Karen Stocker.

John M. Lipski, Chair, Senate Graduate Committee.

Kimberle López, 1) Women's Studies Executive Committee, 1997-98; 2) Cultural Studies planning Committee, 1997-98; 3) University New Faculty Committee, 1997-98; 4) Merit and Evaluation Committee, for the Department of Spanish and Portuguese, 1997-98; 5) Graduate Committee, for the Department of Spanish and Portuguese, 1997-98; 6) Conducted Exam Preparation Workshop, for the Department of Spanish and Portuguese, October 1997.

Margo Milleret, 1) Member of Undergraduate Committee and 2) Activities Committee for the Department of Spanish and Portuguese; 3) Recruiting during summer orientation sessions for Portuguese program; 4) Faculty sponsor for Brazil Summer Study program; 5) Library Committee for Latin American Studies Institute.

Diana Rebolledo, 1) Selection Committee: Raza Excellence Outstanding Students Award, 1997; 2) Faculty Mentor: Research Opportunity Program, 1997; 3) Search Committee for the Dean of the College of Arts and Sciences, 1997; 4) Committee of Undergraduate Advisors, College of Arts and Sciences; 5) Undergraduate Advisor, for the Department Spanish and Portuguese; 6) Senior Promotion and Tenure Committee, College of Arts and Sciences.
Susan Rivera, 1) Advisory Committee, fall 1997-present; 2) Women Studies Associate.

Jon Tolman, 1) Graduate Committee, for the Department Spanish and Portuguese; 2) Coordinator of Luso-Brazilian Studies for Latin American Institute; 3) Associate Director for Luso-Brazilian Programs for Latin American Institute; 4) Executive Committee for Latin American Institute; 5) Budget Committee for Latin American Institute; 6) Grants and Awards Committee for Latin American Institute; 7) Interdisciplinary Committee on Latin American Studies for Latin American Institute; 8) Council of the Americas for UNM.

I. Grants and Contracts, Extramural and Otherwise

Antony Higgins/Tey Diana Rebolledo

Title: Teaching Allocation Grant Videos for the Classroom

Agency: T.A.S Committee/UNM

Dates: January - May 1998

Funding: $1,500.00

Enrique Lamadrid

Title: Flamenco Culture

Agency: UNM/RAC

Dates: December 1997 - December 1998

Funding: $1,450.00
Tey Diana Rebolledo

Title: Research Allowance

Agency: Student Affairs/UNM

Dates: August 1997 - May 1998

Funding: $1,000.00

Title: La Diabla a Pie: Hispana Tales from the WPA

Agency: Recovering the U.S. Hispanic Literary Heritage Project

Dates: April 1998 - November 1998

Funding: $3,000.00

J. Diversity

This past year, the department maintained its pursuit for diversity, making efforts to attract women and minority groups. This year, the department issued contracts to fifty-three teaching assistants, of which twenty-four were Hispanics, and three were Asian. Women accounted for thirty-seven of the total, of which sixteen were Hispanic and three Asian. A total of five lecturers taught on a part-time basis, three of them were women of Hispanic origin. The work study team was composed of three students, one being Hispanic.
Department of Speech and Hearing Sciences

July 1, 1997-June 30, 1998

Submitted by

Linda Riensche

Professor and Chair, Department of Speech and Hearing Sciences

1. Significant developments during the academic year, 1997-1998

Associate Dean Ken Frandsen was appointed to the position of Interim Chair for the upcoming academic year from August, 1998 through May, 1999. Curricular adjustments were made so that a graduate level child language course will become available beginning Fall, 1998. The Speech-Language Pathology Program was ranked in the U.S. News survey of top graduate programs in our field.

Research

The number of publications from the Department was greater than during any previous year in the Department’s history.

Curriculum and Advisement

The curriculum requirements were modified for 1998-99 because (1) Bruce Porch, the instructor of Clinical Aphasiology, a required course based on a test developed by him, taught for the last time in Fall 1997 and (2) Barbara Rodriguez was scheduled for return Fall 1998. Her planned return allowed for an adjustment in the curriculum to meet a long term deficiency in the curriculum, that of a graduate level child language course. The resulting modification was to replace Clinical Aphasiology with a graduate child language course to be taught by Barbara
Rodriguez during the spring semester and by Janet Patterson during the fall semester. Barbara received a fellowship at the University of Washington for 1 year during which she will focus her energies on research. Plans for the curricular changes will not be fully implemented until her return.

The Distance Education Program continued, though the Department was not granted the opportunity to search for a person to oversee it. As specified at the time the program was planned, the Department will not continue the program beyond the bachelor’s degree offerings unless the position is filled.

**Scholarships**

The Richard B. Hood Scholarship was awarded for the first time. Two students were recipients.

Funds for the Bruce E. Porch Scholarship continued to accrue.

**ASHA Accreditation**

The Department’s first annual report since its accreditation renewal was accepted.

**The UNM Speech-Language-Hearing Center**

Community Practicum sites included the following:

Albuquerque Area Indian Health Board

Albuquerque Grand Retirement Apartments

Albuquerque Manor
Albuquerque Public Schools
Albuquerque Speech, Language, and Hearing Center
Albuquerque Veterans Administration Medical Center
All Angels Preschool
All Indian Pueblo Council
Alta Mira
Anchorage Public Schools
Aspen Living Center-CO
Atlanta Promina Hospital
Bear Canyon Senior Center
Bernalillo Public Schools
Brushwood Care Center
Carrie Tingley Hospital
CCDP Child Development Program
Chelwood Learning Center
Child Development Center-Colorado Springs
Clark County Schools-NV
Class and Cradle Preschool
Cleft Palate Clinic
Coddington Care Home
Crestview Academy
Cuddles Child Learning Center
Delamar Care Home
Ear Institute
Escuela del Sol
Eubank Daycare
Explorabilities
Family Hearing Center
Gila Regional Medical Center
Green Project
Health South Rehabilitation Hospital-Albuquerque
Health South Rehabilitation Hospital-Phoenix
Hearing Aid Dispensers Company
Hearing Evaluation Center
Hearing Health Care Center
Horizons Specialty Hospital
Hospitality House
Interface
Kindercare-Lower Terrace
Kindercare-Panorama
La Mesa Preschool
Las Palomas
Las Vegas Medical Center
Los Volcanes
Lovelace Medical Center
Meadowlark Senior Center
Montessori Academy
Monzano del Sol
Moriarty Public Schools
New Mexico Preschool for the Deaf
New Mexico School for the Deaf
New York Jewish Hospital
Northern BPS Communities
Northern Dumas Medical Centers
Pathways-Santa Fe
Parent-Child Development Center
Public Health Services
Presbyterian Ear Institute
Presbyterian Hospital Rehabilitation Services
Rehab works
San Juan Regional Medical Center
Santa Fe County Community Head Start
Santa Fe Public Schools
Santa Fe Speech and Language Associates
Skyline therapies
St. Joseph Rehabilitation Hospital and Outpatient Center
Southern BPS Communities
Tres Manos Parent Child Center
The UNM Child Development Center
Transitional Hospital Corporation
UNM Adolescent Mental Health Center
UNM Audiology Clinic
UNM Audiology Clinic-Otolaryngology Department
UNM Children’s’ Psychiatric Hospital
UNM Senior Health Clinic
UNM Speech and Hearing Center
UNM University Affiliated Programs-PIE Program
UNM Speech Language Swallowing Center
UNM University Hospital Neonatal Intensive Care Unit
Valle Norte
YMCA Preschool
Youth Diagnostic and Detention Center

**Audiology Clinic**

The directorship of the Audiology Clinic was combined with that of the UNM Speech-Language-Hearing Center.

**Special Programs**
Augmentative Communication Program

10 Graduate students participated in a summer augmentative communication clinic offered through Albuquerque Public Schools.

Mexico City Interdisciplinary Program

In July and August, Ms. Kate Blaker led a group to Comunidad Crecer in Mexico City for additional clinical and cultural experiences and to enjoy intensive work on their Spanish speaking skills. Other members of the group included Ms. Yvonne Soto-Gomez, Ms. Elayne Kessler, and graduate students Stacey Burke, Diola Garcia, Sylvia Sarmiento, and Craig Tucker as well as Ms. Saundra Anderson, Occupational Therapist, and Mr. Ruben Castillo, Adaptive Equipment Specialist.

Villahermosa Program

The Director of the Villahermosa Clinic visited the Department in the Fall semester. 1 clinician from the Villahermosa Clinic participated in the Southwest Conference presented by the UNM Chapter of the National Student Speech, Language, and Hearing Association.

Albuquerque Public Schools Programs

The Albuquerque Public Schools program continued to provide 4 clinical supervisors and additional financial support. It was modified to include a program at Jefferson Middle School rather than at Lowell Elementary School. The budget was also modified so that a portion of the compensation was based on the number of evaluations.
Leadership Training Program

The Leadership Training Program (LEND) was in its third year of a 5 year cycle. 3 students participated. The program continued to provide student financial support, multicultural clinical opportunities, interactions with many disciplines, professional travel, and experiences with the legislative process.

Allied Health Interdisciplinary Program for Rural Areas

The Allied Health Interdisciplinary Program was in its third year of a 5 year cycle. The program continues to provide an opportunity for students in the various health related disciplines to learn together and gain an understanding and appreciation for the expertise that each brings to the solution of health problems. It also continues to use the Problem-Based Learning Approach of the UNM School of Medicine with the experience extended to the rural setting through clinical placements and the use of centralized library resources. The locations for placing students this year were Roswell, Farmington and Silver City.

Project Hozho

Ms. Christina Vining served as the director of Project Hozho ("ho o"), a multicultural project funded by The American Speech-Language-Hearing Association through the New Mexico Center for Developmental Disabilities. The project provides opportunities for clinical practicum experiences with individuals in Native American communities who have developmental disabilities. Students in the program compiled a broad assortment of articles on Multicultural considerations in speech and hearing.
Special Events

Convocation
A convocation was held at Woodward Hall for faculty, staff, undergraduate, non-degree, and graduate students. Students were provided professional and departmental information. Faculty, staff, and officers of the UNM Chapter of the National Student Speech, Language, and Hearing Association were introduced. Program requirements, special events, and plans were discussed. Approximately 50 persons attended.

Annual Picnic
The Department held its seventh annual picnic on Saturday, September 6 at Snow Park. Faculty, staff, undergraduate, non-degree, and graduate students were invited. Approximately 100 persons attended.

Faculty-Student Attendance at National Conventions and Conferences
10 students and 3 faculty and staff members attended the American Academy of Audiology Convention in Los Angeles, California in April. Four faculty members attended the American Speech-Language-Hearing Association Convention in Boston, Massachusetts.

Holiday Party
The Annual Holiday Party was held at Montezuma Elementary School. The event was a potluck. Approximately 50 faculty, staff, students, and family members were in attendance. The event was nearly canceled because of a winter storm, which undoubtedly did effect attendance.
December Graduation Reception

The December Graduation was celebrated by a reception in the Department before the UNM Commencement ceremony. Bachelor’s level graduates were presented certificates and master’s level graduates were presented a UNM pin by Dr. Richard Hood, Professor Emeritus and past department chair. The event was attended by approximately 50 faculty, staff, graduates, and family members.

Interdisciplinary Career Fair

Speech-Language Pathology students were again included in the Interdisciplinary Career Fair hosted by the UNM Physical Therapy Club and the UNM Student Occupational Therapy Association.

NSSLHA Seventh Annual Southwest Conference

The Seventh Annual Southwest Conference on Communicative Disorders was held March 12 and 13, 1998. It was designed for attendance by both students and professionals, though it was put on by students. There were 27 speakers and a total of 376 attendees including 172 students and 204 professionals from New Mexico, Colorado, Wyoming, Georgia, Arizona, Nebraska, Texas and Nevada. The event was held at the Albuquerque Convention Center and was comprised of four blocks of four simultaneous sessions throughout the day on Thursday and Friday. An awards banquet and ceremony followed the Thursday sessions at the La Posada Ballroom. Speakers included the following:
Jack Damico
Doris B. Hawthorne Chair, Communicative Disorders & Special Education
The University of Southwestern Louisiana
“Innovative Service Delivery for ADHD: The role of Speech-Language Pathologists”

Brenda Lee-Machain
Window Rock Unified School District; Consultant for Chinle Comprehensive Indian Health Service
“An Integrated Multicultural Approach to Language Development in the Classroom”

David Lipscomb
Correct Service, Inc.
“Investigative Audiology and Speech Pathology”

Maria Adelaida Restrepo
The University of Georgia
“Identifiers of Hispanic children with specific language impairments”

Anne Cordes
The University of Georgia
“Research and the practicing clinician: Who’s afraid of JSLHR?”
Charlotte Lough
Brain Injury Program Manager
St. Joseph’s Hospital
“Cognitive Rehabilitation after Brain Injury”

David Lipscomb
Correct Service, Inc.
“Auditory Physiology: Historical Concepts and Weird New Ideas”

Dorothy Baker
Moriarty Municipal Schools
“The Relationship Between Language Processing Disorders and Psychiatric Disorders in Children: Implications for Language Assessment and Intervention”

Ann Cordes
The University of Georgia
“Stuttering treatment: Not enough choices or too many choices?”

Joy Zabala
University of Kentucky
“Get Ready! Get SETT! Go! Supporting Augmentative Communication success in the Real World”
Richard Tyler

The University of Iowa

“Tinnitus Management”

Joan Kissel

University of Central Florida


Karen Lang

Private Practitioner

Albuquerque, New Mexico

“When all else fails: Using Oral-Motor Techniques to inhibit Aspiration in a C-P Adult”

Liz Thompson, PT and Mother of a child with Autism

and

Ellen Reavis, OTR/L

“Eric’s Hole in the Wall-And Other Stories of Living with Autism”

Joan A. Mele-McCarthy, University of Maryland

and

Jean-Fryer Schedler, The Summit School
“Oral Language for Reading Development: the Language Continuum”

Jon Lyon
Director
Living with Aphasia, Inc.

“Treating “the whole” of aphasia”

Tabitha Parent
University of New Mexico

“Update on the Au.D.”

Tom Littman
Texas Children’s Hospital
Houston, TX

“Pediatric Application of Distortion Product Otoacoustic Emissions”

Nadynne Myers, The University of New Mexico

and

Kate Blaker, The University of New Mexico

“The Horse is out of the Barn: supervision needs of the SLP Profession”

Mike Kuhn
Albuquerque Public Schools

“The Good, the Bad, and the Ugly: SLP Services within the Classroom”

Tom Littman
Texas Children’s Hospital
Houston, Texas

“Hearing Loss Due to Congenital Asymptomatic CMV Infection”

Barbara Rodriguez
University of Washington

“Parental beliefs about language impairment and language intervention for preschoolers: Mexican-American Perspectives”

Lyndelle Owens
Horizon Specialties

“Oral Motor Transit Control and Optimal Alignment for Swallowing in the Adult Client”

Barbara Hoskins
Educational Consultant
Pasadena, CA

and

Kristine Noel
YDDC/NMGS

"Working with Adolescents: Making Assessment and Intervention Relevant"

Robert T. Wertz
Veterans Administration and Vanderbilt Professor
Hearing and Speech Sciences

"Managing Aphasia at the Millennium: A Fork in the Road?"

David McPherson
Brigham Young University

"Clinical Utilization of Long Latency Auditory Evoked Potentials"

Jim Benson
Paradigm Management

"Managed Care and its Impact on the Speech and Hearing Profession"

Honors Dinner

The Honors Dinner was held at the La Posada Ballroom on Thursday evening, March 12. It was organized by Craig Tucker and hosted by Nadynne Myers. Those who were honored included the following:

a. Diola Garcia was named to the “Hall of Fame” and received the Honors of The UNM Chapter of the National Student Speech, Language and Hearing Association for her work as Chair of the Southwest Conference.
b. Hannah Neufeld received the Honors of the National Student Speech, Language and Hearing Association for her work as President of The UNM Chapter of the National Student Speech, Language and Hearing Association.

c. Beth Baldwin was honored for winning the competition for the 1997 American Speech Language Hearing Foundation Scholarship Award.

d. Jacquie Kurland was honored for her work as the National Student Speech, Language and Hearing Association Region IX Representative. In this capacity, she was sent to Washington D.C. twice during the year to represent the 29 local chapters of NSSLHA in New Mexico, Texas, Arizona, Montana, Utah, Wyoming, Mexico, Puerto Rico and Alberta, Canada.

e. Tabitha Parent received the Teacher of the Year Award for Audiology faculty.

f. Elynn Cowden received the Teacher of the Year Award.

Sharon Christiansen was named the Chair for the 1999 Southwest Conference. Linda Riensche was honored for having served as Department Chair for the last 7 years.

May Graduation Reception

The May Graduation was celebrated by a reception at the Albuquerque Country Club following the UNM Commencement ceremony. Dr. Dorothy Baker from Moriarty Public Schools served as the speaker. Bachelor's level graduates were presented certificates and master's level graduates were presented a UNM pin by Dr. Richard Hood, Professor Emeritus and past departmental chair. The event was attended by 236 faculty, staff, graduates, and family members, including 176 who participated in the luncheon and 60 additional persons who attended the ceremony.
Other Activities

NSSLHA Meetings

NSSLHA meetings were held at the Nursing and Pharmacy Building.

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<td>September 16</td>
<td>Maggie Horan, Educational Assessment systems, Inc.</td>
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<td>“Marketing Yourself for Employment”</td>
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<td>Attendance: Approximately 70</td>
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<td>Lisa McNiven, Community Outreach Program for the Deaf</td>
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<td>“The Deaf Culture and How It Relates to our Professions”</td>
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<td>October 28</td>
<td>Jim Benson, Paradigm Group Management</td>
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<td>“The Impact of Managed Care on SLP and Hearing Professions”</td>
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ASHA and State of New Mexico Continuing Education Units sponsored by UNM


Facility Modifications
Most of the main facility was painted inside.

2. Significant plans and recommendations for the near future.
   a. Ken Frandsen, Associate Dean of Arts and Sciences, will serve as Interim Chair of the Department from August, 1998 through May, 1999.
   b. A new Chair of the Department will be elected in Spring, 1999.
   c. Complete paperwork for return of Barbara Rodriguez to the Department.
   d. Complete search for new Audiology faculty member.

3. Appointments to staff.
   a. Nadynne Myers, Director of the UNM Speech-Language Hearing Center, 7/29/97
   b. Elaine Smith joined the Department on loan from Albuquerque Public Schools, 8/18/97

4. Separations from staff.
   a. Andrea Billey, Director of the Audiology Clinic, 9/19/97
   b. Deborah Detorie, Visiting Assistant Professor and Director of the UNM Speech-Language Center, 7/31/97
   c. Susan Karasik-Rush, Audiologist, funded through UNMH, 4/10/98
   d. Anita Kessler, Administrative Assistant, 6/5/98

5. Publications of the division; publications of individual faculty/staff.


6. **Outside professional activities of staff members.**

   **Presentations**


Professional Memberships and Leaderships


e. Blaker, K., Member, Membership Committee, New Mexico Speech, Language and Hearing Association.

f. Blaker, K., Member, Training and Recruitment Committee, New Mexico Speech, Language and Hearing Association.

g. Blaker, K., Preceptor, Allied Health Interdisciplinary Program.

h. Blaker, K., Director, Mexico City Augmentative Communication Clinic, Comunidad Crecer, Mexico City, July, 1997.

i. Finn, P., Reviewer, Journal of Speech and Hearing Research.

j. Finn, P., Reviewer, American Journal of Speech-Language Pathology.

k. Myers, N., Participant, Project Access, The State of New Mexico, Department of Education.


m. Oelschlaeger, M., Board Member, Albuquerque Stroke Club.

o. Oelschlaeger, M., The University of New Mexico Research Opportunity Program.

p. Parent, T., Board Member, Audiology Foundation of America.

q. Patterson, J., Faculty Mentor, The University of New Mexico Research Opportunity Program.

r. Riensche, L.L., Participant, Project Access, The State of New Mexico Department of Education.

s. Soto-Gomez, Y., Team member of the Unified Education System inclusive classrooms.

Longfellow Elementary, Albuquerque, NM.

t. Soto-Gomez, Y., Member, Bilingual Committee, Longfellow Elementary School, Albuquerque, NM.

u. Soto-Gomez, Y., Member, Technology Team, Longfellow Elementary School, Albuquerque, NM.

Continuing Education


g. Blaker, K., Attended the Southwest Conference on Communicative Disorders, presented by the UNM Chapter of the National Student Speech, Language and Hearing Association, Albuquerque, NM, March, 1998.


i. Finn, P., Attended the Southwest Conference on Communicative Disorders, presented by the UNM Chapter of the National Student Speech, Language, and Hearing Association, Albuquerque, March, 1998.


u. Patterson, J., Attended the Southwest Conference on Communicative Disorders, presented by the UNM Chapter of the National Student Speech, Language, and Hearing Association, Albuquerque, March, 1998.


Individual and Program Affiliations

a. Academy of Dispensing Audiologists
b. Acoustical Society of America
c. American Academy of Audiology
d. American Association for Supervision and Curriculum Development
e. American Speech-Language-Hearing Association
f. Association for Research in Otolaryngology
g. Audiology Foundation of American
h. International Fluency Association
i. Fluency Special Interest Division of the American Speech-Language-Hearing Association
j. Partners of the Americas
k. SERTOMA Club of Albuquerque
l. The New Mexico Speech, Language, and Hearing Association

Internal Fundings

Finn, Patrick, “Evaluation of a Treatment for Adults with Chronic Stuttering”, UNM Research Allocation Committee Grant, $2,403.
7. **Outside sponsored research and training.**
   
a. Maternal and Child Health Interdisciplinary Leadership Training Program, .50 FTE of Pat Osbourn’s salary for service as a clinical supervisor to our program from July 1, 1997 through June 30, 1998. Funds were directed through the University Affiliated Program. ($24,000). Assistantships for 3 graduate students were also included.

b. Riensche, Linda, UNM-APS Collaborative Program in Speech-Language Pathology. ($93,317 + 4 professional staff).

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**Honors**

(An incomplete listing)

**Undergraduate Students**

a. Miller, Jessica Jo, graduated Magna cum laude

b. Poe, Shannon Louise, graduated Summa cum laude

c. Poe, Shannon Louise, Claude Outstanding Senior Award

d. Poe, Shannon Louise, Who’s Who in American Colleges and Universities

e. Poe, Shannon Louise, Phi Eta Sigma

f. Poe, Shannon Louise, Phi Kappa Phi

g. Poe, Shannon Louise, Mortar Board

h. Poe, Shannon Louise, National Honor Societies

i. Sanger, Robbyn, Excel Scholarship

j. Sanger, Robbyn, Golden Key National Honor Society

k. Varner, Dabney Malone, Golden Key National Honor Society

l. Varner, Dabney Malone, Phi Beta Kappa
Graduate Students

a. Anaya, Christina Marie, National Hispanic Foundation Scholarship
b. Anaya, Christina Marie, Sunshine Brook Foundation Scholarship
c. Anaya, Christina Marie, MANA de Albuquerque Scholarship
d. Brown, Kathleen, Veterans Administration Medical Center Traineeship
e. Butler, Melissa Gail, Project Hozho
f. Kubala, Rachel, Research, Project and Travel Grant (Office of Graduate Studies)
g. Kubala, Rachel, Phi Beta Kappa
h. Merrett, Stephanie, Interdisciplinary Health Care Grant for Rural Areas-Roswell
i. Sanchez, Andrea Ray, Outstanding Pass, Comprehensive Issues Paper
j. Kloer, Sylvia Sarmiento, UNM/Comunidad Crecer Program, Mexico City
k. Spencer, Feizi, Project Hozho
l. Spencer, Feizi, Interdisciplinary Health Care Grant for Rural Areas-Farmington
m. Spencer, Feizi, Outstanding Pass-Comprehensive Issues Paper
n. Tucker, Craig, Treasurer, UNM Chapter, National Student Speech, Language and Hearing Association
o. Tucker, Craig, Interdisciplinary Health Care Grant for Rural Areas-Silver City
p. Weidner, Kathleen, Vice President, UNM Chapter, National Student Speech, Language and Hearing Association

Faculty

a. Parent, Tabitha, Teacher of the Year
b. Elynn Cowden (Part Time Instructor), Teacher of the Year
Appendices

Program Inquiries

In previous reports, we have included a listing of the number of program inquiries. This section is being discontinued because e-mail and internet inquiries have replaced much of our mailings.

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Percentile Scores on CCC (National) Examination* by Semester of Exam Taken.

**Summer 96 = SLP = 580, 630, 660, 680, 690, 710, 730, 740, 750, 770, 780**
Mean = 706
AUD = 630
Mean = 630

**Fall 97 = SLP = 650, 710, 730, 740, 750**
Mean = 716
AUD = 640
Mean = 640

**Spring 98 = SLP = 600, 600, 610, 650, 680, 690**
Mean = 638**
AUD = 600, 640
Mean = 620

SLP Mean for 1997-98 = 690
Aud Mean for 1997-98 = 628

*The procedures for reporting scores on the national examination changed for Fall, 1993 with the result being that percentiles were no longer reported. However, according to p. 17 of the May 1994 copy of the American Speech-Language-Hearing Association Journal, “NESPA exams are designed and administered by the Educational Testing Service. The average score is 600. Between 1988 and 1991, 26% of speech-language pathology examinees and 22% of audiology examinees failed. In that same time period, students scored a mean of 625 in speech-language pathology and 652 in audiology.” Note also that on a national basis, the distributions of scores for the audiology and the speech-language pathology exams are different, with the audiology exam having scores distributed lower than the speech-language pathology exam scores.

**Note that the testing conditions under which this group took the exam were noisy and undoubtedly effected the level of performance. The students who took the exam at this time petitioned the organization who administers the test and were granted the opportunity to retake the test at no cost if any of them had failed it.
## Enrollment Statistics

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**Department Total Enrollment**: 136

**Total Hours**: 495
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Dept. Total Enrollment 640 1,975
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SUMMER 1997

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FALL 1997

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SPRING 1998

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ANNUAL TOTAL FOR SPEECH-LANGUAGE PATHOLOGY = 12,891:12
Audiology Clinic

The Audiology Clinic changed their method of reporting statistics. For this reason, some of the statistics were unavailable.

Diagnostic Evaluations (Number of appointments based on an average of one hour each):

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<th>Sep</th>
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<th>Jan</th>
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Newborn Screens (Number of baby screens):

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Other Hearing Screens:

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Hearing Aids fit (Number of Hearing Aids Sold):

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Annual Report
Women Studies Program, College of Arts and Sciences
July 1, 1997 - June 30, 1998

Prepared by Shane Phelan, Director

Staff
Shane Phelan, Associate Professor of Political Science, served as director for AY 1997-98 and summer 1998. Her appointment was a half-time buyout, with no teaching time scheduled for WS. In spring 1998 she cross-listed her P.S. 463 course as WS 479, Gender, Sexuality, and Politics.

Both core faculty, Teresa Cordova and Gordene MacKenzie, left the program at the end of AY 1996-97, so all courses were offered by part-time instructors (including faculty in other departments teaching on buyouts) and graduate students. A plan was submitted to the dean and the provost to address our faculty shortage through splitting existing lines and hiring to compensate departments, but no action was taken this year. We hope that the next few years will see the return of regular appointments in Women Studies.

Carmen Salazar Lowhar, Sheena Malhotra, Diane Prindeville, and Monica Torres were hired as graduate assistants in the program for the academic year. Each GA taught one course during the year and served as undergraduate advisor and in other capacities during the other semester. This proved to be less than optimal, as students faced a different advisor each semester. For the 1998-99 year, we have hired Jill Heine for 5 hrs./wk as advisor.

Bessie Gallegos-Torrez continued as Administrative Assistant. Adriana Nieto was our work-study student.

The Executive Committee consisted of Susan Dever, Media Arts; Kimberle Lopez, Spanish and Portuguese; and Joni Young, Anderson School of Management. The committee advises the director on budget, hiring, and curriculum, as well as program and event planning. The Women Studies Alliance formed in spring 1997 was found to be too large to get work done, and so we returned to the earlier format. We began to look at fundraising, and several people have volunteered to begin work next year.

Instructional Activities
The program has approximately 160 minors at present. The graduate assistants served as advisors for the minors, with the director's assistance. 16 minors graduated in spring 1998, and ceremony and reception was held for them on May 15, 1998.

A proposal for a major has passed the College of Arts and Sciences, and will be before the Faculty Senate and its committees in the fall.

The program's enrollments were slightly down from last year. In fall we had 245 (169 in WS classes and 76 in cross-listed courses); in spring 231 (204 in WS and 27 in cross-listed classes).
Courses taught were as follows:

**Fall 1997:**
WS 200, Women in Contemporary Society - Carmen Salazar; WS 231, Chicana Studies - Monica Torres; WS 324, Contemporary Feminist Theory - Karen Foss, Communication and Journalism (buyout); WS 331, Third World Women - Rinita Mazumdar; WS 339, Women and Cultural Violence - Cara Marianna; WS 379.001, Mad Women - Ann Skinner-Jones; WS 379.003, Stress Banishment - Maya Sutton; WS 379.004, Women and Solitude - Nancy Uscher; WS 379.004, Women and Social Change - Jill Heine. In addition, 12 other courses were cross-listed from other departments.

**Spring 1998:**
WS 200, Women in Contemporary Society - Maisha Baton; WS 234, Black Women Writers - Doris Fields; WS 322, Race, Class, and Feminism - Rinita Mazumdar; WS 335, Lesbian Culture and Politics - Katherine Greyson; WS 339, Women and Cultural Violence - Cara Marianna; WS 357, Media Arts and Women - Ann Skinner-Jones; WS 379.002, French Women Writers - Deborah Jenson (buyout); WS 379.003, Women's Health - Cheryl Learn (buyout); WS 379.004, Women and Science - Diane Marshall (buyout); WS 379.005, Native American Women Writers - Jami Hacker; WS 379.006, Nationalism, Gender, and Sexuality in Totalitarian Regimes, Aurora Morcillo; WS 379.007, Third World Women and Environmental Organizing - Diane Prindeville; WS 379.008, Women, Art, and Culture - Kathryn Sorrells; WS 379.009, Gender Issues in TV and Film - Sheena Malhotra; WS 392, Senior Seminar - Gail Houston (buyout). In addition, 9 other courses were cross-listed.

In addition, many courses offered in other departments and colleges were cross-listed by WS.

**Program Activities**
This year's activities focused on bringing feminist scholars from other units back into Women Studies. In the spring semester Linda Nicholson, an internationally known feminist theorist, visited for a week. She presented a public lecture, spoke to a class, and facilitated a faculty seminar on the future of feminist theory. All of the events had strong turnout, with approximately 30 faculty at the seminar and 100 faculty and students at the lecture. We hope to be able to invite a major speaker for such an event each year. We had several other speakers, on topics ranging from feminist art history to the situation in Bosnia.

Women Studies joined with the Women's Resource Center to honor four New Mexican women for International Women's Day in March. We had a luncheon with approximately 200 attendees, and honored Ann Nihlen, Doris Fields, Martha Trolin, and Nancy Eleffson. Jane Slaughter spoke on the theme of “women making history.” This was especially significant because relations between the WRC and Women Studies have been tense for the last few years. This atmosphere is changing, as the director of WS and Juba Clayton, director of WRC, have been meeting regularly. We hope next year to strengthen this bond through a joint committee to plan and organize the luncheon, and eventually to engage in joint projects that will develop students' research skills by working on WRC studies.

Shane Phelan and Ann Nihlen, a former director and now Associate Professor of Education, began
an oral history of the program. They are involving several graduate students from many units in this project. This project is beginning with the founding period of 1969-75, and completion is expected to take five years. We are seeking grants to help us with transcription and other costs. We plan to present findings from the first phase at the National Women's Studies Association meeting in June 1999.

The NWSA meeting will be held in Albuquerque in June 1999. This will be an excellent chance to showcase feminist scholarship at UNM, as well as involving our students in the larger world of feminist studies. During 1998-99 we will have committees working with NWSA leadership to organize local events.

The program published a newsletter in the spring. This went to all departments, advisors, and administrators at UNM; to the Women Studies Associates, a list or affiliated faculty on campus; and to Women Studies programs around the country.

In addition, the Feminist Research Institute continued its work with graduate students and faculty. Jane Slaughter, Associate Professor of History, served as director. Tresa Thomas was the graduate assistant. The Visiting Scholars for the spring semester 1998 were Nancy Huse, from Augustana College, and Robin Goodman, a recent graduate of New York University. Each gave colloquia based on their work, and they hosted a writing and reading group for faculty and graduate students. The Institute also initiated a competition for best graduate paper in feminist studies. Three small grants for summer research were awarded. Last year's recipients, Judith Bennahum (Theater and Dance), Susanne Baackmann (Foreign Languages and Literatures) and Lonna Atkeson (Political Science), each gave talks based on their research during the fall 1997 semester. The Institute continued to offer workshops for graduate students on MIDAS funding, publication, and other topics.

Publications and Professional Activities
Although we did not have tenure-stream faculty this year, we had extensive participation in professional activities. Shane Phelan presented papers at the American Political Science Association convention, September 1997, the Western Political Science Association convention, March 1998, and the conference on Gender, Sexuality, and the Law at Keele University, June 1998. She also gave a talk, "Bodies, Passions, and Citizenship" at the University of Colorado in November 1997 and at UNM in January 1998. She was a plenary speaker at the National Women's Studies Association convention in June 1998. Her article, "The Re-Closeting of Butch Lesbians in Mainstream Political Discourse," was published in Butch/Femme: Inside Lesbian Gender, edited by Sally Munt (Cassell, 1998). She signed a contract for her book, *Queer Citizenship*, with Temple University Press. She served as a section organizer for the 1998 Western Political Science Association convention.

Our graduate students were very active. Diane Prindeville presented two papers at the Western Political Science Association convention. She published "Indigenous Women Activists and Political Participation: The Case of Environmental Justice" (with John Bretting) in *Women and Politics* 19/1. She anticipates completion of her dissertation this summer, and has accepted a tenure-stream position at New Mexico State University.

Carmen Salazar Lowhar co-chaired a panel at the American Counseling Association World Conference, March 1998. She received a research award from the Association for Counselor Education and Supervision, a division of ACA.


Monica Torres presented papers at the UNM American Studies Colloquium, the UNM Native American Research Caucus, the New Mexico Women Studies Conference, March 1998, and the California/Rocky Mountain American Studies Association meetings.

Bessie Gallegos-Torrez, Monica Torres, Sheena Malhotra, and Adriana Nieto attended the New Mexico Women Studies Association, where Monica Torres and Sheena Malhotra gave papers. Bessie and Adriana are Women Studies minors as well as staff, and have participated regularly in program activities.
Feminist Research Institute
Annual Report, 1997-98

As we begin our third of activity, I believe that we have developed a more efficient and regular structure for the Institute, and that our presence on campus is now firmly established. The following remarks describe the Institute’s activities for the last year, and preview future plans and goals.

Administration
Our board consisted of faculty from the colleges of Arts and Sciences, Fine Arts and Education. Jane Slaughter (History) directed the Institute and Tresa Thomas (graduate student in Anthropology) was the administrative assistant. For the following year, the Board voted to retain Slaughter and Thomas. We will be seeking new Board members and hope to include faculty from colleges and departments not already represented.

Sponsored Lectures
Fall 1997 former recipients of our small grants presented research lectures. Susanne Baackmann (Modern Languages and Literature) (with recent graduate of the College of Architecture and Planning, Naama Ferstenfeld) spoke on "Locating Memory: Of Bodies and Memorials," and Lonna Atkeson (Political Science) on "Thinking and Discussing Politics: The Role of Gender." In the Spring semester Judith Chazen-Bennahum gave a research talk on the history of gender and dance, entitled, "Women of Faint Heart and Steel Toes." Additionally our Visiting Scholars also presented lectures reflecting their past and current research projects. (See below.)

Visiting Scholars
Our visiting scholars for Spring 1998 were Robin Goodman (New York University, Comparative Literature), and Nancy Huse (Director, Women's Studies Program and Department of English, Augustana College). Goodman, who recently received her Ph.D. from N.Y.U., presented a portion of her dissertation research in "Explosion of Savage Instinct: Paiakan's Dessert," and talked about her current project in "Freud's Equipment." Huse, a senior scholar whose current project is gender, authorship and children's literature, gave a lecture, "Making Up (for) History: Children's Books and Women's Agency." Both scholars also met with various faculty members and created a reading/writing group that was most beneficial to graduate students from a variety of departments. This year we were able to offer "free" housing to the scholars in one of the university owned houses on campus. Because of this arrangement the scholars were able to meet with students and faculty at their residence, and, of course, were able to take advantage of campus facilities and activities in the fullest sense. It is my hope we can continue such an arrangement in the future as it makes our positions even more attractive to outside scholars, and the time they spend here even more productive.
Small Research Grants

The following individuals were the recipients of small grants ($700 each) to support new research projects: Melissa Bokovoy (History) for study of gender, national identity and memory of World War I in the Kingdom of Yugoslavia; Dorothy Chansky (Theatre Arts) for oral histories of audiences of CCC theatre, and Shane Phelan/Ann Nihlen (Women Studies) for their oral history of the Women Studies program at UNM. We look forward to hearing preliminary reports of their research during the 1998-99 academic year.

Graduate Student Activities

One of the goals of the Institute is to support graduate students engaged in feminist scholarship and to help build networks among these individuals. Our administrative assistant, Tresa Thomas, has been most diligent and effective in these efforts. During the year workshops were organized dealing with such topics as: how to get published, information on funding sources and grant writing, and how to use library electronic sources. Additionally, a Graduate Student Advisory Board was created, they sponsored two well-attended end-of-semester potlucks, and established a Graduate Student Essay prize that this spring was awarded to Debbie Boehm (graduate student in Anthropology and Latin American Studies) for her essay "Gendered Borderlands: The Articulation of Ethnicity and Gender in New Mexico." In 1998-99 the Institute will sponsor a series of working papers of graduate student research -- a proposal that came from Thomas and the Advisory Board.

The Future

Next year, in addition to continuing the activities just described we would like to update our brochure, establish faculty research interest groups, and develop programs to encourage and support faculty grant applications.

Submitted by Jane Slaughter