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ANNUAL REPORTS
1982-83

VOLUME I

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UNIVERSITY OF NEW MEXICO

WOMEN'S ATHLETICS

YEAR END REPORT
1982-83

PAT TRAINOR
SPORTS INFORMATION DIRECTOR

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SUMMARY OF THE PROGRAM

The 1982-83 athletic year could best be characterized as a vintage year for the women, and their first complete season under the auspices of the NCAA. It was also a neophite year for the High Country Athletic Conference, with Women's Athletic Director, Linda Estes, serving as President, and Assistant Women's Athletic Director, Judy Ray, serving as the first Executive Secretary.

HCAC Championships were held in eight sports: basketball, cross-country, golf, softball, swimming, tennis, track & field and volleyball. The Conference membership received automatic qualification which allowed the Conference victor's in basketball, softball and volleyball to advance to their respective NCAA Championships. Thus, these three sports' performances throughout the season took on a great deal of importance with much at stake. Later in the year, however, the University of Wyoming discontinued their softball program, thus nullifying the automatic berth in this sport for the 1983 season.

The HCAC inaugurated the High Point Trophy which was based on points awarded to each team in correlation with their Conference finish. Thus, the results enabled a comparison of one school's total program to that of other member schools. BYU was the winner with 38 points out of a possible 48 points, but New Mexico (35.5) was a close second and only 2½ points short. UNM's Women's golf and softball teams were Conference Champions; and, not one other team finished lower than fourth place in a championship. Altogether

UNM had 25 women athletes that were selected to be members of their respective All-Conference Teams. Three other young women received Honorable Mention.

The members of HCAC took further strides this year in establishing itself as a respectable and prominent Conference. The membership hired a full-time Executive Director. Her responsibilities will be to facilitate and coordinate all Conference business and dealings.

Five UNM teams qualified to participate in NCAA Championships. The first was skiing. The NCAA conducted their first coed championship by combining the men's and women's ski results to determine the champion. This experiment was very successful and could set a presidence for other sports in the future. The ski team outdid themselves...they placed sixth nationally, had a total of six All-Americans, five of which were women, and three National Champions, all women.

In the spring, the women's golf team qualified to attend Nationals. Hopes were high that this year the Lobo's would break into the top five. The team was disappointed in their play as they finished 12th. The program, however, is still one of the best in the country and there is always next year.

Two days after the completion of the NCAA Golf Championship, softball Coach Susan Craig received word that the Lobo's had been selected for the NCAA Play-Offs. The team was to play a three game series with third ranked Cal-State Fullerton in California. The Lobo's did well against a more experienced team, which continued through the bracket to eventually take second place nationally.

The women trackster's were the next to leave. Four women had qualified in their respective events. Three of the ladies set personal records, while one placed 11th nationally during the Championships.

The women's swim team had four individuals that qualified for the NCAA Championships. One person had qualified for several individual events, as well as, was a member of the medley team. This person, however, was a transfer student, so therefore was ineligible to compete at the Championship this year. All of these women will be back on the swim squad next year. Hopes are high that they will be representing UNM at the 1983-84 NCAA Swimming and Diving Championships.

As the coaches were preparing their teams for Championships, the UNM Women's Athletic Staff was preparing to host the NCAA Division I Women's National Tennis Championships at the Lobo Tennis Club. This was a major undertaking for the Department and required hundreds of hours of planning and the assistance of several hundred people from the Albuquerque tennis community. At the end of the nine day affair, the longest tournament conducted by the NCAA, it was determined that the Championship was a huge success. The news coverage of the event was trememdous and the finals were televised three times by ESPN. Albuquerque and UNM received a great deal of publicity from the venture.

Earlier in the semester the Department had sponsored an international volleyball exhibition match between the USA and Japanese National Women's Teams. This afforded the people of Albuquerque a look at two teams that had already qualified for the 1984 Olympics.

This was the third time such an event had been conducted by the Department and again attendance records were broken for people viewing a women's athletic event.

The women's athletic personnel continue to be involved on the national level. Linda Estes is serving on several NCAA national committees and is always striving to improve the world of athletics for women. Likewise, several coaches are members of national committees, providing leadership within their sports organizations. The entire staff and athletes were heavily involved this past year in conducting clinics within the city and throughout the state. The coaches feel a deep commitment to assist coaches and athletes at all levels in developing the best athletic programs possible for New Mexico.

Many goals were reached this year by women's athletics, but new ones have already been set for 1983-84. UNM women's athletics is a quality program that is continuously striving for excellence in its achievements.

COACH'S RECORDS
SUMMARY

SPORT	COACH ASST. COACH	YRS. AT UNM	SEASON RECORD	UNM RECORD	CAREER RECORD	CONFERENCE FINISH	NATIONAL FINISH
Basketball	Doug Hoselton Frankie Walsh	3 2	14-11	36-49	36-49	4th	-
Golf	Barbara Berry	1	No way to compute win-loss record			1st	12th
Gymnastics	Pete Longdon	1	13-13	13-13	13-13	NA	1 Qualified
Skiing	George Brooks Klaus Weber	13 8	No way to compute win-loss record (Six All-Americans)			NA	6th
Softball	Susan Craig Ken Johnson	6 4	35-16	160-136-1	160-136-1	1st	9th
Swimming	Bill Spahn Eric Jones	2 6	No way to compute win-loss record			3rd	4 qualified
Tennis	Helen Horn	2	18-12	28-27	28-27	3rd	-
Track/ Cross Country	Mike MacEachen Nancy Gavoor	1 1	No way to compute win-loss record			2nd 4th	4 Qualified 1 Scored
Volleyball	Mike Hebert Gwen Abram	3 1	21-20	60-57	187-109	2nd	-

ADMINISTRATIVE PERSONNEL-WOMEN'S ATHLETICS

Athletic Director-Linda Estes - 13 years

Assistant AD-Dr. Judith Ray - 3 years

Sports Information Director-Dr. Pat Trainor - 1½ years

8 BASKETBALL

The women's basketball team had a successful season under the leadership of third year Coach Doug Hoselton and Assistant Coach Frances Walsh. The team finished with an overall record of 14 wins and 11 losses. The Lobos' record in the High Country Athletic Conference was 4-6, placing them fourth in the six school conference.

The Lobos came out roaring during the first half of the season, compiling a 7-4 stat record. The last half of the season, however, found the Lobos playing teams with more experience and height. The women played well, but it was an uphill battle to finish the last half with a 6-6 tally.

There were some bright shining stars during the year. Sophomore Alison Foote (Farmington, NM) was the stabilizing force for the team throughout the regular season of play and broke almost every school record. She averaged 20 points per game with 8.6 rebounds, was shooting 75% from the free throw line and was nationally ranked in that category by the NCAA. Alison was rewarded for her efforts by being selected as a First Team All-Conference Player in the High Country Athletic Conference and received her team's Most Valuable Player Award. Senior Debie Leeper (Albuquerque, NM) was another player who could be counted on when the going got though. She led the team in rebounds, averaging 10 per game. This was perhaps her best of 2 years while playing for the Lobos, and she received the team's Rebounding Award. Debie and senior Sally Marquez (Albuquerque, NM) were selected to the HCAC Honorable Mention list for 1982-83, as well as Sally received the team's Defensive Player Award.

The team loses seniors Debie Leeper and Sally Marquez.

Basketball
1982-83 Results

OPPONENT	OWN SCORE	OPPONENT SCORE	SITE	SEASON RECORD	CONF. RECORD
Texas El Paso	81 (W)	54	H	1-0	
Missouri	57 (L)	102	1	1-1	
Colorado College	91 (W)	53	1	2-1	
Colorado College	71 (W)	55	1	3-1	
Northern Arizona	74 (W)	52	H	4-1	
Rice University	86 (W)	72	H	5-1	
Eastern Washington	64 (L)	73	A	5-2	
Washington State	61 (L)	68	A	5-3	
Oregon State	53 (L)	77	2	5-4	
N.M. Highlands University	87 (W)	49	H	6-4	
Northern Arizona	70 (W)	60	A	7-4	
Utah	62 (L)	72	H	7-5	0-1
Brigham Young	83 (L)	85	H	7-6	0-2
West Texas State	91 (W)	61	H	8-6	
New Mexico State	81 (W)	73	H	9-6	1-2
Wyoming	72 (L)	76	A	9-7	1-3
Colorado State	57 (L)	70	A	9-8	1-4
Trinidad	111 (W)	41	H	10-8	
Brigham Young	61 (L)	100	A	10-9	1-5
Utah	58 (L)	71	A	10-10	
UTEP	67 (L)	51	A	11-10	1-6
NMSU	69 (W)	61	A	12-10	2-6
Wyoming	56 (W)	55	H	13-10	3-6
Colorado State	68 (W)	61	H	14-10	4-6
University of Victoria	58 (L)	72	H	14-11	

OVERALL RECORD: 14-11
HOME: 9-2
AWAY: 3-8
NEUTRAL: 2-1

HACA OVERALL: 4-6
HOME: 3-2
AWAY: 1-4

NEUTRAL SITES (Arena, City, State)

1. Queens Classic-Wayland Baptist-Plainview, TX
2. Nike Tournament-Oregon State-Corballis, OR

1982-83 WOMEN'S BASKETBALL ROSTER

NO.	NAME	HT.	CL.	POS.	HOMETOWN
40	Sally Anderson	5'10"	So.	F	Pittsburgh, PA
25	Marge Brinkman	5'4"	Jr.	G	Ocean City, NJ
15	Betsy Collins	6'1"	So.	C	Provo, UT
42	Alison Foote	5'11"	so.	F	Farmington, NM
12	Winnie Foster	5'10"	Fr.	F	Aurora, CO
20	Debie Leeper	5'10"	Sr.	F	Albuquerque, NM
11	Danene Manning	5'5"	Fr.	G	Kirtland, NM
14	Sally Marquez	5'6"	Sr.	G	Albuquerque, NM
50	Yvonne McKinnon	6'1"	Sr.	C	Aurora, CO
21	Muff Reinert	6'1"	Sr.	F	Bellingham, WA
22	Trish Shoemaker	5'7"	Fr.	G	Albuquerque, NM
35	Kathy Trujillo	5'4"	So.	G	Albuquerque, NM

GOLF

At the conclusion of last year, seven year coach Henry Sandles resigned his position to become the assistant director of golf courses for the University of New Mexico. A past Lobo competitor, Barbara Berry, and a two-year assistant to Henry, took his place. The transition was smooth, with the team doing what they do best...playing championship golf.

The word that has come to best describe the UNM Lobo women's golf team is "excellence." The team performed well throughout the year, never finishing below the ninth position out of the eight regular season tournaments. The Lobos were always ranked in the top 15 in the nation.

The team came off the tees at the BYU Invitational like there was no tomorrow, taking first place honors. Dana Howe (Colorado Springs, CO) and Sue Sanders (Salem, OR) tied for medalist honors. The Stanford Invitational was a heartbreaker, with the Lobos as defending champs taking second place. Prior to the Conference Championship, the national rankings placed BYU ahead of UNM. When all was said and done, however, the Lobos carried off the title once again, with Dana Howe in first place, Sue Sanders second, Kristi Arrington (El Paso, TX) third and Theresa Schreck (Spokane, WA) fifth. They beat BYU by 16 strokes and ended the Cougars' hopes of qualifying for the NCAA Championship.

When the NCAA's final rankings came out, UNM had moved from 12th to 8th position. The team packed their bags for Georgia, where they eventually finished in 12th position. Four Lobos were named to the HCAC Conference Team: Dana Howe; Sue Sanders; Kristi Arrington, and Theresa Schreck. Schreck also received her team's MVP Award, while Dana Howe received the Leadership Award. The team loses seniors Howe, Sanders and Sherri Chandler (Carlsbad, NM).

Although Dana Howe has finished her eligibility, she has received a Letterman's Scholarship and will assist Coach Berry next year.

UNM WOMEN'S GOLF TEAM RESULTS 1982-83

TOURNAMENT	TEAM FINISH	INDIVIDUAL PLAYERS
Brigham Young University Invitational Provo, Utah	1st 889	Dana Howe, T1st - 221 Sue Sanders, T1st - 221 Theresa Schreck, 5th - 225 Sherri Chandler, 6th - 226 Debbie Wright, 12th - 232
Dick McGuire Invitational Albuquerque, NM	4th 959	Theresa Schreck, 14th - 238 Sherri Chandler - 239 Sue Sanders - 239 Dana Howe - 244 Kristi Arrington - 247
Nancy Lopez Invitational Tulsa, Oklahoma	8th 963	Dana Howe 11th - 231 Theresa Schreck - 242 Kristi Arrington - 247 Sue Sanders - 248 Debbie Wright - 252
Stanford Invitational Palo Alto, CA	2nd 929	Sue Sanders 3rd - 227 Theresa Schreck 7th - 232 Dana Howe 14th - 234 Sherri Chandler - 236
Blue Bonnet Bowl Invitational Houston, TX	7th 214	Dana Howe Sue Sanders
Lady Gator Invitational Gainesville, FL	4th 621	Theresa Schreck 8th - 153 Sue Sanders 14th - 155 Sherri Chandler - 158 Kristi Arrington - 160 Dana Howe - 163
Betsy Rawls Austin, TX	9th 921	Debbie Wright - 229 Theresa Schreck - 232 Dana Howe - 233 Sue Sanders - 235 Sherri Chandler - 239
Lady Mustang Roundup Dallas, TX	6th 966	Theresa Schreck T3rd - 236 Sue Sanders - 245 Debbie Wright - 246 Kristi Arrington - 247 Sherri Chandler - 247

Lady Sun Devil	5th	
Conference Championships	1st 926	Dana Howe, 1st - 229 Sue Sanders, 2nd - 231
Albuquerque, NM		Kristi Arrington, 3rd - 232 Theresa Schreck, 5th - 235 Debbie Wright, 9th - 238
NCAA Championships	12th 1242	Theresa Schreck, 17th - 303 Sue Sanders - 312
Athens, GA		Dana Howe - 313 Kristi Arrington - 316 Sherri Chandler - 340

1982-83 WOMEN'S GOLF ROSTER

NAME	CLASS	AGE	HOMETOWN
Sherri Chandler	Sr.	23	Carlsbad, NM
Sarah Hindi	Sr. (did not play due to injury	21	Albuquerque, NM
Dana Howe	Sr.	21	Colorado Springs, CO
Carolyn Barnett	Jr.	20	Appleton, WI
Sue Sanders	Jr.	21	Salem, OR
Christine Smith	Jr.	20	Casper, WYO
Debbie Wright	Jr.	19	Albuquerque, NM
Kristi Arrington	So.	18	El Paso, TX
Lucy Castaneda	So.	20	Tijeras, NM
Theresa Schreck	So.	19	Spokane, WA

GYMNASTICS

This year the women's gymnastics team and first year coach Pete Longdon started out with great hopes and expectations. The nickname of "Lobo Pride" was adopted to emphasize the new team concept and the attitude which had been assumed by the women gymnasts. The 1982-83 team was capable of a higher skill level than any previous Lobo team.

During the early part of the competitive season, the "Pride" broke into the Top 10 nationally, being ranked 8th in the nation. With continued improvement and progressively higher scoring, the team was able to compete with the best teams in the country. Then tragedy, in the form of a rash of injuries began to take their toll.

The "Pride" lost the use of 5 All-Around gymnasts to injuries, thus halting nearly all hope for national competition. Even the one all-arounder who qualified for the NCAA National Championships as an individual could not attend because of an injury which occurred one week before the regional qualifying meet.

Much has been learned from this year's misfortunes. Amends will be made...look for the women to be better than ever this year. The "Pride" will return.

This year's MVP Award went to Antoinette Gonzales (Houston, TX); and the Coaches Award was received by Lisa Fuller (Lakewood, CA). The team loses only one senior, Natasha Strelkoff (Beverly Hills, CA).

GYMNASTICS SUMMARY, 1982-83

OVERALL RECORD: 13-13

DATE	OPPONENT	UNM SCORE	OPP SCORE	LOBO VAULT	OPP VAULT	LOBO BARS	OPP BARS	LOBO BEAM	OPP BEAM	LOBO FLOOR	OPP FLOOR
12/10	Rocky Mt. Open	170.60		40.30		42.45		43.90		43.95	
	Denver U.		169.40		42.45		42.55		42.75		41.65
	BYU		168.90		42.30		42.20		42.20		42.20
	Nebraska		168.80		42.30		42.15		40.70		43.65
	Air Force		164.00		42.65		40.85		38.70		41.80
	Northern Colorado		162.85		41.30		40.40		38.85		42.30
	Southern Colorado		148.65		39.15		30.50		39.55		39.45
	Ft. Hays St. U.		143.70		38.65		33.30		34.00		37.75
1/14	U. of Pittsburgh	154.95	163.70	41.75	42.90	41.30	41.50	38.50	39.20	33.40	40.1
	Michigan	154.95	155.45	41.75	42.95	41.3	38.05	38.50	35.25	33.40	39.20
	Maryland	154.95	157.15	41.75	42.75	41.3	37.40	38.5	38.30	33.40	38.70
1/18	West Virginia	169.95	169.30	43.50	43.60	40.85	42.10	38.65	40.60	42.95	43.00
	Indiana Univ.	169.95	152.25	43.50	41.85	40.85	38.00	38.65	35.80	42.95	36.60
	Clarion	169.95	152.10	43.50	42.10	40.85	35.40	38.60	36.15	42.95	38.45
1/21	George Washington	165.15	126.30	43.10	27.55	39.25	27.55	41.55	31.95	41.25	31.95
	Maryland	165.15	161.20	43.10	43.05	39.25	39.35	41.55	40.20	41.25	38.60
1/29	Southern Colorado	174.90	161.15	44.55	41.35	43.30	40.55	42.15	39.55	44.90	39.70
2/1	Odessa Jr. College	178.10	126.45	44.70	33.20	45.35	30.05	43.20	31.60	44.85	31.60
2/10	Oklahoma State	174.35	178.80	43.90	44.25	43.65	45.70	42.10	43.35	44.70	45.45
2/11	Univ. of Oklahoma	174.60	177.70	42.80	44.45	44.25	44.40	43.40	43.65	44.15	45.20
2/18	UTEP	174.05	149.70	44.70	9.05	44.25	17.10	41.85	14.05	43.25	8.90
3/4	Brigham Young	140.40	176.50	35.20	44.35	35.65	43.10	34.25	44.40	35.30	44.50
3/26	NCAA Regionals	132.45		34.50		34.15		30.40		33.5	
	Teams										
	Arizona State		186.90		46.0		46.75		47.50		46.65
	Utah (NCAA National Champion)		185.55		46.60		46.85		45.65		46.45
	Brigham Young		175.55		43.65		4.35		43.60		43.95
	Utah State		174.35		44.65		45.05		84.65		43.30
	Arizona		169.85		43.20		42.65		40.95		43.05
	Boise State		166.30		43.95		41.10		40.75		40.45

1982-83 GYMNASTICS ROSTER

NAME	CLASS	EVENT	HOMETOWN
Natasha Strelkoff	Sr.	All-Around	Beverly Hills, Cal.
Lisa Fuller	Jr.	"	Lakewood, Cal.
Tracy Kwiatkowski	Jr.	"	Socorro, NM
Becky Murphy	Soph.	"	Albuquerque, NM
Chris Riser	Soph.	"	Albuquerque, NM
Cyndi Backman	Soph.	"	Lodi, Cal.
Aline Robinson	Soph.	"	Addison, Ill.
Antoinette Gonzales	Fr.	"	Houston, Tex.
Deneen Black	Fr.	"	Houston, Tex.
Martha Drummer	Fr.	V, Bm, FX	Los Alamos, NM

This was a "White Christmas" year for the men's and women's ski team. Not only did New Mexico have a record amount of snow, but the team had their best competitive season in the history of UNM Skiing!

The U.S.'s collegiate ski world is located in the western states, and UNM competes against these powers all season. They understood the task ahead of them, but also knew that there was a great deal of talent on this year's team with more depth than before. Of the five collegiate races, UNM never fell below third place with an average of 10 teams competing in the meets. The high point of the season was when UNM defeated the University of Wyoming, another first in UNM Ski history. The MVP Award, Alpine went to Jill Wahlqvist and the Cross Country MVP was Heidi Sorenson. The team's Most Consistent Skier Award winner was Sail Miettinen.

By the end of the season seven men and eight women had qualified to attend the NCAA championships and they qualified to compete as a team. For the first time ever, the NCAA conducted a coed Championship event, with the men's and women's scores being added together to determine the champion. The experiment was a complete success. At the conclusion of the alpine events UNM was in seventh place with Max Walqvist (Sweden) and sister Jill (Sweden) earning All-American status, Jill for the second year in a row. Then came the grueling cross country events. After the men's 15K and the women's 7K events, UNM was in sixth position. Coach Klaus Weber was so nervous about the relay he could hardly contain himself for he knew that, if all went well, the women's relay team had a chance of taking the event. Klaus' dream came true and UNM suddenly had three national champions in Heidi Sorenson (Norway), Wenche Hokholt (Norway) and Kjersti Stenberg (Norway). When all of the scores were tallied up the men placed eighth over-all and the women placed fourth in the nation. The combined scores proclaimed UNM to be the sixth highest ranked team in the country! As a result of their efforts, Jill Walqvist,

Heidi Sorenson, Wenche Hokholt, Kjersti Stenberg, Saila Miettinen (Finland), and Max Walqvist earned All-American status. What a way to finish off a great season!

1982 - 83
FINAL RESULTS
MEN & WOMEN SKI TEAMS

DATE	LOCATION	NUMBER OF TEAMS ALPINE/CROSS COUNTRY	PLACING	PLACING MEN/WOMEN
Jan. 7-8	Bozeman, MT.	10/10	3rd	4/3
Jan. 14-15	Salt Lake City, UT	9/9	3rd	5/3
Jan. 27-28	Laramie, WYO	7/7	3rd	5/3
Feb. 4-5	(UNM) Sandia Peak, Albuquerque, N.M.	8/7	2nd	4/2
Feb. 25-27	Boulder, CO	10/10	3rd	5/3
Mar. 9-12	NCAA Finals Bozeman, MT.	20/20	6th	8/4

SKI TEAM ROSTER
1982 - 83

WOMEN - ALPINE	HOMETOWN	YEAR
Lisa Dean	Seattle, WA	Jr.
Renee Farwig	Parkdale, OR	Jr.
Lisa Kimura	Syracuse, NY	Jr.
Saila Miettinen	Finland	Fr.
Tali Parman	Eau Claire, WIS	Sr.
Sherry Rue	Blaine, MN	So.
Jill Wahlqvist	Sweden	Sr.
Mia Wahlqvist	Sweden	Fr.

WOMEN - CROSS COUNTRY		
Christina SAndal	Sweden	Jr.
Gøril Skyttesater	Norway	So.
Heidi Sorenson	Norway	So.
Wenche Hokholt	Norway	Fr.
Kjersti Stenberg	Norway	So.
Sissel Trondseth	Norway	So.
Karen Wilson	Albany, NY	Fr.

MEN - ALPINE		
Richard Abruzzo	Albuquerque, NM	Fr.
Ross Collins	Tacoma, WA	Jr.
Billy Farwig	Parkdale, OR	Jr.
Guy Jackson	Albuquerque, NM	So.
Steve Maynard	Hancock, MASS	Sr.
Tony O'Brien	Houghton, MI	So.
Jim Raudenbust	Ruidoso, NM	Jr.
Patrick Rey	Switzerland	Fr.
Max Wahlqvist	Sweden	So.

MEN - CROSS COUNTRY		
Pekki Kemppi	Finland	Fr.
Tom Kirschgessner	Albuquerque, NM	Fr.
Bernie Saunder	Canada	Fr.
Vesa Suomalainen	Finland	Fr.

20

SOFTBALL

The UNM softball team forgot about last year's injury plagued season and adopted the motto "The Lobo's Are Back" and back they were! Prior to the season starting, Coaches Susan Craig and Ken Johnson could be heard saying that this was one of their most promising teams, but young and inexperienced.

The team came out swinging their bats like Babe Ruth. The Lobo's won a remarkable 14 games in a row and against some of the better teams in the country. They proved that they could hang in there when the going got tough and play as a team. Then mid-way through the season they hit a slump and lost five games in a row. The team's inability to pull out of this was their inexperience showing up, but they lived up to their motto during the Texas A & M Invite. Playing nationally ranked teams, the Lobo's came away with 5 wins and only 2 losses. The Lobo's then invited the three best softball teams in the nation to Albuquerque for a little fun. This would be a real test for the young Lobos. The high point was defeating Texas A & M, who was ranked number one in the nation and had the fastest collegiate pitcher on the mound. During this tournament, the coaches found out that Wyoming was to discontinue their softball program, thus the Conference champion would not receive an automatic berth to Nationals. Now, every ball game became more important so as to qualify for the Play-Offs.

The Lobo's chose the long way to run the bases at the Conference Championship. It was a double elimination format, with the Lobo's winning their first game, only to lose the second. They then came up through the losers bracket to defeat Northern Colorado twice and clinch the title. Sue Kragseth (St. Louis Park, MN), Allison Maney (Long Beach, CA), and Sue Inman (Midland, MI) were named to the All-Conference Team.

Then came the long wait to see if the team's record was good enough to qualify for the NCAA Play-Offs. They made it and were to play Cal State Fullerton there in a best of three games series. They played aggressively, splitting games with Fullerton and losing the third. They gave their all and should be very proud of their accomplishments.

Allison Maney received the team's Most Valuable Player Award this year, along with Sue Inman earning the Offensive Award, Claire Miller (Scottsdale, AZ) taking the Defensive Award, and Sheila Blonigan (Golden Valley, MN) capturing the Lobo Award.

SOFTBALL
1983 SCORES

		OPPONENT		W/L
UNM	1	Texas Tech	0	W
UNM	4	Texas Tech	0	W
UNM	4	Texas Tech	2	W
UNM	8	Highlands University	0	W
UNM	6	Highlands University	4	W
UNM	1	Wyoming	0	W
UNM	1	West Texas State	0	W
UNM	4	West Texas State	0	W
UNM	4	Baylor	3	W
		New Mexico State Invite		
UNM	1	Pima Jr. College	0	W
UNM	9	Mesa	0	W
UNM	5	Oklahoma City	1	W
UNM	2	Minnesotta	1	W
UNM	9	Eastern Arizona	0	W
UNM	0	New Mexico State	4	L
UNM	4	Nebraska	1	W
UNM	0	Kansas University	2	L
UNM	4	Kansas University	0	W
		Oklahoma University Invite		
UNM	2	Nebraska	0	W
UNM	3	Kansas State	4	L
UNM	0	Louisiana Tech	1	L
UNM	0	Northwestern	6	L
		Cal State Fullerton Invite		
UNM	0	Cal State Poly Pomona	4	L
UNM	0	United States International University	1	L
UNM	3	UCSB	0	W
		Texas A & M Invite		
UNM	6	Weber State	2	W
UNM	2	Baylor	1	W
UNM	0	Texas A & M	3	L
UNM	3	Texas Tech	0	W
UNM	4	Utah	1	W
UNM	0	Utah State	2	L
UNM	1	Sam Houston State	0	W

Lobo Diamond Invite

UNM	2	Oklahoma State	6	L
UNM	0	Texas A & M	4	L
UNM	2	Texas A & M	0	W
UNM	0	Cal State Fullerton	5	L
UNM	3	Cal State Fullerton	4	L
UNM	3	Northern Arizona	0	W
UNM	3	Northern Arizona	0	W
UNM	3	West Texas State	0	W
UNM	5	West Texas State	4	W
UNM	1	New Mexico State	0	W
UNM	1	New Mexico State	0	W

High Country Athletic Conference Championships

UNM	4	New Mexico State	0	W
UNM	2	Northern Colorado	3	L
UNM	6	Utah	2	W
UNM	4	Northern Colorado	0	W
UNM	3	Northern Colorado	1	W

34-14

NCAA Regional Play-Offs

UNM	0	Cal State Fullerton	6	L
UNM	4	Cal State Fullerton	0	W
UNM	0	Cal State Fullerton	6	L

35-16

SOFTBALL
1983 TEAM ROSTER

NO.	NAME	CLASS	POSITION	HOMETOWN
9	Diane Settle	Soph.	C	Edwardsville, IL
12	Sue Kragseth	Jr.	3rd-1st	St. Louis Park, MN
14	Kathy Dyer	Soph.	2nd	Ann Arbor, MI
16	Claire Miller	Sr.	SS	Scottsdale, AZ
18	Erin Putnam	Soph.	3rd-1st	Scottsdale, AZ
22	Denise Blankenship	Fr.	P	Buena Park, CA
24	Meg Connors	Jr.	OF	Scottsdale, AZ
25	Michele Madrid	Soph.	CF	Espanola, NM
26	Amy Lucero	Fr.	utility	Los Alamos, NM
27	Sue Inman	Fr.	utility	Midland, MI
28	Sheila Blonigan	Fr.	SS-2nd	Golden Valley, MN
30	Allison Maney	Soph.	P	Long Beach, CA
31	Paula Congleton	Sr.	1st-OF	Albuquerque, NM

SWIMMING

Coach Bill Spahn came to New Mexico with the reputation of being able to build competitive swim teams, and so far he has done just that. The women's swim team, still in a building phase, keeps progressively improving their previous year's record. They had a very successful season, with the twelve member team breaking a remarkable eleven school records and setting HCAC records in five events! Over the past two seasons the UNM women have established sixteen records out of a possible twenty-three events.

The season was not without misfortune however. Linda Aki (Honolulu, HI) suffered a sever shoulder injury which certainly effected her performance throughout the year and sprinter Deb Reutter came down with mononucleosis. Regardless of these set backs the team proved that they have the winning spirit by placing third at the Conference Championships. Coach Spahn was honored by his collegue's in being voted HCAC Coach of the Year.

The women's team had four individuals qualify for the NCAA Championships. Kathy Dixon (Santa Fe, NM) qualified in the 100 & 200 individual medley, but because she is a transfer student was not eligible to compete this year. In the 200 medley relay event Linda Aki, Kathy Dixon, Bobbie Clems (Milwaukee, WI), and Janie Owens (Grand Forks, ND) qualified.

Those swimmers selected to be members of the All-Conference Team were: Linda Aki, Bobbie Uimens, Janie Owens, Kathy Dixon, and Michelle Leffingwell (Albuquerque, NM). The team's MVP Award winner was Kathy Dixon, while Terri Porter (Sandose, CA) was the Most Improved Swimmer, and Linda Aki walked away with the Coaches' Award. The team loses no seniors this year.

SWIMMING
1982-83 Results

DATE	UNM SCORE	OPPONENTS	OPPONENT SCORE
10/29/82	42	Arizona	92
10/29/82	67	New Mexico State	44
10/29/82	46	Air Force	67
11/11/82	42	Colorado State	108
11/11/82	33	Nebraska	116
11/12/82	4th	Wyoming Relays	
12/11/82	101	Utah	49
12/11/82	92	New Mexico State	55
1/8/83	59	Southern Methodist	90
1/21/83	47	Brigham Young	65
1/27-29/83	2nd	Rebel Classic - Las Vegas	
2/11/83	44	Texas Tech	69
2/24-26/83		Conference Championship	
		1. Colorado State	530
		2. Brigham Young	486
		3. New Mexico	435
		4. New Mexico State	400
		5. Wyoming	304
		6. Utah	290

Bill Spahn was voted Coach of the Year in HCAC.

SWIMMING
1982-83 Roster

NAME	CLASS	EVENT	HOMETOWN
Linda Aki	Jr.	backstroke	Honolyly, HI
Bobbie Clemens	Fr.	breaststroke	Milwaukee, EI
Becky Culpepper	Jr.	freestyle	Farmington, NM
Kathy Culpepper	So.	breastroke	Farmington, NM
Kathy Dixon	So.	free/butterfly	Santa Fe, NM
Lynn Doyle	So.	freestyle	Albuquerque, NM
Michelle Leffingwell	Sr.	butterfly/back	Albuquerque, NM
Janine Owens	Fr.	butterfly	Grand Forks, NM
Terri Porter	Sr.	breaststroke	San Jose, CA
Cathy Raynis	Jr.	freestyle, distance	Rockaway, NJ
Deb Reutter	Fr.	freestyle	St. Cloud, MN
Tracey Weyant	Fr.	diving	Honolulu, HI

TENNIS

The women's tennis team has grown by leaps and bounds under the direction of second year Coach Helen Horn. Not only has the level of play improved, but the quality of competition has risen considerably.

The fall season ended with the Lobos having a 3-1 dual record. At the Texas A & M Invitational the doubles team of Kelly Fackel (Rock Island, IL.) and Lisa Buss (Vista, CA) made it to the finals, while Susanne Kloster (Albuquerque, NM) won singles consolation honors. The standout tourney for the team, however, was their own University Volkswagon Invitational. This was the first time that a sponsor had been solicited for such an event, plus some of the best women's collegiate teams were in attendance.

The spring semester found the team on the road a great deal, but they came out ahead with a dual record of 18-12. This was by far one of the best records for the Lobo's in several years. The standout player during the spring and the team's MVP was Susanne Kloster, who finished with a 16-9 dual record. Others contributing to the team's success were Lisa Buss (17-10) and Kuuli McCalla (13-4) from Los Altos, CA. The team's Most Improved Player this year was Mari Forbes. Fackel, Forbes and McCalla, were named to the All-Conference Tennis Team.

The spring semester was hectic for the Lobos. Not only did they have to contend with school and competition, but they were also busy at work in preparation for the NCAA Division I Women's Tennis Championships that were to be held in Albuquerque. Coach Helen Horn's proposal to host the 1982-83 Championship had been accepted by the NCAA during the previous summer. It took several hundred people and hundreds of hours of planning, but the nine day event came off without a hitch. This was quite a feather in the cap for UNM Women's Athletics and the Lobo Tennis Team.

TENNIS
1982-83 Results

DATE	RECORD RESULT	OPPONENT	SCORE	HOME/AWAY NEUTRAL
9/30/82	W 1-0	Idaho State	7-1	N
10/1/82	W 2-0	Denver University	7-2	A
10/2/82	W 3-0	U. of Northern Colorado	6-3	A
10/2/82	W 4-0	U. of Colorado	6-3	A
2/17/83	L 4-1	San Diego State	9-0	N
2/18/83	L 4-2	U. of Utah		N
2/18/83	L 4-3	Brigham Young U.		N
2/19/83	L 4-4	Arizona State	8-1	A
3/5/83	L 4-5	Louisiana Tech	5-4	N
3/5/83	L 4-6	Texas Tech	7-1	A
3/6/83	W 5-6	Oklahoma City U.	9-0	N
3/17/83	W 6-6	U. of Idaho	7-2	H
3/18/83	L 6-7	U. of Nebraska	6-3	H
3/91/83	L 6-8	U. of Utah	6-0	H
3/20/83	W 7-8	Denver	8-1	H
3/31/83	L 7-9	Lamar U.	6-0	H
4/1/83	W 8-9	Oral Roberts U.	5-4	H
4/1/83	L 8-10	Lamar U.	8-1	N
4/2/83	W 9-10	Colorado State U.	9-0	H
4/8/83	W 11-10	NMMI	8-1	H
4/9/83	W 12-10	U.T. Permian Basin	5-4	N
4/16/83	W 13-10	U. Southern Colorado	9-0	H
4/22/83	W 14-10	W. Texas State	7-2	H
4/23/83	W 15-10	New Mexico State	7-2	H
4/23/83	W 16-10	Northern Colorado	5-4	H
4/29-20/83		Conference Championship		A
	W 17-10	Colorado State U.	9-0	
	L 17-11	Brigham Young U.	7-2	
	L 17-12	Utah University	6-3	
	W 18-12	New Mexico State U.	6-3	

TENNIS
1982-83 Roster

NAME	CLASS	HOMETOWN	DUAL RECORD
Lisa Buss	Fr.	Vista, CA	17-10
Kelly Fackel	Fr.	Rock Island, IL.	10-12
Mari Forbes	Fr.	Carlsbad, NM	16-13
Susanne Kloster	Jr.	Albuquerque, NM	16-9
Jennifer Marello	Fr.	Vista, CA	5-8
Kuulei McCalla	So.	Los Altos, CA	13-4
Leslie Roybal	Jr.	Santa Fe, NM	9-16

CROSS COUNTRY

At the conclusion of the 1981-82 school year, Coach Tony Sandoval resigned his position of four years to assume coaching duties at the University of California, Berkeley. A native New Mexican, Mike MacEachen was hired to take over the head track position. The new coach must have jelled pretty well with the team, for during the cross country season almost every athlete set a new personal record, and the Lobo's stayed competitive with other teams in the region. At season's end, during the NCAA District 7 meet, UNM had an impressive finish by placing fifth out of fifteen teams. Sylvie Velay received the team's MVP Award.

TRACK & FIELD

During the indoor and outdoor track season, Coach MacEachen witnessed a majority of the team members reach new personal records. Due to some injuries, however, the Lobo's lost some of its' depth in the field events, so they found themselves having to "run an extra mile" during most meets. The team met the challenge and established eight new school records, and, for the first time in UNM track history, defeated two Top 20 teams, ASU & UTEP. By the end of the season four Lobo's had qualified to compete in the NCAA Track & Field Championships. They were Barbara Bell (Ft. Worth, TX) who ran the 100 & 200 meter events, placing eleventh nationally; Shannon Vessup (San Bernardino, CA), 400 meter hurdles; Margaret Metcalf (Albuquerque, NM), 800 meters; and Sylvie Velay (Gap, France), 3,000 meters. These four young women were also named to the All Conference Team along with Mary Goodwin (Albuquerque, NM), Michelle Wagner (Albuquerque, NM), Joan Sterrett (New York, NY), and Lyn Schreyer (Albuquerque, NM).

This years MVP-Running was Barbara Bell and the MVP-Field was Mary Goodwin, with Cynthia Valdez being the Most Improved Athlete. The team loses senior Margaret Metcalf.

WOMEN'S TRACK AND CROSS COUNTRY
1982-83 TEAM RESULTS

DATE	MEET	LOCATION	RESULTS
9/18	ASU - UTEP	Albuquerque, NM	2nd
10/9	Stanford Invitational	Palo Alto, CA	6/21
10/23	BYU Autumn Classic	Provo, UT	4th/10
10/30	NAU	Albuquerque, NM	1st
11/13	NCAA District 7	Salt Lake City, UT	5/15
1/22	Albuq. Jaycee	Albuquerque, NM	Non-Scoring
1/29	NAU	Flagstaff, AZ	2nd
2/6	Lobo Invitational	Albuquerque, NM	Non-Scoring
2/19	NAU Invitational	Flagstaff, AZ	Non-Scoring
3/5	Arizona & NAU	Tuscon, AZ	2nd
2/12	NCAA Indoor Championships	Detroit, MI	NA
3/26	Texas, Nebraska, Tennessee	Austin, TX	4h
4/2	Texas Tech Invite	Lubbock, TX	2nd
4/9	Arizona State, San Diego State	Tempe, AZ	2nd
4/23	Mt. Sac Relays	Walnut, CA	Non-Scoring
4/30	ASU-UTEP	Albuquerque, NM	1st
5/6-7	HCAC Championships	Prove, UT	2nd/5
5/21	SPTAC	Los Angeles, CA	Non-Scoring
6/1-4	NCAA Outdoor Championship	Houston, TX	4 qualified, 1 scored (11th)

1982-83 TRACK & FIELD ROSTER

NAME	CLASS	EVENT	HOMETOWN
Distance Runners			
Sally Champell	Fr.	800/1500	Santa Fe, NM
Loretta Chavez	Jr.	1500	LaJora, CO
Val Fisher	Jr.	800/1500	Philadelphia, PA
Alfreda Juan	So.	5K/10K	Sells, AZ
Victoria Malo	So.	1500/3K	Albuquerque, NM
Margaret Metcalf	Sr.	800	Albuquerque, NM
Linda Mitchell	So.	1500/3K	Bellevue, WA
Lisa Mitchell	So.	1500/3K	Bellevue, WA
Kathy Pfiefer	So.	5K/10K	Sacramento, CA
Kristi Rapp	So.	5K	Albuquerque, NM
Peggy Rupert	Jr.	1500	Pittsburgh, PA
Joan Sterrett	So.	800/1500	New York, NY
Cynthia Valdez	So.	1500/3K	Albuquerque, NM
Sylvie Velay	So.	1500/3K	Gap, France
Sprint & Field Events			
Delores Archuleta	Fr.	H/HJ	Albuquerque, NM
Sue Ballinger	Jr.	400H	Woodbury, NJ
Barbara Bell	So.	100/200	Ft. Worth, TX
Mary Goodwin	Jr.	H/LJ	Albuquerque, NM
Shari Harris	Fr.	100/200	Centerville, OH
Terry Helleck	Sr.	SP/D	Anchorage, ALA
Lisa Mathews	Fr.	1500	Albuquerque, NM
Glenda Padilla	So.	H/HJ	Albuquerque, NM
Yvette Patterson	Fr.	400	Hobbs, NM
Sue Qualls	So.	SP/D	Albuquerque, NM
Muff Reinert	Sr.	J	Bellingham, WA
Sara Rivera	Fr.	Hepthathlon	Raton, NM
Lyn Schreyer	So.	Heptathlon	Albuquerque, NM
Christine Roybal	Fr.	Heptathlon	Albuquerque, NM
Stella Shaiba	Fr.	100/200	DarEl-Salaan, Tanzani
Tonya Sutton	Fr.	HJ/H	Clovis, NM
Kathy Tysinski	Jr.	400/800	Alameda, CA
Shannon Vessup	So.	400H	San Bernardino, CA
Michelle Boronell Wagner	Fr.	100/200	Albuquerque, NM
Karen White	Fr.	400	El Paso, TX

VOLLEYBALL

The 1982-83 UNM volleyball squad and third year Head Coach Mike Hebert, finished the season with a 21-20 record, and a second place in the HCAC with a 5-5 record. While 21-20 is no disgrace, the Lobos had been expected to at least repeat last year's 25 win season.

The Lobos began the year ranked in the Top 20 in both the NCAA and the Tachikara Polls. The season's first poll ranked them 16th in the nation, but early season upsets at the hands of New Mexico St. and Washington dropped them to 18th.

Injuries to key players knocked the Lobos off course, and the team never fully righted itself. They also played a tougher schedule than any previous Lobo team. They went up against the best California had to offer, and many times took them to five games. Because of their performance against the top ranked California teams, the Lobos were considered for an at-large berth into the NCAA National Championships up until the last minute. Two or three more wins and the Lobos would have been invited.

The highlight of the season occured during early October when the Lobos won 12 of 13 matches, and won the Lamar Invitational. Also, for the second year in a row, both Kelli Knowles (Rialto, CA) and Terri Neilson (San Bernardino, CA) were named to the All-Conference First Team. Shannon Vessup (San Bernardino, CA) was named to the Honorable Mention list. Terri Neilson won the team's MVP award this year.

UNM once again invited international teams to compete in Albuquerque this year. The U.S.A. and Japan National Women's Teams competed in October at University Arena. This event brought recognition to UNM and the state of New Mexico as well. It set a new attendance record in the Pit for those watching a women's athletic event at UNM.

The team loses no seniors this year.

UNM VOLLEYBALL
Results - 1982

			35 Record
9/10-9/11	NMSU Invitational		
L	University of Arizona	15-12,13-15,3-15	0-1
W	UTEP	13-15,15-7,15-11	1-1
W	Colorado State	15-8,15-8	2-1
W	University of Houston	15-7,4-15,15-5	3-1
L(semi's)	NMSU	11-15,14-16	3-2
L(3rd)	University of Arizona	8-15,15-9,13-15	3-3
9/16-9/17	SDSU Invitational		
L	Cal Poly	7-15,0-15	3-4
L	USC	6-15,5-15	3-5
L	Washington	15-9,13-15,7-15	3-6
L	BYU	6-15,10-15	3-7
W	Oregon State	15-7,14-16,15-12	4-7
9/25-9/26	LOBO INVITATIONAL		
L	Arizona State	9-15,4-15,12-15	4-8
L	NMSU	12-15,9-15,10-15	4-9
9/26W	NMSU	10-15,15-10,15-9,11-15,15-5	5-9
9/30W	Rice University	13-15,15-5,15-9,15-5	6-9
10/1-10/2	Lamar Invitational (First Place Finish)		
W	University of North Carolina	7-15,15-9,15-8	7-9
W	University of New Orleans	15-3,15-7	8-9
W	Southwest Louisiana State	15-7,15-0	9-9
W	Lamar University	4-15,15-12,15-9	10-9
W	Alvin College (C.C.)	15-3,15-3	11-9
W	University of South Alabama	15-7,15-4(Quarters)	12-9
W	Sam Houston State	15-12,11-15,15-7 (Semis)	13-9
W	NMSU	7-15,15-13,15-13,15-3(Final)	14-9
10/4L	University of Hawaii	10-15,6-15,15-13,12-15	14-10
10/8W	University of Wyoming	14-16,15-12,15-6,15-17,16-14	15-10
10/9W	Colorado State University	15-9,15-12,7-15,15-1	16-10
10/15L	NMSU	15-17,14-16,3-15	16-11
10/22L	University of Utah	11-15,15-17,16-14,7-15	16-12
10/23L	BYU	10-15,13-15,15-6,5-15	16-13
10/28W	UTEP	15-5,15-11,5-15,9-15,15-12	17-13
10/29W	CSU	15-7,15-8,15-11,8-15	18-13
10/30L	Wyoming	13-15,15-17,15-11,8-15	18-14
11/2 L	Pepperdine	4-15,12-16,14-16	18-15
11/5	NIVT		
L	SDSU	4-15,8-15	18-16
L	UCSB	8-15,16-14,6-15	18-17
W	Oregon	15-4,1505	19-17
L	UOP	6-15,7-15	19-18
L	Texas A & M	14-16,14-16	19-19
11/12W	NMSU	15-5,12-15,15-2,15-10	20-19
11/19L	BYU	9-15,15-11,14-16,6-15	20-20
11/20W	Utah	15-9,10-15,8-15,15-10,15-8	21-20

FINAL RECORD: 21-20
HCAC RECORD: 5-5

NEW MEXICO VOLLEYBALL

1982 ROSTER

NO.	NAME	HT.	CL.	POS.	HOMETOWN
9	Linda Archuleta	5'10"	Sr.	H/C	Albuquerque, NM
4	Sandra Gayton	5'6"	Jr.	D	Albuquerque, NM
1	Kelly Knowles	5'9"	Jr.	S	Rialto, CA
13	Terri Neilson	5'10"	Jr.	H	San Bernardino, CA
7	Sally Plows	5'10"	So.	C	London, Ontario
10	Shannon Vessup	5'11"	So.	C	San Bernardino, CA
12	JoAnne O'Connell	5'10"	Fr.	H/S	Albuquerque, NM
6	Lori Linder	5'10"	Jr.	H	Albuqueruqe, NM

THE REPORT OF THE ACADEMIC AND STUDENT AFFAIRS DIVISION

University of New Mexico Athletic Department

July 1, 1982 - June 30, 1983

Submitted by:

Dr. Thomas Brennan, Assistant Athletic Director

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I. Introduction

The Office for Academic and Student Affairs is one division within the Department for Intercollegiate Athletics. During the 1982-83 academic year, the division was head by Dr. Thomas Brennan, Assistant Athletic Director. The division remains charged with the responsibility of monitoring the integrity of the academic athletic milieu and facilitating the delivery of student support services to the student athlete population at the University of New Mexico.

A. Staffing (1982-83)

Assistant Athletic Director	--	Dr. Thomas Brennan
Staff Assistant	--	Rose Lomba
Athletic Counselor (full-time)	--	Mary Ellen Kurucz, resigned Feb. 2, 1983
		Ruth Francis Feb. 7, 1983
Student Advisor (part-time)	--	David Potter
Student Advisor (part-time)	--	Jennifer Forbes
Student Advisor (part-time)	--	Reggie Waites
Tutorial Coordinator	--	Sonja Frandsen

B. Programs

The Assistant Athletic Director will continue to serve as departmental liaison with functional university offices, especially the following:

Athletic Council
Athletic Faculty Representative
Office of the VP for Student Affairs
Office of the Provost (Academic Affairs)
College Deans
Office of Admissions and Records
Dean of Students
Financial Aid and Career Services
University Advisement Centers
University Skills Center
Academic Departments

II. Data, RE: Student Athletes at the University of New Mexico

A. Student Athletes Enrollment (By UNM College of Matriculation)*

Fall Semester 1982

College	Number of Students
Anderson School of Management	14
College of Arts and Sciences	50
Bachelor of University Studies	11
College of Education	46
College of Engineering	21
College of Fine Arts	1
General College	7
College of Nursing	4
College of Pharmacy	2
Physical Therapy Program	1
**University College	297
TOTAL STUDENT ATHLETES	454

Spring Semester 1983

College	Number of Students
Anderson School of Management	15
College of Arts and Sciences	62
Bachelor of University Studies	10
College of Education	51
College of Engineering	19
College of Fine Arts	2
General College	6
College of Nursing	4
College of Pharmacy	1
**University College	218
TOTAL STUDENT ATHLETES	388

*These figures reflect the number of student athletes who appeared on NCAA squad lists at the beginning of each semester. It should be noted that some attrition does occur during the course of each semester.

**University college students have completed less than 64 degree credit hours.

B. American College Test (ACT) Information - New Scholarship Athletes (Fall 1982) - Average Scores ($\bar{X}$)*

Men	N	English	Math	Social Science	Natural Science	Composite
Baseball	7	14.0	19.5	14.6	18.6	16.7
Basketball	1	8.0	1.0	6.0	11.0	7.0
Football	17	12.8	14.9	13.4	17.6	14.8
Golf	2	12.0	14.5	6.0	13.5	11.5
Gymnastics	3	17.7	21.3	16.0	21.3	19.3
Skiing	2	19.5	20.5	24.0	29.0	23.5
Swimming	5	17.8	22.6	16.6	23.2	20.2
Tennis	3	17.7	17.0	20.0	19.7	18.7
Track	7	14.7	10.4	16.0	17.9	15.0
Wrestling	6	15.2	17.5	19.3	21.7	18.7
ACT Sum (N)	53	14.6	16.4	15.4	19.2	16.5
Women						
Basketball	3	16.3	18.0	11.3	17.0	15.7
Golf	-	--	--	--	--	--
Gymnastics	2	20.0	24.0	17.0	22.5	21.0
Skiing	3	18.0	15.7	19.3	22.0	18.7
Softball	3	19.3	14.0	19.0	22.7	18.7
Swimming	5	22.2	26.2	22.4	25.8	24.4
Tennis	4	23.0	25.2	24.2	23.0	24.2
Track	3	15.7	8.3	13.7	12.7	13.0
Volleyball	1	11.0	13.0	10.0	22.0	14.0
ACT Sum (N)	24	19.2	19.2	18.4	21.3	19.7
ACT Sum (Men & Women)	77	16.0	17.2	16.3	19.8	17.5
ACT ($\bar{X}$) All Entering UNM Freshmen		18.3	17.6	18.2	21.7	19.0

*All new scholarship athletes for shom ACT information was available are included in this analysis.

C. University Skill Course (100) Information - Enrollment Data

Student Athlete Placement into University Skills Courses (100 courses)

New Scholarship Athletes - Fall 1982 Admits

Men	N (New Admits)	Number of 100 Courses Placed into None	One	Two	Three	Four	% of students enrolled in at least one skill course
Baseball	6	2	0	0	4	0	67%
Basketball	1	0	0	0	0	1	100%
Football	17	2	4	4	4	3	88%
Golf	3	0	0	0	3	0	100%
Gymnastics	4	2	0	1	1	0	50%
Skiing							
Swimming	5	2	2	0	1	0	60%
Tennis	3	2	0	0	1	0	33%
Track	7	1	2	1	1	2	86%
Wrestling	6	1	1	2	0	2	83%
TOTAL (M) on scholarship	52	12 (23%)	9 (18%)	8 (15%)	15 (29%)	8 (15%)	77%
Women							
Basketball	3	0	1	0	1	1	60%
Golf							
Gymnastics	2	1	1	0	0	0	50%
Skiing	3	2	0	0	1	0	33%
Softball	3	2	0	0	1	0	33%
Swimming	4	3	1	0	0	0	25%
Tennis	2	2	0	0	0	0	0%
Track	3	0	1	0	2	0	100%
Volleyball	1	0	0	1	0	0	100%
TOTAL (W) on scholarship	21	10 (48%)	4 (18%)	1 (5%)	5 (24%)	1 (5%)	52%
TOTAL (M&W) on scholarship	73	22 (30%)	13 (17%)	9 (12%)	20 (27%)	9 (12%)	70%

NOTE: This summary only includes students who entered as new freshmen. Transfer students are not required to enroll in University Skill courses. Foreign students have not been included in the analysis.

University Skill Course (100) Information - Performance Data

STUDENT ATHLETE PERFORMANCE
IN
UNIVERSITY SKILL COURSES (100 COURSES)
(Fall, 1982)

Grades:

	English 100		Math 100		Soc. Science 100		Natural Science 100	
A) For All Athletes								
A	3		2		2		0	
B	13		5		3		4	
C	31	66%	8	60%	7	67%	4	53%
D	20		6		5		4	
F	4		4		1		3	
B) All Men Athletes								
A	3		1		2		0	
B	10		4		3		2	
C	26	66%	5	53%	5	67%	3	42%
D	18		6		5		4	
F	2		3		0		3	
C) All Women Athletes								
A	0		1		0		0	
B	3		1		0		2	
C	5	67%	3	83%	2	67%	1	100%
D	2		0		0		0	
F	2		1		1		0	
D) All Scholarship Students								
A	3		1		1		0	
B	11		3		3		3	
C	16	63%	2	43%	6	71%	3	55%
D	15		6		3		3	
F	3		2		1		2	
E) All Male Scholarship Students								
A	3		0		1		0	
B	8		2		3		1	
C	13	59%	2	36%	4	73%	2	38%
D	15		6		3		3	
F	2		1		0		2	

This information reflects student athlete performance in University Skill courses during the Fall 1982 semester. The figures in the columns indicate the percentage of student athletes (in each category) who passed the University Skill requirement with a grade of C or better. This information reflects the performance of scholarship and non-scholarship student athletes.

F) All Women Scholarship Students

	English 100		Math 100		Soc. Science 100		Natural Science 100	
A	0		1		0		0	
B	3		1		0		2	
C	3	86%	0	67%	2	67%	1	100%
D	0		0		0		0	
F	1		1		1		0	

G) New Football Basketball Scholarship Athletes

A	1		0		1		0	
B	0		0		2		0	
C	6	47%	1	17%	1	67%	0	0%
D	6		5		2		1	
F	2		0		0		1	

University Skill Course (100) Information - Performance Data

STUDENT ATHLETE PERFORMANCE
IN
UNIVERSITY SKILL COURSES (100 LEVEL)
(Spring, 1983)

Grades:

		English 100		Math 100		Soc. Science 100		Natural Science 100	
A)	For All Athletes								
	A	0		0		0		0	
	B	4		2		0		1	
	C	11	75%	3	56%	2	20%	5	75%
	D	4		2		4		0	
	F	1		2		4		2	
B)	All Men Athletes								
	A	0		0		0		0	
	B	2		1		0		1	
	C	10	71%	3	57%	2	22%	5	75%
	D	4		1		4		0	
	F	1		2		3		2	
C)	All Women Athletes								
	A	0		0		0		0	
	B	2		1		0		0	
	C	1	100%	0	50%	0	0%	0	-
	D	0		1		0		0	
	F	0		0		1		0	
D)	All Scholarship Students								
	A	0		0		0		0	
	B	1		2		0		1	
	C	8	90%	2	67%	1	17%	5	86%
	D	1		2		2		0	
	F	0		0		3		1	
E)	All Men Scholarship Students								
	A	0		0		0		0	
	B	1		1		0		1	
	C	8	90%	2	75%	1	20%	5	86%
	D	1		1		2		0	
	F	0		0		2		1	

This information reflects student athlete performance in University Skill courses during the Spring 1983 semester. The figures in the columns indicate the percentage of student athletes (in each category) who passed the University Skill requirement with a grade of C or better. This information reflects the performance of scholarship and non-scholarship student athletes.

F) All Women Scholarship Students

	English 100		Math 100		Soc. Science 100		Natural Science 100	
A	0		0		0		0	
B	0		1		0		0	
C	0	-	0	50%	0	0%	0	-
D	0		1		0		0	
F	0		0		1		0	

G) New Football Basketball Scholarship Athletes

A	0		0		0		0	
B	1		1		0		1	
C	3	100%	2	100%	0	-	2	100%
D	0		0		0		0	
F	0		0		0		0	

University Skill Course (100) Information - Performance Data

STUDENT ATHLETE PERFORMANCE
IN
UNIVERSITY SKILL COURSES (100 LEVEL)
(1982-83 Academic Year)

Grades:

		English 100		Math 100		Soc. Science 100		Natural Science 100	
A)	For All Athletes								
	A	3		2		2		0	
	B	17		7		3		5	
	C	42	68%	11	59%	9	50%	9	61%
	D	24		8		9		4	
	F	5		6		5		5	
B)	All Men Athletes								
	A	3		1		2		0	
	B	12		5		3		3	
	C	36	67%	8	54%	7	50%	8	55%
	D	22		7		9		4	
	F	3		5		3		5	
C)	All Women Athletes								
	A	0		1		0		0	
	B	5		2		0		2	
	C	6	73%	3	75%	2	50%	1	100%
	D	2		1		0		0	
	F	2		1		2		0	
D)	All Scholarship Students								
	A	3		1		1		0	
	B	12		5		3		4	
	C	24	67%	4	50%	7	55%	8	67%
	D	16		8		5		3	
	F	3		2		4		3	
E)	All Men Scholarship Students								
	A	3		0		1		0	
	B	9		3		3		2	
	C	21	65%	4	47%	5	53%	7	60%
	D	16		7		5		3	
	F	2		1		2		3	

This information reflects student athlete performance in University Skill courses during the 1982-83 academic year. The figures in the columns indicate the percentage of student athletes (in each category) who passed the University Skill requirement with a grade of C or better. This information reflects the performance of scholarship and non-scholarship student athletes.

F) All Women Scholarship Students

	English 100		Math 100		Soc. Science 100		Natural Science 100	
A	0		1		0		0	
B	3		2		0		2	
C	3	86%	0	60%	2	50%	1	100%
D	0		1		0		0	
F	1		1		2		0	

G) New Football Basketball Scholarship Athletes

A	1		0		1		0	
B	1		1		2		1	
C	9	58%	3	44%	1	67%	2	60%
D	6		5		2		1	
F	2		0		0		1	

D. Grade Point Average and Credit Hour Summary

GRADE POINT AVERAGE (GPA) AND CREDIT HOUR SUMMARY
Fall, 1982

Men's Sports

Men	N (Athletes)	GPA	Fall 1981 GPA	X Credits Passed	Prob.	Susp.
Baseball	28	2.3	2.2	12.8	3	0
Basketball	14	2.6	2.8	13.0	4	0
Football[1]	78	1.89	2.2	11.0	15	3
Golf	9	2.6	1.9	12.7	3	0
Gymnastics	13	2.5	2.4	13.2	2	0
Skiing	13	2.6	2.7	13.2	-	0
Swimming	21	2.5	2.6	13.1	-	0
Tennis	9	2.2	2.4	12.6	-	0
Track	36	2.5	2.2	13.1	5	1
Wrestling	23	1.9	2.1	11.3	3	0
Total (M)	244	2.2	2.3	11.8	35	4
UNM Undergrad GPA (Male)	--	2.40	2.3733			
All Scholarship Athl (M)	207	2.2	2.3	12.2	31	4
New Scholarship admits (Football)	18	1.7	2.3	11.0	4	0
New Scholarship admits (Basketball)	3	2.4	2.6	14.0	1	0
UNM GPA (New Male Admits)		2.0559	2.0275			
All Athletes (M & W)	376	2.4	2.4	12.1	46	5
Football (Walk-ons)	24	1.6		10.5	6	0
All University Undergrad (GPA)	--	2.5119	2.4899			

D.

GRADE POINT AVERAGE (GPA) AND CREDIT HOUR SUMMARY
Spring, 1983

Men's Sports

Men	N (Athletes)	GPA	Spg. 1982 GPA	X Credits Passed	Prob.	Susp.
Baseball	25	2.0	2.2	10.9	2	1
Basketball	13	2.5	2.3	11.3	2	0
Football[1]	80	2.5	2.5	12.5	9	1
Golf	11	2.4	2.3	12.5	-	1
Gymnastics	11	2.9	2.6	12.8	1	-
Skiing	15	2.7	2.8	13.5	-	-
Swimming	18	2.8	2.8	14.2	-	-
Tennis	9	1.7	1.8	9.9	2	-
Track	40	2.2	2.1	11.3	1	2
Wrestling	22	2.4	2.3	11.7	3	-
Total (M)	244	2.4	2.2	12.1	20	5
UNM Undergrad GPA (Male)		2.47	2.49			
All Scholarship athl (M)	194	2.3	2.5	12.3	19	5
New Scholarship admits (Football	15	2.6	2.6	13.3	1	0
New Scholarship admits (Basketball)	3	2.0	2.1	10.3	2	0
All Athletes (M & W)	358	2.44	2.5	12.6	27	17
Football (Walk-ons)	43	1.82		10.0	3	9
All University Undergrad (GPA)		2.586	2.580			

GRADE POINT AVERAGE (GPA) AND CREDIT HOUR SUMMARY
Fall, 1982

Women's Sports

Women	W (Athletes)	GPA	Fall 1981 GPA	X Credits Passed	Prob.	Susp.
Basketball	13	2.6	2.8	13.2		
Golf	11	2.6	2.6	12.0		
Gymnastics	10	3.0	3.1	14.3		
Skiing	14	3.0	2.8	13.1		
Softball	16	2.8	2.4	12.9	1	
Swimming	12	2.9	2.8	14.4	1	
Tennis	8	2.7	2.9	13.6		
Track	40	2.3	2.4	11.6	2	1
Volleyball	8	2.5	2.6	12.6	1	
Total (W)	132	2.6	2.63	12.8	5	1
UNM Undergrad GPA (Women)		2.6202	2.6069			
All Scholarship athl (W)	96	2.7	2.63	12.5	5	1
All Athletes (M & W)	376	2.4	2.40	12.1	46	5
All University Undergrad (GPA)		2.5119	2.48999			

D.

GRADE POINT AVERAGE (GPA) AND CREDIT HOUR SUMMARY
Spring, 1983

Women's Sports

Women	N (Athletes)	GPA	Spg. 1982 GPA	X Credits Passed	Prob.	Susp.
Basketball	14	2.2	2.5	13.9		
Golf	9	2.6	2.6	13.0		
Gymnastics	10	2.7	2.9	13.9		
Skiing	15	2.8	3.0	13.5		
Softball	17	2.2	2.9	10.7	2	1
Swimming	12	2.9	2.5	13.4	1	
Tennis	8	3.1	3.2	12.9		
Track	24	2.3	2.7	11.8	1	1
Volleyball	5	2.6	2.8	12.2		1
Total (W)	114	2.6	2.8	13.5	4	3
UNM Undergrad GPA (Women)		2.70	2.68			
All Scholarship athl (W)	75	2.6	2.8	12.8	4	3
All Athletes (M & W)	358	2.44	2.5	12.6	27	17
All University Undergrad (GPA)		2.58	2.58			

GRADE POINT AVERAGE (GPA) AND CREDIT HOUR SUMMARY
1982-83 Academic Year

Men and Women

Men	GPA	X Credits Passed
Baseball	2.1	12.0
Basketball	2.5	12.1
Football[1]	2.2	11.8
Golf	2.5	12.6
Gymnastics	2.7	13.0
Skiing	2.6	13.3
Swimming	2.6	13.6
Tennis	2.0	11.2
Track	2.4	12.2
Wrestling	2.1	11.5
New Football admits	2.10	12.0
New Basketball admits	2.2	12.2
Football (Walk-ons)	1.75	10.2
Total (M)	2.3	12.0
Women		
Basketball	2.4	13.5
Golf	2.6	12.5
Gymnastics	2.8	14.1
Skiing	2.9	13.3
Softball	2.5	11.8
Swimming	2.9	14.0
Tennis	2.9	13.3
Track	2.3	11.6
Volleyball	2.5	12.5
Total (W)	2.6	13.1
Total (M & W)	2.4	12.3

D.

GRADE POINT AVERAGE (GPA) AND CREDIT HOUR SUMMARY
Fall, Spring and Year Comparison

Men's and Women's Sports

	Grade Point Average			$\bar{X}$ Credit Hours Passed		
Men	Fall 1982	Spg. 1983	1982-83 Year	Fall 1982	Spg. 1983	1982-83 Year
Baseball	2.3	2.0	2.1	12.8	10.9	12.0
Basketball	2.6	2.5	2.5	13.0	11.3	12.1
Football	1.9	2.5	2.2	11.0	12.5	11.8
Golf	2.6	2.4	2.5	12.7	12.5	12.6
Gymnastics	2.5	2.9	2.7	13.2	12.8	13.0
Skiing	2.6	2.7	2.6	13.2	13.5	13.3
Swimming	2.5	2.8	2.6	13.1	14.2	13.6
Tennis	2.2	1.7	2.0	12.6	9.9	11.2
Track	2.5	2.2	2.4	13.1	11.3	12.2
Wrestling	1.9	2.4	2.1	11.3	11.7	11.5
Total (M)	2.2	2.4	2.3	11.8	12.1	12.0
Football (Walk-ons)	1.6	1.82	1.75	10.5	10.0	10.0
UNM Undergrad GPA (Male)	2.40	2.47				
Women						
Basketball	2.6	2.2		13.2	13.9	13.5
Golf	2.6	2.6		12.0	13.0	12.5
Gymnastics	3.0	2.7		14.3	13.9	14.1
Skiing	3.0	2.8		13.1	13.5	13.3
Softball	2.8	2.2		12.9	10.7	11.8
Swimming	2.9	2.9		14.4	13.4	14.0
Tennis	2.7	3.1		13.6	12.9	13.3
Track	2.3	2.3		11.6	11.8	11.6
Volleyball	2.5	2.6		12.6	12.2	12.5
Total (W)	2.6	2.8		12.8	13.5	13.1
UNM Undergrad GPA (Women)	2.62	2.68				
Total (M & W)	2.4	2.5		12.1	12.6	12.3
UNM Undergrad GPA	2.5119	2.58				

D.

GRADE POINT AVERAGE AND CREDIT HOUR SUMMARY
Fall, 1982

UNM Scholarship Athletes

Men	$\bar{X}$ (Athletes)	GPA	X Credits Passed	Prob.	Susp.
Baseball	19	2.2	12.7	3	
Basketball	14	2.6	13.0	4	
Football	78	1.9	11.0	15	3
Golf	6	2.3	12.1	2	
Gymnastics	13	2.5	13.2	1	
Skiing	11	2.6	13.3		
Swimming	11	2.8	14.9		
Tennis	7	2.0	12.6		
Track	30	2.4	13.2	4	1
Wrestling	18	1.9	11.2	2	
Total (M)	207	2.2	12.2	31	4
UNM Undergrad GPA (Male)		2.40			
Women					
Basketball	11	2.6	12.8		
Golf	8	2.7	13.0		
Gymnastics	8	3.0	14.1		
Skiing	14	3.0	13.1		
Softball	12	2.8	12.9	1	
Swimming	7	3.1	12.6	1	
Tennis	5	2.8	13.4		
Track	24	2.2	11.0	2	1
Volleyball	7	2.5	12.6	1	
Total (W)	96	2.7	12.52	5	1
UNM Undergrad GPA (Women)		2.70			
Total (M & W)	303	2.34	12.3	36	5
All University Undergrads (GPA)		2.5119			

GRADE POINT AVERAGE (GPA) AND CREDIT HOUR SUMMARY
Spring, 1983

UNM Scholarship Student Athletes

Men	N (Athletes)	GPA	X Credits Passed	Prob.	Susp.
Baseball	16	2.0	11.6	2	1
Basketball	13	2.5	11.3	2	
Football	80	2.5	12.5	9	1
Golf	5	2.3	11.6		1
Gymnastics	11	2.9	12.8	1	
Skiing	10	2.5	13.1		
Swimming	10	2.5	13.9		
Tennis	7	1.8	11.0	2	
Track	26	2.0	10.9	1	2
Wrestling	16	2.3	10.9	2	
Total (M)	194	2.3	12.1	19	5
UNM Undergrad GPA (Male)		2.47			
Women					
Basketball	10	2.2	13.4		
Golf	8	2.5	12.5		
Gymnastics	8	2.8	13.6		
Skiing	13	2.9	13.5		
Softball	11	2.4	11.5	2	1
Swimming	6	3.2	13.0	1	
Tennis	4	2.4	12.6		
Track	12	3.3	13.3	1	1
Volleyball	3	2.4	11.0		1
Total (W)	75	2.61	12.8	4	3
UNM Undergrad GPA (Women)		2.70			
Total (M & W)	269	2.4	12.3	23	8
All University Undergrad (GPA)		2.58			

GRADE POINT AVERAGE (GPA) AND CREDIT HOUR SUMMARY
1982-83 Academic Year

UNM Scholarship Athletes
Men and Women

Men	GPA	X Credits Passed
Baseball	2.1	12.2
Basketball	2.5	12.1
Football	2.2	11.8
Golf	2.3	11.9
Gymnastics	2.7	13.0
Skiing	2.6	13.2
Swimming	2.6	14.4
Tennis	1.9	11.8
Track	2.3	12.1
Wrestling	2.1	11.0
Total (M)	2.3	12.1
Women		
Basketball	2.4	13.1
Golf	2.6	12.8
Gymnastics	2.9	13.9
Skiing	2.9	13.3
Softball	2.6	12.2
Swimming	3.2	12.8
Tennis	3.0	13.3
Track	2.3	11.5
Volleyball	2.5	12.1
Total (W)	2.6	12.6
Total (M & W)	2.4	12.3

D.

GRADE POINT AVERAGE (GPA) AND CREIDT HOUR SUMMARY
Fall, Spring and Year Comparison

UNM Scholarship Athletes
Men and Women
1982-83

	Grade Point Average			$\bar{X}$ Credit Hours Passed		
Men	Fall 1982	Spg. 1983	1982-83 Year	Fall 1982	Spg. 1983	1982-83 Year
Baseball	2.2	2.0	2.1	12.7	11.6	12.2
Basketball	2.6	2.5	2.5	13.0	11.3	12.1
Football	1.9	2.5	2.2	11.0	12.5	11.8
Golf	2.3	2.3	2.3	12.1	11.6	11.9
Gymnastics	2.5	2.9	2.7	13.2	12.8	13.0
Skiing	2.6	2.5	2.6	13.3	13.1	13.2
Swimming	2.8	2.5	2.6	14.9	13.9	14.4
Tennis	2.0	1.8	1.9	12.6	11.0	11.8
Track	2.4	2.0	2.3	13.2	10.9	12.1
Wrestling	1.9	2.3	2.1	11.2	10.9	11.0
Total (M)	2.2	2.3	2.3	12.2	12.1	12.1
UNM Undergrad GPA (M)	2.40	2.47				
Women						
Basketball	2.6	2.2	2.4	12.8	13.4	13.1
Golf	2.7	2.5	2.6	13.0	12.5	12.8
Gymnastics	3.0	2.8	2.9	14.1	13.6	13.9
Skiing	3.0	2.9	2.9	13.1	13.5	13.3
Softball	2.8	2.4	2.6	12.9	11.5	12.2
Swimming	3.1	3.2	3.2	12.6	13.0	12.8
Tennis	2.8	3.3	2.3	11.0	12.6	13.3
Track	2.2	2.4	3.0	13.4	13.3	11.5
Volleyball	2.5	2.4	2.5	12.6	11.0	12.1
Total (W)	2.7	2.6	2.6	12.5	12.8	12.6
UNM Undergrad GPA (W)	2.7	2.7				
Total (M & W)	2.34	2.4	2.4	12.3	12.3	12.3
UNM Undergrad GPA	2.5119	2.58				

E. Student Athlete Scholastic Awards

1) NCAA Postgraduate Scholarship Award

George (Pete) Parks was the recipient of a 1983 NCAA Postgraduate Scholarhip for his outstanding achievements as a scholar and as an athlete. This is the highest form of recognition which the National Collegiate Athletic Association bestows upon a student athlete. Mr. Parks plans to continue his education in the area of law.

2) Western Athletic Conference Scholarship Medal

George (Pete) Parks was the recipient of the Western Athletic Conference Scholarship Medal for the University of New Mexico. This award distinguished Mr. Parks as the most outstanding scholar athlete at the University of New Mexico. Selection was made by the Athletic Faculty Representative at UNM.

3) Western Athletic Conference Scholar Athletes (1982-83)

Each of the following student athletes (men only) was awarded a WAC Scholar Athlete certificate. They qualified by having lettered during the past year in a varsity sport and by achieving a grade point average of 3.0 or better for the past two semesters (1982-83 academic year).

Name	Sport	College
Richard Abruzzo	Skiing	University
Matthew Arnot	Gymnastics	Arts and Sciences
Ross Collins	Skiing	Anderson School of Management
Ted Crouch	Track	Anderson School of Management
Daniel Daube	Swimming	Arts and Sciences
Alan Dolensky	Basketball	Education
Tom Ferrier	Track	Engineering
Nelson Franse	Basketball	Bachelor of University Studies
Patrick Garza	Football	University
Brent Henson	Football	Engineering
Jose Hidalgo	Golf	University
Steven Hill	Gymnastics	Arts and Sciences
Ray Hornfeck	Football	University
Pekka Kemppi	Skiing	University
Timothy Kneafsey	Swimming	Engineering
Craig Kromi	Gymnastics	Anderson School of Management
Dean Lewis	Golf	University
Mark Mathiasmeier	Football	Anderson School of Management
Richard Mello	Football	Education
Kimball Merewether	Wrestling	Engineering
Neil Merrion	Gymnastics	University
Martin Neibauer	Track	Education
Pete Parks	Football	Arts and Sciences
Eric Rajala	Track	Arts and Sciences

Name	Sport	College
Patrick Rey	Skiing	University
Peter Ruffu	Gymnastics	Education
Patrick Scanlon	Swimming	Arts and Sciences
Derek Skene	Football	Engineering
Jacob Simpson	Football	Education
Vesa Suomalainen	Skiing	University
Joseph Tracey	Wrestling	University
Marty Van Hekken	Golf	Bachelor of University Studies
Michael Volk	Swimming	Engineering
Michael Wright	Gymnastics	University

4) UNM Academic-Athletic Honor Roll

The following student athletes were inducted into the UNM Academic-Athletic Honor Roll. The students qualified by having achieved a 3.25 GPA or better during the semester indicated in addition to participating in their particular sport.

MEN

	Fall 1982		Spring 1983
Baseball	Kelly Blake	Baseball	Brian Kubala
Basketball	Don Brkovich Alan Dolensky Nelson Franse	Basketball	Alan Dolensky Nelson Franse
		Football	Pat Garza
Football	Pat Garza Mark Mathiasmeier Tracy Mount Pete Parks Jake Simpson		Mark Mathiasmeier Pete Parks Ron Salazar Jake Simpson Derek Skene Ron Tamura
Golf	Dal Daily Jose Hidalgo	Golf	Jose Hidalgo
Gymnastics	Craig Kromi Peter Ruffu Mike Wright	Gymnastics	Steven Hill Craig Kromi Pete Ruffu
Skiing	Richard Abruzzo Ross Collins Don Dean	Skiing	Richard Abruzzo Pekka Kemppi Patrick Rey
Swimming	Dan Daube Tim Kneafsey Pat Scanlon Mike Volk	Swimming	Daniel Daube Timothy Kneafsey Michael Volk
		Track	Salvador Aguirre
Track	Angelo Collado Ted Crouch Martin Neibauer John Smith		Ibrahim Kivina Eric Rajala Brett Schroeder

E.

	Fall 1982
Wrestling	Kim Merewether Stan Miranda

	Spring 1983
Wrestling	Kim Merewether Stan Miranda Joseph Tracey

WOMEN

	Fall 1982
Basketball	Sally Marquez Melissa Strickland
Golf	Dana Howe Theresa Schreck
Gymnastics	Martha Dummer Lisa Fuller Marie Gonzales Tracy Kwiatkowski Rebecca Murphy
Skiing	Lisa Dean Renee Farwig Suzanne Mayer Saila Miettinen Christina Sandal Maria Wahlqvist
Softball	Sheila Blonigan Paula Congleton Margaret Connors Linda Gilkey Allison Maney Claire Miller Erin Putnam
Swimming	Roberta Clemens Michelle Leffingwell Janine Owens Terri Porter
Tennis	Kelly Fackel Mari Forbes
Track	Margaret Metcalf Loreleit Mock Kathleen Pfiefer Kristina Rapp Peggy Rupert Lynn Schreyer Karen Weber
Volleyball	Linda Archuleta Alice Modic

	Spring 1983
Basketball	Sally Marquez
Gymnastics	Lisa Fuller Marie Gonzales
Skiing	Renee Farwig Saila Miettinen Christina Sandal Goril Skyttersater Jill Wahlqvist
Softball	Claire Miller Diane Settle
Swimming	Roberta Clemens Kathryn Dixon Michelle Leffingwell Janine Owens Terri Porter
Tennis	Kelly Fackel Mari Forbes Susanne Kloster Marian Thomas
Track	Sally Chappell Margaret Metcalf Kathleen Pfiefer Kristina Rapp Lynn Schreyer

5) Alumni Lettermen Award

The following students have each been awarded a scholarship by The Alumni Lettermen's Club. These students have all completed their athletic eligibility. The awards will assist them in completing the requirements for their undergraduate degree.

Name	Sport
Dana Howe	W. Golf
Martin Niebaurer	M. Track
Marty Van Hekken	M. Golf
Jill Wahlqvist	W. Skiing

Afro-American Center Student Services Division
Johanna "Juba" Clayton, Director

1982 - 1983 Annual Report

As director of the Afro-American Center Student Services Division, I have continued to work from the premise that the primary function of Afro-American Student Services is to not only provide any assistance which will keep Black students in school for the duration of their degree programs, but to also provide an environment conducive to making their experience at UNM as academically and culturally rewarding as possible. Working from the above mentioned premise, the following programs were undertaken this year in cooperation with Dr. Shiame Okunor and the support of the Afro-American Center Academic Unit. In addition to our efforts, any successes of the program this year should be attributed to the combined efforts of Vice President "Swede" Johnson and his staff whose support and encouragement was never ending, and to Shirley McDowell whose devotion to the program was an inspiration.

Coordinated Activities

1982 - 1983

1) Career, Academic and Personal Counseling

In 1982-83 the use of counseling services offered by the Afro-American Center was slightly above the 1981-82 years.

In 1982-83, there was a slight increase in the use of counseling services offered by the Afro-American Center

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(see individual client report 1982-83). The following additions to the Center's counseling services contributed greatly to this increase.

a) In an effort to better accommodate non-traditional and returning students seeking personal counseling or academic guidance, counseling hours were extended two days a week. "Special Counseling Hours" were also set up at the Albuquerque Counseling Co-op for extended work with families.

b) A directory of various counseling services available in Albuquerque was developed. The directory was used to refer students and non-students to reputable and affordable counseling services, when the services were not available on campus.

c) The director made presentations at local counseling agencies in an effort to greater sensitize these agencies to the needs of non-traditional clients.

d) A ½ hour video tape titled "Reaganomics & Mental Health" was produced by this director and aired on KOAT-TV. This program was designed to demystify the counseling process and to discuss the impact of economics on mental health.

2) Financial Aid Information

Several meetings were held with representatives from the office of Financial Aid. The purpose of these meetings was to keep this office accurately informed of of all available financial resources for students during the academic year, and of any change in policy with regard to financial aid for UNM students. The director also meet regularly with the Albuquerque Black Student Union Coalition.

3) Full and Part-time Employment Information

Employment information received by this office is placed on the office bulletin board. Black graduating seniors were mailed employment notices in their field of interest.

4) Free Use of Typewriters and Free Emergency Typing Service

Students had free use of typewriters in the Center's Tutoring Office. Papers ten pages or less were typed for students who could not type and could not pay for typing. Students whose papers were typed by the Center's staff were required to have their papers clearly written, in the office forty-eight hours in advance of due date, and to have a conference with the typist before and after the typing service.

5) Study Area

The Afro-American Center Conference Room houses books and resource materials donated by University departments and community persons. This room was reserved by students for group and individual study sessions and by community organizations for meetings.

6) Coordinated Volunteer Tutoring Program

The Afro-American Center Volunteer Tutoring Program utilized the talents of current UNM students in good academic standing. These students provided free tutoring for both UNM students and local high school students. The director also served on the Committee to investigate free tutoring, chaired by Asst. to Vice-President, Ted Martinez.

7) Emergency Student Loan Fund

In the event of an emergency students may borrow up to fifty dollars ($50.00) from the Afro-American Center Emergency Student Loan Fund.

8) Participation in UNM Home Visits Program

The director participated in the UNM Home Visits Program by contacting and meeting with four Albuquerque graduating seniors and their parents. Follow-up contact was made to further discuss opportunities available at UNM for these students.

Special Services Programs

1) "The Black Experience" TV Program is produced and hosted by the Afro-American Center, Director of Student Services. It is a bi-monthly public service program aired on KOAT-TV. The show focuses on a variety of issues pertinent to local as well as national Black Communities.

2) Afro-American Center, After School Academy

Fall and Spring - The After School Academy Program if staffed primarily by volunteers and is designed to motivate excellence in the scholastic development of young people. The program focuses on students in grades 1-12 with a concentration on current classroom activities and preparation towards educational and professional objectives.

This is accomplished by working with program participants

on a near personalized basis.

There is no charge for the program, the personnel and supplies are provided, and in some cases free transportation is provided. The program is sponsored by the Afro-American Center and the Albuquerque Branch of the National Technical Association.

Summer After School Academy

The objectives of the summer phase of this program are as for the Spring and Fall. The summer program however, focuses on the basic skills i.e. reading, writing, math and science. Every effort is made to show students that learning can be a fun experience. Free transportation and lunches are provided.

After School Parents' Orientation & Volunteer Program

The objective of the After School Academy Parents' Orientation and Volunteer Program was to get the parents of After School Academy participants involved in their children's learning experience. This was done by presenting a workshop titled "Helping Your Child Learn". In addition, one parent or a family representative was required to donate 4 hours a month to the program and all parents were asked to combine their efforts in support of a fundraising activity for the summer program.

Parents and friends of the After School Academy were responsible for the purchase of the following supplies

materials and supplies:

1) 10 pocket calculators - parents
2) 7 science fair prizes - V.P. Johnson, Sandia Labs.
3) 1 volley ball set - parents
4) materials and supplies for tie-dye workshop - Newchild
5) additional transportation for pickup and delivery of students, field trips and outings - UNM Newchild Players.

5) New Mexico NAACP-ACTSO Competition

Afro-American Center co-sponsored the New Mexico NAACP-Afro-Academic Cultural, Technological & Scientific Olympic. The director also provided individualized tutoring for two of the participants chosen to represent New Mexico in the national competition.

6) Ethnic & Women's Centers Directors Coalition

Met once a month with directors of ethnic centers and women's centers at UNM. Directors discussed common concerns and cooperative efforts.

Summary of Participation/
In Sponsored Activities

Tutoring	12
Financial Aid Information	86
High School Visitation	55
Free Typing	Approximately 4 papers/day
Black History Month Activities	1,008
Parents' Volunteer Program	78
Emergency Student Loan	7
Fall and Spring Tutoring	20

Summer	150
Parents' Orientation	54 Parents
Albuquerque Black Student Union Coalition	75 Students

Afro-American Student Services

Statement of Purpose 1982-1983

The purpose of Afro-American Student Services is to provide any assistance that will keep Black students in school for the duration of their degree programs, and to provide an environment conducive to making their experience at UNM as academically and culturally rewarding as possible.

The goals of the division are:

1) To make a concerted effort to act upon the needs of Black students;

2) To provide access to support systems and communication networks for Black students on campus;

3) To increase public awareness of the current and changing state of Blacks.

The goals reflect this director's view of student service's role on the campus for the next several years. To achieve these goals I have identified several specific objectives that will establish a framework for efforts to meet the goals.

Our first goal as stated is "to make concerted effort to act upon the need of Black students." The objectives include:

1) Meeting regularly with representatives of the UNM ethnic centers and Black student organizations and provide administrative support and consultation on projects when requested.

2) Providing center services to individual students.

3) Participating in the network of organizations serving the Black community.

Our second goal is "to provide access to support systems and communication networks for Black students on campus."

The objectives include:

1) Maintaining liaison with campus office and organizations which have an impact on Black students.

2) Monitoring University decisions that affect the status of achievement of Blacks on campus.

3) Providing a foundation for Black students to organize around specific issues and needs.

The third goal is "to increase public awareness of the current and changing state of Blacks." The objectives include:

1) Publicizing services, events and issues of concern to Blacks on campus.

2) Providing forums that encourage research and discussion of Black people issues and needs.

3) Sponsoring workshops and lectures addressing the issues and needs of Black people.

4) Maintaining a special-interest library and reference collection.

5) Participating in the network of organizations serving Black people.

Individual Client
Report

1982-1983

	High School Student	Re-entry	Under-graduate	Graduate	Non-degree	Staff	Faculty	Alumni	Total
ocational	31	7	16	3	10	4	1	5	77
e-entry cademic	2	1	12	5	12	2		1	35
ersonal	8	4	9	1	1	2	1	3	29
ndividual otal									141

* Due to the extended nature of personal counseling, five (5) students were referred to additional counseling services off-campus and three (3) on campus referrals.

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CHICANO STUDIES
ANNUAL REPORT
July 1, 1982 - June 30, 1983

Tobías Durán

I. Summary of Activities

The Chicano Studies Academic Program became affiliated with the Southwest Hispanic Research Institute in August, 1982. The merger will it possible to provide better academic and research services.

Chicano Studies offers courses in American Studies (a new course, Chicanos and the Media, was offered in the spring semester), in Modern Languages, Philosophy, Political Science, Women Studies, English, Psychology and History during the 1982-83 academic year.

In October, Chicano Studies and the Southwest Research Institute held an open house at their new office, 1805 Roma Avenue, N.E. On 24 November, Chicano Studies and SHRI sponsored a poetry reading by Jimmy Santiago Baca, native New Mexico poet, who was accompanied by Andrés Olguin, flamenco guitarist. In February, CS sponsored a performance by the Miguel Caro Mexican folklore dancers at Popejoy Hall. In March, CS co-sponsored film showings during women's week in commemoration of International Women's Day.

Also in March, CS and SHRI sponsored an Hispanic

Leadership Conference for students from the University of Oklahoma. In April, CS sponsored a showing of "The Ballad of Gregorio Cortéz," a film based on Dr. Américo Paredes' study of the life and times of Mexican-Americans in Texas at the turn of the twentieth century. Edward James Olmos and James Bower, the principal actors, were present at the Lobo Theatre and at other showings in Albuquerque. In the last week of April, CS presented a talk by Roberto Maestas, author of El Pueblo: The American Journey of the Gallegos Family. The last two events were possible through the leadership of Sofía Martínez, CS staff member.

II. Future Plans

CS will continue to develop a program of studies of the Southwest. In fall of 1983, Tobías Durán will teach a new course, American Studies 286-Introduction to the Southwest. Other courses on the Southwest will be introduced in the near future. Eventually CS will evolve into a comprehensive Southwestern studies program.

III. Research Proposals, Publication, and other Services

Durán submitted proposals to conduct research on the history of legal justice in New Mexico to the Rockefeller Foundation and the National Endowment for the Humanities. Both are pending.

Durán also wrote a chapter, "Hispanics in the Union," in a recently published book, Building New Mexico: The

Experience of a Carpenters Union in the Southwest, edited by Professor Robert Kern, UNM History Department.

Durán, CS Academic Coordinator, presented talks on the history of the Southwest to the District Court administrative staff; to the Rio Rancho Kiwanis Club; and to the American Public Gas Association, which held a national convention in Albuquerque.

Note: For related information on CS see the annual report of the Southwest Hispanic Research Institute.

Native American Studies Center
- Academic Programs/Institute for Native American Development -
1982-83 Annual Report

Employees/Staff

Ted Jojola (Director: 50% faculty release time
Asst. Professor of Planning, Department of
Community and Regional Planning) tenure code 1, 9 month contract

Virginia R. Lujan (Clerical Specialist V)
Full-time, 12 months

Sadie Hoskie (Research Aide, workstudy and contract employment)
20 hours/week, Fall, Spring Semester

Marion Eagle (Clerical Aide, workstudy)
20 hours/week, Spring Semester

Instructors:

Geary Hobson (Lecturer-contract) Fall, Spring
Beverly Mathews (Lecturer-contract) Fall, Spring
Junella Hayes (Lecturer-contract) Spring
Marion Rodee (Professor-extra load compensation) Spring
Hana Samek (Teaching Assistant-Graduate Student contract), Spring
David Stea (Instructor-contract), 2 days, February, 1983
Scott Morris (Instructor-contract), 1 day, February, 1983
Ki Tecumseh (Instructor-contract), 3 days, March, 1983
Robert Johnson (Instructor-contract), 1 day, May, 1983
Kesley Edmo (Instructor-contract), 1 day, May, 1983
Andrew Thompson (Instructor-contract), 1 day, May, 1983

Special Contract Personnel:

Louis Baca (Graphic Artist)

Visiting Lecturers (honorarium):

Joseph Bruchac (Poet)
Scott Borg (Land Rights Attorney)
Sam Deloria (Indian Law Center)
Gilbert Pena (Vice-President - All Indian Pueblo Council)
Fred Ragsdale (Professor of Law)
Harold Ranquist (Water Rights Attorney)
Ralph Salisbury (Poet)
Cal Seciwa (Zuni Tribal Spokesperson)
Jennifer Skeets (Indian Land Rights Advocate)
Imre Sutton (Professor of Geography)
Al Utton (Professor of Law)

Visiting Lecturers (in-kind):

Ted Jojola's Class:

Steve Armenta (Jesuit Missionary)
John Gregory (Chief of Police, Bureau of Indian Affairs-Southern Pueblos Agency)
Richard Hughes (Land Rights Attorney)
Jaynn Kushner (Exec. Director, Society for the Preservation of American Indian Culture)
An Painter (Conflict Mediator)
Harold Ranquist (Water Rights Attorney)
Ramona Tafoya (Spokesperson, Old Town Plaza Vendors)
Maria Valdez (Director, Peoples Alternative Energy Services)

Geary Hobson's Class:

Diane Burns (Poet)
Maurice Kenny (Poet)
Gilbert Marin (Writer)
Luci Tapahonso (Poet)

Beverly Mathew's Class:

Conroy Chino (TV Investigative Reporter)
Elray DeRoin (Freelance Photographer)
Geary Hobson (Writer)
John Jojola (Lt. Governor, Isleta Pueblo)
Ted Jojola (Asst. Professor of Planning)
Jose Rey Toledo (Actor)

Hana Samek's Class:

Greg Camp (Graduate Student)
Richard Ellis (Professor of History)
Ted Jojola (Asst. Professor of Planning)
Frank Jones (Bureau of Indian Affairs - Water Rights)
Scott Rushforth (Professor of Anthropology)

Advisory Committee Members:

Chairman: Alfonso A. Ortiz, Professor, Anthropology
Anita Alvarado, Assistant Professor, Anthropology
Sam Deloria, Director, American Indian Law Center
Beverly Mathews, Director of Student Services, Native American Studies Center
Paul Resta,* Associate Dean for Special Projects, Education
William Siembieda, Director, Community & Regional Planning
Paul Vassallo,* Dean of Library Services, General University Resources/Library

*Served half-term due to leave of absence.

Fall 1982

		Instructor	Total Enrollment
American Studies			
221-001	SW Ind Com	Mathews, B.*	17
322-001	Five Civilized Tribes	Hobson, G. *	11
Anthropology			
237-001	Inds of NM	Alvarado, A.	40
306-001	S Amer Ind	Schwerin, K.	7
356-001	SW Archeology	Cordell, L.	22
430-002	T/Nav Ethnog	Chisholm, J.	10
Econ			
340-001	CANCELLED		
English			
211-004	SW Lit	Marquez, A.	12
211-005	SW Lit	Remley, D.	16
211-008	Ind Auto	Hobson, G.*	5
306-001	Oral & Fold Lit	Weigle, M.	23
397-003	CANCELLED		
History			
369-001	Am Ind Hist	Ellis, R.	43
Navajo			
101-001	Elem Nav	Willink,R.	17
102-001	Elem Nav	Willink, R.	7
201-001	Int. Nav	Willink, R.	5
497-001	Undergrad. Problems	Willink, R.	0
551-001	Grad Problems	Bills, G.	0
Art History			
280-001	Nat Am Art	Brown, D.	21
CRP			
470-003	S/Nat Am Land	Jojola, T.*	7
570-003			3
Pub Ad			
590-001	CANCELLED		

*Taught by Native American Studies Staff

Spring 1983

		Instructor	Total Enrollment
American Studies			
326-001	St/Ind Am Pop Cult	Mathews, B.*	18
Anthropology			
371-001	Img Am Ind Amer Cult	Hobson, G.*	7
History			
220-002	St/Am/Can Ind Pol	Samek, H.*	14
Art History			
429-003	T/New World Weaving	Rodee, M.*	17
CRP			
470-002	S/Cult Aspects/Plng	Jojola, T.*	2
570-002			0
Women Studies			
233-001	Amer Ind Women	Hayes, J.*	11

*Taught by Native American Studies Staff

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Events Held During the 1982-83 Academic Year

Title:	Date:	Attendees:
Ralph Salisbury (Public Reading)	Sept. 9, 1982	14
Tukak Theatre (Performance)	Sept. 18, 1982	335
Joseph Bruchac (Public Reading)	Nov. 30, 1982	20
Culturally Appropriate Design for Tribal Settlements (Econ. Dev't. Seminar)	Feb. 21-23, 1983	22
Federal Indian Law-The Exercise of Tribal Government (Public Seminar)[1]	March 10, 1983	47
Tribal Employment Issues in the Economic Development Process (Econ. Dev't. Seminar)	March 18-20, 1983	12
Indian Land Rights-The Ongoing Controversy (Public Seminar-Gallup)[2]	March 30, 1982	18
American Indian Water Rights-A Southwest Perspective (Public Seminar-Santa Fe)[3]	May 6, 1983	72
Financial Analysis of Business Operations (Econ. Dev't. Seminar)	May 18-20, 1983	23
Energy Independence--A Challenge for Native American Communities (Conference-UCLA)[4]	April 15-16, 1983	520
Book Signing and Reception--Western Social Science Association Conference[5]	April 29, 1983	250
The Four Corners-A National Sacrifice? (Regional Film Premier)[6]	May 9, 1983	375

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[1] Presented in cooperation with the UNM School of Law and the UNM Indian Law Students Association.

[2] Presented in cooperation with Student Services, UNM Gallup Campus.

[3] Presented in cooperation with the Native American Outreach Program, College of Santa Fe.

[4] Cosponsored with the American Indian Studies Center, UCLA and the United Indian Development Association, California.

[5] Cosponsored with the American Indian Program, University of Arizona.

[6] Cosponsored with Earth Image Films.

Gifts to the Center

Monies:

Mrs. Carolyn Reyer	$10,000[1]
ARCO Foundation	5,000[2]
National Endowment for the Humanities	2,000[3]
Anonymous Doner	900
Public Service Company of New Mexico	500
POGO Producing Company, Midland, TX	500
Sandia National Labs	200

Other:

Margo Juarez	Library collection of Phil Reno (Deceased) 25 linear feet
Barbara Bolling	Library Materials 2 linear feet
Geary Hobson	Library Materials 2 linear feet
Ted Jojola	Library Materials 2 linear feet
Coca Cola Company of Albuquerque	Refreshments
Frontier Resturant	Refreshments
Quality Import Company	Refreshments

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[1]Held in Trust

[2]Joint Award with American Indian Studies, UCLA, for Energy Conference

[3]Joint Award (Dr. Gerald Nash, Principal Investigator)

PERSONNEL

The Director of Academic Programs successfully negotiated a joint appointment with the School of Architecture, Department of Community & Regional Planning. His full time appointment as Assistant Professor of Planning, with 50% release time to direct Academic Programs, is the first such arrangement within Native American Studies (NAS): the appointment is consistent, though, with similar arrangements for the other ethnic and women centers.

Toward the end of the academic year, NAS was surprised to learn of the resignation of the Director of Native American Student Services, Beverly Mathews. Her resignation followed a few weeks after the resignation of her program secretary, Judy Hernandez. Both these resignations reflect a disturbing aspect of Center-wide efforts to maintain a comprehensive, coordinated program of services. Under the three-year tenure of Director Mathews, few joint programming efforts were shared. Part of the cause is attributable to the necessity of maintaining separate identities on account of the 1980 division of program services at the higher administrative level (i.e., the Vice President for Student Affairs and the Provost for Academic Affairs). Another aspect of the problem is due to the lack of a hierarchical structure within the Center itself. There are conflicting administrative roles in personnel, building/equipment policy, and outreach priorities.

PROGRAM EVALUATION

The 1982-83 academic year was devoted to extension of programs and services both within and outside of the University campus. The impetus behind this move was a need to gain an estimation of the regional role that Academic Programs and the Institute for Native American Development (Institute) could develop.

The first half of the academic year was spent primarily on academic programming. The task was made much more difficult by the drastic changes occurring nationally in American Indian Policy. Reservation governments had experienced severe cutbacks in tribal professional staff, and Indian education programs were curtailed in many "soft" monied programs. The combined effects of these were also felt throughout New Mexico with high unemployment and low services in many reservations. Tribally oriented national organizations located in Albuquerque faced reorganization or ter-

mination due to widespread national recession. A particularly disturbing trend is the downturn in policy by the Department of Interior in recognizing Indian education. Many university students on tribal scholarship were consequently involved in rectifying this issue. The above situations had a number of direct and indirect impacts on programming. As a result, more requests for clearing-house services were handled. New coalitions were formed. NAS joined two of these -- the Coalition on American Indian Religious Freedom, and the Coalition of the Directors of the Ethnic and Women Centers.

Some nine programs were executed during the second half of the academic year. These might have been the greatest number of activities that Academic Programs has ever done in its entire history: thus, making the year a most hectic but fruitful one. Among the combination of elements that were successfully accomplished include: the single unique assembly of top regional and national scholars; statewide outreach efforts which breached the UNM Gallup Campus and the College of Santa Fe; and regional efforts that saw the first ever cosponsorship of events with other major Indian Studies Programs (i.e., UCLA and the University of Arizona).

Although it appears from examining student class enrollments that humanities courses are in less demand than those which emphasize applied social science areas, attempts were made to continue an overall balanced offering through the sponsorship of cultural programs as well as academic offerings oriented toward tribal reservation development.

Locally, efforts were also increased so as to bring national tribal concerns into the Albuquerque area. Among these were various programs designed to involve the diverse non-Indian and Indian communities. These entailed group discussion and dissemination of shared concerns in water rights, energy development, and the performing arts. A trial program effort was also initiated with KOAT-TV. The Director of NAS is now responsible for co-producing public information programs on the series entitled, "Outreach 83," on a rotating one program per eight week basis.

PUBLICATIONS

The Institute has embarked on two specific ventures. The first of these involves plans for a limited release of a classic reference text on American Indian movie stereotypes entitled, "The Only Good Indian: The Hollywood Gospel," by Ralph and Natasha Friar. First released on a limited basis in 1972 by Drama Books of New York, a special agreement of copyright and retail sale has been negotiated with Drama

press and the authors. As the work contains numerous rare photographs and plates, the re-release of this text is a major accomplishment.

A second venture was successfully concluded this Spring with UNM Press. It entails the joint publication of a work on American Indian Land Tenure entitled, "The Irredeemable Estate: American Indian Land Rights." Edited by Professor of Geography, Dr. Imre Sutton, the finished work will contain contributions by major scholars and policy makers from throughout the United States. As publication four of the Institute's Economic Development Series, the manuscript has been evaluated by UNM Press as the most significant compilation of scholarly work on land tenure in the past twelve years. A special contract designating NAS as principal "author" will assure that all royalties will go toward the Institute's publications accounts. Furthermore, due to the strength of this as well as past Institute publications, UNM Press has extended an offer to form a professional publication relationship. This represents the maturation of Institute publications from an obscure, inhouse activity into an established, recognized operation.

PROGRAM ASSESSMENT

NAS in continuing to expand and stabilize its diverse offerings is demonstrating the viability of its role and responsibilities in academic programs and, to a limited extent, publications. The overall program, however, continues to be hampered by limited resources and the lack of support personnel. As was indicative in the past years, NAS has economized to the extent that is reasonably possible without affecting the quality of its programming. The acceleration of responsiblities brought onto the Center this year, however, necessitated the solicitation of outside funds to help support certain programs. This effort was relatively successful, especially in the face of national recession. In this regard, however, more hours are being consumed in fund raising at the expense of hours that would otherwise be committed to longer range programming.

NAS is at a distinct point in its twelve year existence. As the numbers of organizations that serve American Indian constituencies diminish, NAS is beginning to emerge as a distinct institution with a notable regional reputation. This may be somewhat premature due to its limited budget and personnel, but current national trends in Indian education and reservation development is forcing the program to respond toward areas that offer more applied and practical skills.

Academically, the trend in courses is toward substantative, contemporary offerings. This is also indicated by concerns raised by other university departments. Discussions with longer range merits have consequently been established with the departments of American Studies, Anthropology, Architecture and Planning, Art, Economics, Elementary Education, English, Engineering, Public Administration, and Women Studies.

RECOMMENDATIONS

As NAS draws toward a new level of maturity, the following tasks are recommended for action during this upcoming academic year:

(1) to begin a comprehensive evaluation and writeup of NAS goals, priorities , and program ideology;

(2) to detail the academic position of NAS in the role of a department and as a research institute;

(3) to explore the prospects for the expansion of its facilities, personnel, and programs through the generation of outside funding.

Office of Graduate Studies

Annual Report

July 1, 1982 - June 30, 1983

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A. Introduction.

Among the more significant personnel changes in the OGS during the 1982-83 fiscal year was the assumption of the position of Assistant Dean by Edward V. DeSantis on July 28, 1982. Antonio Gomez, Assistant to the Dean who manages the Graduate & Professional Opportunities Program and heads the OGS recruitment program for minorities, was reclassified as an Assistant Dean January 1, 1983. Alan Reed resigned from his position as Associate Dean effective July 31, 1983. A search which attracted a large number of highly qualified candidates culminated August 1, 1983 in the selection of Professor Peter Ciurczak (Music) as Associate Dean of Graduate Studies.

B. Significant Developments in the Office of Graduate Studies.

1. Once again progress in updating, refining and revising policies governing graduate education at UNM created an immense task for both the Senate Graduate Committee and the Office of Graduate Studies, which included drafting a new policy governing standards of quality for graduate students and studying an alternative dissertation format. A PhD in Laser Optics (Physics) and a PhD in Toxicology and Masters programs in hospital pharmacy, radiopharmacy and toxicology (Pharmacy) and a five-year program for a BS/MS in Chemistry were all sent to the Faculty Senate with a do-pass recommendation. The Committee approved an MA in accounting together with a PhD accounting concentration, addition of the Plan II to the master's program in Theatre Arts, and a public & applied history concentration for the master's

program in History. It also approved dual masters degrees in Latin American Studies with Community & Regional Planning and in Nursing.

Chairman Professor Paul Pohland (Educational Administration) guided the SGC very effectively through the year and, together with the Office of Graduate Studies, commenced program reviews of the Departments of Communicative Disorders, Geology, Modern & Classical Languages, Secondary & Adult Teacher Education and Sociology. The former three were completed during the 1982-83 academic year; the SATE and Sociology reviews will be completed during September, 1983 with visits from the off-campus reviewers selected by the departments and approved by the SGC. In each case a member of the SGC served with the review teams while they were on campus. I would like to commend both the SGC team members and Professors Schlegel (Architecture) who worked with the Geology review team, Don Flammer (Psychiatry) who worked with the Communicative Disorders review team and Alan Hudson-Edwards (Linguistics) who worked with the Modern & Classical Languages review team for their willingness to serve the University in this important process to insure quality graduate education.

The GA/TA subcommittee under of the aegis of the Office of Graduate Studies, chaired by Professor Barbour, commenced discussion on the problems of hiring, managing and counseling of graduate students who are employed for teaching and related duties. The Committee was made an official subcommittee of the SGC and developed a new GA/TA policy providing for protecting rights of departments as well as students and established a new compensation and classification schedule

with incentives for student assistants which was ratified both by the SGC and the Faculty Senate. This is a first step in efforts to bring UNM into parity with nearby comparable state universities and thus improve recruitment of promising graduate students.

2. The 1982-83 Graduate Lecture series began and ended with two vastly disparate, but highly successful presentations. Sir Francis Crick lectured before a very large and mixed audience on how the mind knows what the eye sees. Professor Jess B. Bessinger discussed archaeological backgrounds to the mediaeval imagination. There has been widespread interest in the series both on and off the campus. The series promises to continue in an exciting and stimulating vein.

3. One of the most urgently needed improvements in the Office of Graduate Studies for some time has been a systems analysis that could contribute to automation and change procedures to make them both more efficient and easier to understand and use. That analysis was started in June, 1982 with the help of the Computer Services & Information System staff. The process was completed in 1983: a flow chart was developed which documented the activities of the Office of Graduate Studies and systems and procedures were simplified.

4. In August 1982 an orientation session was offered for University personnel who worked with graduate studies and wanted to know the details of graduate administration, policies and procedures. An operations manual was prepared and distributed at this session with GO personnel explaining individual sections dealing with their areas of responsibility. Orientation sessions are now available by request.

5. Significant strides were made in record keeping, record processing, etc. The required review of student grades and academic standing was reorganized in order to expedite notification of probationary and suspended students. Streamlined procedures for processing assistantship recommendation and contract forms were established with the assistance of the Human Resources Committee and several departments. Heretofore the graduate or teaching assistant appointment contract required three separate circuits through the OGS, thus taking an inordinate amount of time to implement. The new "once-through" procedure makes it possible for the contract to be forwarded to the Comptroller and, subsequently, payroll expeditiously.

A central, alphabetical file of financial aid applicants was established for the first time; information is now available on the applicants for purposes of recruitment, budget and affirmative action. New forms were written clarifying credit for undergraduates who enroll in graduate courses.

An important step was taken when tentative agreement was reached with Dean Robert Weaver for the removal of the initial admissions file preparation and screening process to the Office of Admissions. This eliminates one step in the process, allows much quicker preparation of a student file and puts OGS at the right point in the process. It is hoped that this transfer will take place with the completion of the new student services building.

GRE reports were turned over to the Testing Division with the cooperation of Director Rod Young. That Division now provides fully automated service for GRE scores.

6. A project was initiated to offer a prize to art students who will participate in a competition for works to be hung in the Springer Conference Room. The works of art will constitute a revolving, permanent collection.

7. The Graduate Notes were circulated in September, January and May. GN is an effort to maintain formal contact with the university at large. GN is designed not only to brief the university community about changes in personnel on the GSO staff, but also to inform faculty and students about changes and improvements in the conduct of graduate affairs generally.

8. All thesis and dissertation manuscripts now submitted for approval to the OGS continue to be read carefully. Student authors are asked to make all recommended corrections. The GSO is pleased to find a significant improvement in the appearance and quality of these manuscripts in the last six months. The assistant dean has formed a panel of faculty, experienced in guiding students in theses and dissertations, to review and rewrite the Thesis and Dissertation Manual. In some ways, the current manual does not adequately address the current changes in manuscript preparation; in others, it restricts legitimate departmental independence in manuscript presentation. This panel should complete its work and present a revised manual to the Senate Graduate Committee and the Dean by the end of the Fall 1983 semester.

9. A major internal personnel reorganization was carried out. The move of graduation and financial aid coordinators into the offices off the front lobby provides better access and privacy. Two general secretary positions, staff who are trained in word processing and

information retrieval, should provide better support to the four deans and the administrative assistant. The employment of a full-time receptionist who receives and directs calls and people should result in smoother functioning of the graduate office.

10. The Office of Graduate Studies continued to maintain active cooperation with the Graduate Students' Association. The Assistant Dean attended the monthly meetings and participated in resolving student-oriented problems. The GSA joined with the OGS in announcing an open house for all graduate students.

11. From the first, James Cooney, the new Director of Alumni Relations, expressed an interest in alumni who hold graduate degrees from UNM. Our two offices are currently formulating a program of departmental fellowships supported by UNM graduates and awarded in the name of outstanding faculty members or graduates. The Foundation has also indicated a willingness to assist the OGS in addressing specific areas of graduate education.

12. The Office of Graduate Studies functioned as a catalytic agent in promoting much closer rapport with the various College Graduate Committees; for example, in promoting an exchange of representatives (Arts & Sciences has a representative from Education on its Graduate Committee). It is hoped that a ramification of this reciprocity will effect similar exchanges among other college graduate committees. The OGS has become involved by contributing to the College of Fine Arts New Mexico Studies in the Arts. It has worked with the College of Education in various and sundry matters, but especially with problems centering on the EdD/PhD distinction and also on on-site program plans.

13. With the assistance of the Associate Provost, OGS has been able to make permanent the Teaching Assistant Resource Center which was commenced last year, aided with the award of a Challenge Assistantship. TARC under the able directorship of Professor Jean Civikly (Speech Communication) has provided valuable training and assistance to teaching assistants at UNM.

14. The Dean has visited with WICHE (Western Interstate Commission on Higher Education) headquarters in Boulder, Colorado and sat on the panel which decided on the final slate of programs of WICHE member institutions during the past academic year. Two of UNM's programs were selected: Lithography (College of Fine Arts) and Public Administration's program in Tribal Administration.

15. The OGS has been in close contact with the Board of Educational Finance, especially on behalf of the development and funding of a proposal for minority fellowships to assist minorities, women and other underrepresented groups in attaining graduate degrees. The proposal, which is a joint effort of NMSU, ENMU, NMH, NMIMT and WNMU, calls for state funding of these fellowships which will be distributed among all the state's universities with graduate programs. Other visionary proposals already explored by OGS and the Provost's Office and falling under the general rubric of long-range planning are also under discussion with the BEF.

16. The Challenge Assistantship program, funded through a grant by the President, gave OGS the opportunity of awarding six of these special assistantships to enable graduate students whose departments presented unique and exciting proposals to participate in, for example, the Teaching Assistant Resource Center (see number 13 above) the

Geology Department's new Quaternary Studies Program dealing with the last million years of geologic time in which the earth developed its present conditions, and coordination of a new interdisciplinary fine arts course integrating drama, dance, music and the visual arts.

17. Dean A. Charlene McDermott.

Travel:

a) COGS (Council of Graduate Schools in the United States) annual meeting held in December at Colorado Springs, Colorado.
b) Panelist "Budgeting in relationship to the quality of graduate education" at WAGS (Western Association of Graduate Schools) annual meeting held in March at Portland, Oregon.
c) the Fall 1982 and Spring 1983 meetings of the Council of Graduate Deans of New Mexico Universities held, respectively, at WNMU campus at Silver City and at the UNM main campus in Albuquerque.
d) NEH Panelist in Washington D.C. which assessed proposals for and awarded summer stipends in philosophy.

Publications:

a) Comparative Philosophy: Selected Essays, Summer 1983. University Press, Washington, D.C.
b) Review of G. Nuchelman's Late Scholastic and Humanist Theories of the Proposition, Historiographica Linguistica X:1, 1983.
c) Review Editor of Journal of Buddhist Philosophy, the first issue of which is to appear in Fall of 1984.

Associate Dean Alan Reed.

Travel:

a) American Society for Public Administration, Region 8 Conference, Denver, Colorado, October 1982. Presented paper "The American States and the New Federalism."
b) American Society for Public Administration National Conference, New York City, April 1983. Presented paper "Space Technology and the new Military Strategy."
c) Convenor "Changing Perspectives in Local Government", Western Social Science Association, Albuquerque, NM, April 1983.
d) Workshop Presentor: New Federalism, Governor's Conference on Career Development for Women, Glorieta, NM, October 1982.

Professional Appointment:

a) Instructor, Rocky Mountain Program for Senior Executives in State and Local Government, University of Colorado, Center for the Improvement of Public Management, Denver, Colorado.

C. Recruitment, Retention and Affirmative Action.

Activities in the OGS under the general rubric of affirmative action continued under the directorship of Assistant Dean Antonio Gomez during the past year. As part of a deliberate effort to continue to integrate theses activities into the ongoing duties and responsibilities of the OGS and thus emphasize their importance to UNM, Mr. Gomez' official title was changed to Assistant Dean effective January 1, 1983 as mentioned earlier in this report.

The Graduate and Professional Opportunities Program (G*POP), the largest graduate fellowship program for minorities and other underrepresented groups in the state, received funding for six new and ten continuation fellowships for 1982-83 in Law, Physics, Mathematics, Psychology and Engineering. A new proposal was submitted for 1983-84 and was funded for eight new and ten continuation fellowships. During the past year, the program received an excellent evaluation as a result of the site visit by U.S. Department of Education staff.

Although no positive responses were received from any of the thirty-seven foundations contacted last year regarding matching funds for the minority fellowship program, it now appears the program may be funded entirely from state revenues. Twenty-three of the foundations contacted last year (those which seemed to respond more sympathetically than others) have recently been sent a letter of inquiry regarding the possibility of providing matching funds for a new innovative retention effort and we expect to begin receiving responses soon.

Other activities of the Assistant Dean for this area (recruitment, advising, counseling, proposal writing, graduate statistics maintenance, etc.) are continuing.

D. Center for Graduate Studies at Los Alamos.

Fourty-four courses were offered at the Center for Graduate Studies at Los Alamos during the 1982-83 academic year. 480 individuals registered over two semesters with a total enrollment of 564 for 1827 student credit hours. Graduating students (5 MBAs and 1 MS in Medical Science) were honored at a convocation held in Los Alamos in May.

The curriculum was developed with input from students, UNM advisors and Los Alamos National Laboratory administrators, resulting in several new courses in the areas of charged particle accelerators, radiochemistry, actinide and aquatic chemistry, instrumental analysis (using Laboratory facilities), and quality of working life issues (a management course). Efforts to assemble groups of students seeking the masters degree have begun to bear fruit in the areas of computer science, chemistry, chemical and nuclear engineering and mathematics.

Experiments with video-taped courses from UNM this year proved encouraging and plans for the installation of a video classroom at UNM funded through the CGS-LA contract were completed.

Several administrative procedures were improved in the areas of registration and management. A computerized records and accounting system was developed at the Los Alamos Branch College, along with a management team concept, and the Graduate Center was able to take advantage of these advances.

A completely revised contract format was adopted for next year that should provide better defined functions and policies.

E. Center for Graduate Studies at Santa Fe.

During 1982-83 both Education and Public Administration courses have remained in high demand. In addition, at the request of the Highway Department, courses in Civil Engineering are now being offered.

The Center staff cooperated with the Graduate School's evaluation aimed at improving the Center's course delivery and administrative procedures.

F. Projections & Recommendations.

Following is a list (randomly ordered) of a few of our more important aspirations for 1983-84.

1) Expansion of Presidential Scholarship Program so as to include scholarships for graduate students. (Presently these scholarships are only available for undergraduate students.)

2) Passage of our statewide minorities fellowship proposal which is a joint effort of NMSU, ENMU, NMHU, NMIMT, WNMU and UNM.

3) Further strengthening of our affirmative action and the development of a recruiting process that is managed by faculty and staff with recruiting skills.

4) Improvement of the quality of doctoral dissertations through the implementation of the guidelines documented in the proposed dissertation proposals policy.

5) Revision of dissertation manual with the addition of a detailed formal description of the process of preparing and defending a dissertation proposal.

6) Redefining criteria for selection of faculty to serve in the supervision of graduate education and providing criteria for periodic review and reinstatement (if called for) of a faculty member. College Graduate Committees and the Senate Graduate Committee have deliberated this issue at some length and are continuing to develop a workable policy.

7) The development of an improved policy and criteria for the delivery of on-site graduate programs.

8) Continuation and expansion of our periodic program reviews together with the tandem process of data analysis and recommendations therefrom for the programs already reviewed.

9) A new project in cooperation with the Office of Research Administration, viz., a television series on the world of research at the University of New Mexico. This would provide an inside look at the rigors and rewards of devoting oneself to extending the frontiers of knowledge.

10) In view of its impact on the already apparent strengthening of interdisciplinary research, an expanded challenge assistantship program is a desideratum and a clear priority of this office. E.g., it is hoped that one or two of next year's challenge TA's might play a role in a university-wide computer literacy program.

11) There are some interesting programs in the process of development with LANL and our own Biochemistry Department. The issue of federal funding as it relates to our LANL contract is a critical component of our planning in this area.

12) Increased efforts to assist our graduate students in the areas of advisement and placement. We plan to explore (with the knowledge and help of Career Services), to a greater extent than has been done, opportunities at Los Alamos, Kirtland and Sandia, as well as potential openings in businesses in Albuquerque, the latter with the aid of the Chamber of Commerce.

13) Evolution of a strong but flexible alternative dissertation policy.

14) Identifying meaningful distinctions between the PhD and EdD degrees and the clarifiction of their respective requirements. Dean Colton and I have continued our discussions.

15) Development of a stronger role for UNM in WICHE graduate exchange programs. The ramifications of our WICHE participation now includes graduate programs in lithography and tribal administration.

16) Continued cooperation with the Library Dean to try to find greatest fiscal support for the UNM Library.

17) Review of the policy governing expenditures from OGS' share of Cost of Education Allowance funds received by the University as a result of outside funded grants and scholarships accruing to graduate students.

18) Cooperation with neighborhood organizations in an effort to refurbish and beautify university areas.

19) Establishment (in cooperation with the UNM Alumni Association) of a lounge for graduate students in Hodgin Hall.

20) Attempts in cooperation with the College of Fine Arts to provide permanent source of funding and overall support for New Mexico Studies in the Arts.

21) Establish an emergency loan fund for students facing short-term financial difficulties.

G. Promotions of Staff.

Kimberly Beard, CSIV to CSV, 4/6/83.
Joanne Henson, CSIV to CSV, 4/7/83.

H. Appointments to Staff.

Kimberly Beard, CSIV, 8/17/82.
Sandra Byrd, CSIII, 8/30/82.
Barbara Yeary, CSIII, 4/6/83
Ruby Curtis, CSIV, 5/4/83.
Rita Tsosie, CSIV, 5/23/83.

I. Separations from Staff.

Gwenn Cooka, CSV, 11/30/82.
Sandra Byrd, CSIII, 3/11/83.
Janet Knop, CSVIII, 4/1/83.

J. Tables and Figure.

Tables and Figures 1-6 provide statistical information on enrollment, both at the masters and doctoral level, on the number of degrees awarded. Although the number of master's degrees increased during this period, the number of doctoral degrees awarded declined. Tables 7-8 show the number of teaching, graduate, research and project assistantships awarded during the period of this report. Needless to say, there is but meager financial aid available to graduate students.

Respectfully submitted,

A. Charlene McDermott
Dean of Graduate Studies

Table 1. Graduate Student Enrollment

Fall Semester, 1969-70 to 1981-82

Academic Year	Enrollment	Change from Previous Year	Percentage Change
1969-70	2,799	+ 134	+ 5.0 %
1970-71	3,210	+ 411	+14.7 %
1971-72	2,985	- 225	- 7.0 %
1972-73	2,909	- 76	- 2.5 %
1973-74	2,951	+ 42	+ 1.4 %
1974-75	2,923	- 28	- 0.95%
1975-76	3,289	+ 366	+12.5 %
1976-77	3,405	+ 116	+ 3.5 %
1977-78	3,470	+ 65	+ 1.9 %
1978-79	3,545	+ 75	+ 2.17%
1979-80	3,563	+ 18	+ 0.5 %
1980-81	3,657	+ 94	+ 2.64%
1981-82	3,757	+ 100	+ 2.73%
1982-83	3,437	- 320	-10.7 %

TABLE 2. MASTER'S LEVEL ENROLLMENT

Colleges, Schools Divisions	1978-79			1979-80			1980-81			1981-82			1982-83	
	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring
SCHOOL OF ARCH & PLANNING	84	83	-	88	75	13	-	-	25	103	105	30	93	89
COLLEGE OF ARTS & SCIENCES														
American Studies	-	-	1	-	-	-	2	7	-	11	16	4	15	14
Anthropology	61	50	5	56	52	5	51	66	14	69	62	9	62	66
Biology	61	57	14	52	50	14	52	48	23	53	53	10	48	49
Chemistry	43	41	16	49	45	16	33	33	14	42	39	16	41	31
Communicative Dis	49	39	27	41	40	27	47	53	40	54	51	40	50	48
Comparative Lit	5	8	2	2	2	2	4	3	1	3	3	1	2	3
Economics	25	29	13	34	32	13	33	35	12	38	33	12	28	29
English	49	53	15	53	42	15	46	48	24	47	44	15	54	52
Geography	13	12	3	14	12	3	14	16	2	15	18	6	18	12
Geology	62	53	7	59	57	7	58	52	12	57	61	12	62	60
History	46	41	19	49	47	19	49	42	15	40	38	13	38	33
Latin American Stud	12	8	3	8	9	3	14	13	7	17	15	6	14	14
Linguistics	12	6	-	-	-	-	11	11	1	6	5	6	7	12
Mathematics & Stat	27	30	13	38	35	13	44	41	14	41	42	12	37	36
Modern Languages	37	32	11	34	29	11	36	38	21	41	36	-	35	36
French	(9)	(8)	(2)	(9)	(11)	(2)	(11)	(13)	(7)	(15)	-	(7)	(7)	(8)
German	-	-	-	-	-	-	-	-	(2)	-	-	(2)	-	(1)
Portuguese	-	(1)	-	-	-	-	-	-	-	-	(2)	-	-	-
Spanish	(28)	(23)	(9)	(25)	(18)	(9)	(25)	(25)	(12)	(26)	(34)	(9)	(27)	(26)
Philosophy	23	21	2	22	20	2	23	24	7	23	17	3	17	14
Physics & Astronomy	24	24	5	30	28	5	33	30	7	49	35	4	44	27
Political Science	15	12	6	11	11	6	12	12	5	14	7	5	12	14
Psychology	42	38	13	36	36	13	35	33	8	39	41	11	41	37
Sociology	11	13	7	18	15	7	22	15	7	14	15	6	11	12
Speech Communication	40	31	13	36	21	13	31	34	20	27	32	17	30	28

TABLE 2. MASTER'S LEVEL ENROLLMENT (Cont'd)

Colleges, Schools Divisions	1978-79			1979-80			1980-81			1981-82			1982-83	
	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring
COLLEGE OF EDUCATION														
Art Education	34	37	19	39	35	19	33	25	20	30	37	22	39	36
Counselor Education	99	97	65	104	112	65	118	130	78	133	115	69	103	90
Ed'l Administration	78	71	55	61	70	55	81	90	106	116	108	100	76	74
Ed'l Foundations	31	26	27	40	49	27	37	41	25	51	46	24	56	54
Elementary Education	252	252	285	253	222	285	226	208	207	191	177	198	148	133
Hlth, Phys Ed, & Rec	126	108	84	106	88	84	99	98	81	99	97	71	85	95
Home Economics	14	13	11	15	24	11	20	16	12	21	15	10	16	18
Sec & Adult Tchr Ed	192	163	152	160	157	152	159	134	118	135	132	82	109	105
Special Education	169	165	173	166	185	173	180	237	212	245	229	149	173	174
COLLEGE OF ENGINEERING														
Chemical Engr	18	21	6	31	34	6	36	30	5	27	29	9	23	23
Civil Engr	32	41	12	35	40	12	41	40	10	32	44	11	43	40
Computer Science	48	44	10	40	52	10	55	60	18	69	61	14	58	57
Elec & Comp Engr	87	87	28	110	123	28	127	127	30	127	123	31	102	104
Mechanical Engr	35	35	9	44	46	9	50	44	6	34	38	13	37	33
Nuclear Engr	18	24	4	5	28	4	30	26	5	24	18	2	19	16
COLLEGE OF FINE ARTS														
Art	91	98	21	107	96	21	117	104	26	102	71	12	79	64
Music	37	34	11	42	40	11	35	37	13	32	31	13	27	26
Music Education	2	1	-	1	1	-	3	1	-	-	5	3	3	3
Theatre Arts	5	5	-	9	8	-	6	6	2	4	14	7	15	12
COLLEGE OF NURSING	7	5	2	23	18	2	34	33	12	44	39	14	42	39
DIVISION OF PUBLIC ADMINISTRATION	272	246	106	223	246	106	219	223	111	182	207	97	169	154
MEDICAL SCIENCES PROGRAM	32	37	5	30	29	5	26	29	7	36	34	3	26	24
TOTAL	2420	2291	1280	2379	2361	1292	2382	2393	1404	2585	2438	1210	2278	2177

In Summer 1982, 15 regular Masters; in Fall 1982, 20 regular Masters; and in Spring 1983, 11 regular Masters students listed incorrect majors; therefore, these figures are not reflected in the totals above.

TABLE 3. DOCTORAL LEVEL ENROLLMENT

Colleges, Schools Divisions	1978-79			1979-80			1980-81			1981-82			1982-83	
	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring
COLLEGES OF ARTS & SCIENCES														
American Studies	43	38	14	45	44	14	46	40	10	34	38	12	28	30
Anthropology	36	39	3	40	38	3	38	35	5	31	40	3	39	32
Biology	36	35	14	38	33	14	40	37	14	31	40	11	35	36
Chemistry	20	18	5	18	21	5	26	20	7	19	16	7	14	22
Economics	12	13	4	15	18	4	19	15	4	16	19	3	19	18
English	27	26	11	24	23	11	24	22	7	20	23	10	21	21
Geology	12	15	3	13	10	3	11	5	-	3	4	1	6	8
History	42	38	10	36	36	10	38	40	7	39	45	5	45	44
Ibero-American Stud	9	11	1	12	9	1	15	15	7	15	8	3	15	14
Mathematics & Stat	21	22	3	22	24	3	20	16	2	17	20	7	19	18
Romance Languages	43	46	11	43	41	11	39	33	10	25	-	9	26	28
Philosophy	14	15	3	17	16	3	14	17	1	7	15	2	13	12
Physics & Astronomy	27	28	6	25	24	6	26	26	9	24	31	7	27	37
Political Science	8	6	-	8	7	-	7	7	1	9	10	4	10	7
Psychology	19	20	6	20	19	6	15	18	7	20	20	1	22	25
Sociology	9	9	4	12	11	4	11	11	2	8	16	6	15	16
SCHOOL OF MGMT	5	4	-	2	3	-	4	3	-	-	-	-	-	-
COLLEGE OF EDUC														
Art Education	6	7	4	6	7	4	3	7	5	6	7	2	6	6
Counselor Education	42	39	20	51	41	20	43	39	16	42	48	12	48	51
Ed'l Administration	40	63	35	64	68	35	34	39	25	32	34	24	34	31
Ed'l Foundations	44	40	13	41	39	13	41	36	11	48	50	20	50	62
Elementary Educ	35	46	15	47	47	15	40	39	24	31	39	31	33	34
Hlth Phys Educ & Rec	44	37	29	42	43	29	47	49	28	52	56	33	49	53
Sec & Adult Tchr Ed	31	47	28	42	40	28	35	39	33	43	42	23	43	44
Special Education	26	43	24	40	41	24	33	37	22	44	60	41	51	52

TABLE 3. DOCTORAL LEVEL ENROLLMENT (Cont'd)

Colleges, Schools Divisions	1978-79			1979-80			1980-81			1981-82			1982-83	
	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring
COLLEGE OF ENGINEERING														
Chemical Engr	5	6	1	7	8	1	8	8	3	12	12	2	15	12
Civil Engr	10	14	5	10	11	5	9	9	2	5	12	1	14	14
Computer Science	28	25	8	24	29	7	24	25	4	32	45	3	3	6
Elec & Comp Engr	28	25	8	24	29	7	24	25	4	32	45	8	37	48
Mechanical Engr	10	8	1	12	11	1	13	7	4	11	5	2	12	13
Nuclear Engr	13	12	3	1	12	3	12	12	-	10	11	3	16	15
COLLEGE OF FINE ARTS														
Art	33	20	8	20	3	8	29	31	7	32	55	12	27	39
Music	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MEDICAL SCIENCES PROGRAM	12	11	1	17	16	1	33	16	2	9	15	1	18	13
TOTAL	762	810	292	823	820	291	797	753	279	727	843	309	810	861

In Summer 1982, 16 Post-Master Doctorals, in Fall 1982, 36 Post-Master Doctorals, and in Spring 1983, 36 Post-Master Doctorals students listed incorrect majors; therefore, these figures are not reflected in the totals above.

TABLE 4. MASTER'S DEGREES AWARDED BY UNIT AND BY YEAR

DEPARTMENTS BY COLLEGES DIV/PROGRAM	1927 thru 1958	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
American Studies																								1	3	
ARCH & PLANNING														6	7	13	10	23	20	21	18	19	13	16	16	18
ARTS & SCIENCES																										
Anthropology	58		4	2	2	1	7		2	7	9	6	14	17	9	13	13	4	8	19	14	15	9	12	10	11
Biology	115	4	5	8	12	7	12	6	11	14	18	21	17	18	18	15	17	19	11	23	15	16	12	7	5	4
Chemistry	25	2		1	1	2	6	1	6	3	9	2	4	1	10	9	6	7	3	4	10	7	9	11	6	5
Communicative Dis.																3	19	20	11	21	18	20	16	14	19	22
Comp. Literature							1		1	1			3	1	2	2	1			2	2		1	3		
Economics	41	3	4	2	2		1	3	1	6	7	8	5	3	7	11	6	3	3	6	5	4	3	6	5	7
English	143	7	4	6	5	6	6	17	21	23	17	23	12	20	14	19	10	10	12	4	14	7	5	3	7	4
Geography															4	3	5	3	2	3	2	2		2	2	6
Geology	65	7	13	11	9	6	5	4	2	6	9	8	7	5	7	8	5	11	9	6	13	12	10	14	10	10
History	114	6	3	7	12	7	10	13	15	11	19	14	15	13	21	16	11	4	6	8	3	3	11	3	3	5
Inter Amer Aff	24	1	1	2		2																				
Lat Amer Stu						3	3	3	1	3	4	16	7	14	9	10	8	10	8	7	9	4	6	5	5	7
Linguistics																				1	2	2	1	5	1	

TABLE 4. MASTER'S DEGREES AWARDED BY UNIT & BY YEAR (Cont'd)

DEPARTMENTS BY COLLEGES DIV/PROGRAM	1927 thru 1958	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
Math & Stat	45	2	2	6	3	4	5	8	11	3	22	13	10	17	14	19	6	3	7	7	4	7	5	7	11	6
Modern and Class Languages																										
Latin	2							1	2	1	5	3	9	9	4	9	3		2	4	2					
French																							1		8	6
Spanish	121	3	6	3	4	2	5	9	12	10	16	6	15	8	12	7	7	4	6	3	1		3	2	4	6
Portuguese						2	1	3		3				3				2		1	1				1	1
ARTS & SCIENCES																										
Philosophy	4		2	3			1	2	3	4	4	3	7	4	5	5	2	4	3	5	11	13	2		2	4
Physics & Astr	36	8	4	12	14	13	10	6	8	10	7	12	9	11	6	9	11	2	2	3	6	6	5	6	6	7
Political Science	61	2	2	3		2	4	2	2	3	3	8	5	6	5	2	3	4	1	5	6	1	4	1	4	1
Psychology	77	4	2	3	5	3	1	6	4	9	8	6	4	4	9	7	4	9	8	10	14	9	8	5	5	8
Sociology	20		1	1	1	1			1	3	1	1	3	2	4	4	5	4	6	1	3	2			2	1
Speech Comm	17	1	3	4	2	3	2	4	7	11	12	11	14	21	18	11	7	5	19	12	14	14	11	14	14	7
ANDERSON SCHOOL OF MANAGEMENT	15	4	1	3	5	4	9	9	8	28	30	20	25	29	27	28	52	52	45	47	46		91			
Industrial Admin						1	2	2		2	1	1	1	1			6		15	2						
COLLEGE OF EDUC																										
Art Education	47		4		1	1		4	4	8	3	7	8	9	18	20	23	9	14	22	19		12	8	9	7

TABLE 4. MASTER'S DEGREES AWARDED BY UNIT & BY YEAR (Cont'd)

DEPARTMENTS BY COLLEGES DIV/PROGRAM	1927 thru 1958	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
Educ'l Admin	355	15	20	21	21	21	23	23	28	35	36	21	16	11	21	18	9	10	18	33	19	17	24	38	29	27
Educ'l Fdns														5	9	5	7	7	6	13	13	8	12	13	14	13
Elementary Educ	64	18	12	6	9	9	9	13	21	23	33	39	56	31	60	59	76	77	87	76	87	72	81	76	87	67
General Educ	121		1																							
Counselor Educ	7	19	9	12	23	19	26	26	26	43	42	61	55	65	83	71	85	59	80	59	56	46	43	28	36	52
Health, Phys Ed & Recreation																										
Health Educ														2	3	2	3	7	8	7	11	5	11	9	5	9
Physical Educ	36	8	6	4	8	11	10	8	12	17	18	19	12	18	12	14	13	13	8	11	22	11	17	18	10	11
Recreation						2			4	3	2	4	4	1	5	13	8	10	6	15	11	16	10	8	10	6
Home Economics																						6	5	7	5	6
Secondary Educ	95	8	9	6	9	3	9	7	4	13	17	27	26	20	40	48	46	38	59	32	34	63	67	59	50	46
M. Educ Sci			14	6	8	31	24	39	30	18	20	4														
Tch Bus Subj											2	4	11	4	6	6	4	4	6	8	6					
Tch English														9	10	1	2		6	1						
Tch Home Ec											4	6	3	6	5	8	6	6		5	2					
Tch Indus Subj											4	3	5	5	5	7	7	4	7	6	4					
Tch Math											1	7	16	10	7	28	9	12		3						
Tch Science											1	7	3	7	6	1	4	5		1						
Tch Spanish			8	6	10	21	9	14	16	8	8	1	6	3	7	8	3	4		7	1					
Special Educ											6	16	25	39	37	33	50	56	38	61	60	67	64	64	85	82

*The MAT;s are no longer offered

**Commencing Fall 1978, the MA in Home Economics has been awarded under the jurisdiction of the Home Econonomics Department.

TABLE 4. MASTER'S DEGREES AWARDED BY UNIT & BY YEAR (Cont'd)

DEPARTMENTS BY COLLEGES DIV/PROGRAM	1927 thru 1958	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
COLLEGE OF ENGR																										
Chemical Engr			1	4		1		1	4	2		1		6	3	2	2	1		2	5	3	5	14	15	9
Engr Sci Mtls									1	1	2		2	1			3	1								
Civil Engr	29	5	6	7	8	7	7	11	12	12	15	13	10	15	10	6	7	13	9	12	13	15	20	14	6	11
Computer Science																	3	3	3	4	10	8	10	10	12	4
Elec & Comp Engr	42	11	12	23	56	40	58	58	32	31	30	35	34	22	36	29	39	30	36	29	25	35	28	30	33	34
Mech Engr	25	10	11	15	27	28	23	26	5	26	15	25	18	20	19	8	3	4	9	7	8	1	18	23	10	10
Nuclear Engr					6	5	7	3	8	6	3	9	11	9	9	14	6	17	9	7	7	10	10	8	7	11
COLLEGE OF FINE ARTS																										
Art	61	4	4	6	5	9	7	6	6	14	13	24	15	11	15	14	18	24	20	18	29	13	31	31	36	17
Music	27		1	2	3	3	1	5	7	6	5	4	2	3	5	6	9	6	7	2	8	9	8	7	6	5
Music Educ	5	4	6	3	5	5	9	4	7	7	3	8	10	7	1	5		3	5		1	1	3	0	0	
Theatre Arts																							1	2	2	2
DIVISION OF PUBLIC ADMINISTRATION													13	17	36	33	30	35	32	57	65	74	81	70	90	77
MEDICAL SCIENCE PROGRAM																		4		1	2	1	6	9	2	4
COLLEGE OF NURSING																							4	4		4
TOTAL	1898	157	182	196	278	282	313	347	345	434	484	527	547	568	680	682	692	665	680	724	751	634	797	697	715	992

TABLE 5. DOCTORAL DEGREES AWARDED BY UNIT & BY YEAR

DEPARTMENTS BY COLLEGES DIV/PROGRAM	1927 thru 1958	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
ARTS & SCIENCES																										
American Studies	6	2		1	1			1	1	2	1	3	4	1	6	5	10	4	12	6	9	4	5	8	4	8
Anthropology	11		1			3					1	3	4	2	1	2	3	3	5	4	2	5	6	4	5	5
Biology	9	1			1	1	1	2	1	1	1	5	2	4	3	10	8	5	4	5	2	3	10	6	6	2
Chemistry	26	6	2	4	7	3	3	4	2	6	6	3	6	6	6	4	5	2	8	5	9	10		9	6	7
Economics														1	1	2	1	2	3	4	2	2	3	3	1	3
English	12	3	2	4	1	2	1	2	3	7	12	16	11	7	14	18	11	9	9	12	4	3	5	2	7	7
Geology					2	1	1	2	3	4	2	3	3	4	9	2	2	2	3	3	1		9	3		3
History	18			4	4	3	3	8	6	6	3	7	18	17	17	11	12	11	15	11	6	9	4	4	3	1
Ibero-Amer Stu						1			1	1	2	3	3		3	5	4	1	2			2	1			
Mathematics					1	2	2	4	1	5	6	7	10	7	9	9	5	5	5	6	6	1	3	7	2	1
Physics	6		1	2	3	2	2	4	2	4	8	2	2	5	1	6	4	7	1	3	8	3		5		2
Philosophy													1	1	3	1		1	2		1	1	1		1	1
Political Science																2	3	2	1	1	1		2			
Psychology					1			1		2	5	8	12	8	6	5	13	4	7	9	7	6	6	12	11	2

TABLE 5. DOCTORAL DEGREES AWARDED BY UNIT & BY YEAR (Cont'd)

DEPARTMENTS BY COLLEGES DIV/PROGRAM	1927 thru 1958	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
Romance Languages													6	7	4	4	5	7	3	8	6		3	10	3	3
Spanish	13	1	1	2			1	1		3		2			4											
Sociology																										1
COLLEGE OF EDUC																										
C & I					2	1	1	5	5	4	9	18	25	22	26	32	30	20	12	19	14		29			
Education																								34	34	20
Educ Admin			2	1	1			3	2	8	4	10	8	3	4	8	7	2	5	5	4	5	5			1
Educ Fdns											2	2	4	5	6	3	9	7	7	5	8	7	7			1
General Educ				3		2																				
PPS						1	2	4	5	2	4	5	14	9	22	6	17	15	8	10	5		10			
COLLEGE OF ENGR																										
Chemical Engr								1					1	1	1	1	2	1		1		1			3	3
Civil Engr									1		2	3	3	5	4	3	1	3	1		2	2	1	1	3	
Computer Science																										1
Elec & Comp Engr				2	4	5	4	3	10	7	10	3	5	7	7	7	6	9	3	4	1	3	3	2	2	3
Mech Engr								3	3	2	5	2	1	2	4	3	1	4	3	4	1					2
Nuclear Engr									2	1	1	1	3	4	2	1	2		2	2		6	3	1	3	

TABLE 5. DOCTORAL DEGREES AWARDED BY UNIT & BY YEAR (Cont'd)

DEPARTMENTS BY COLLEGES DIV/PROGRAM	1927 thru 1958	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
COLLEGE OF FINE ARTS																										
Art History													2			1	2	1		2			2	1	2	2
MEDICAL SCIENCE PROGRAM												1	3	1			3	2	1	6	5	3	3	3	4	6
SCHOOL OF MGMT																							1			
TOTAL	101	13	9	23	28	27	21	48	48	65	85	106	146	129	163	152	166	129	122	135	104	76	122	115	98	94
MASTER OF FINE ARTS									1	2	1	2	1	4	3	2	4	6	4	4	1		2	7	11	9

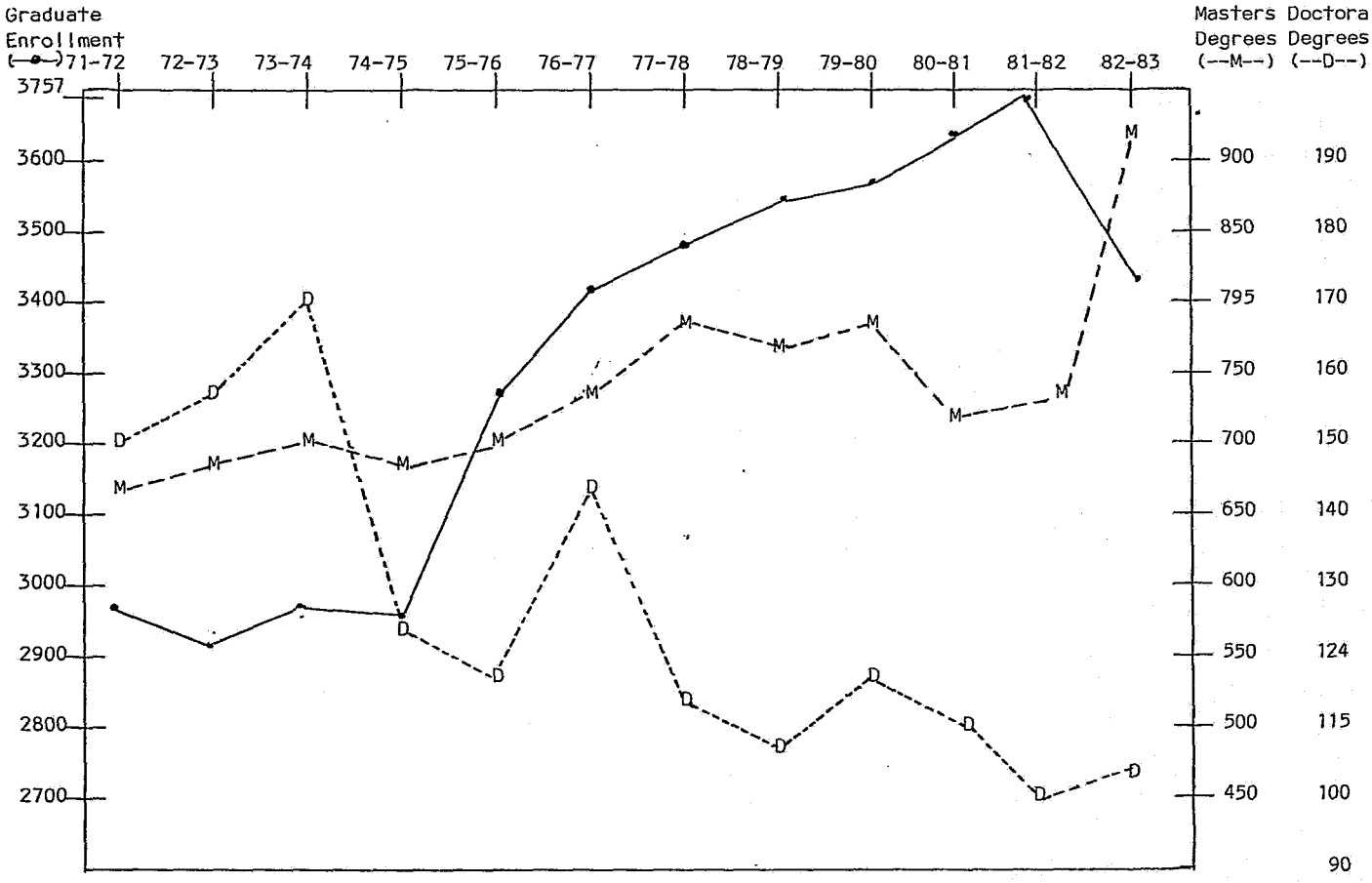

Table 6. Enrollment Figure

Table 7. Graduate Assistants, Teaching Assistants, and Teaching Associates, 1982-83 (Number of Awards)

College, School, Division	Summer 1982	Fall 1982	Spring 1983
School of Architecture and Planning		13	11
College of Arts and Sciences			
American Studies		3	2
Anthropology		16	17
Biology		47	44
Chemistry		31	28
Communicative Disorders		4	4
Economics		13	15
Geography		3	3
Geology		21	17
History		17	17
Ibero-American Studies			
English		50	44
Linguistics		1	1
Mathematics and Statistics		27	28
Modern & Classsical Languages		38	37
Philosophy		6	6
Physics and Astronomy		22	25
Political Science		7	5
Psychology		24	22
Sociology		6	6
Speech Communication		7	8
TOTAL		349	339
Anderson Graduate School of Management		26	26
College of Education			
Art Education		3	3
Counselor Education		2	3
Educational Administration		4	4
Educational Foundations		10	8
Elementary Education		11	10
Health, Phys Ed & Rec		38	38
Home Economics		1	1
Secondary & Adult Education		10	9
Special Education		3	3
TOTAL		108	105

TABLE 7. Graduate Assistants, Teaching Assistants, and Teaching Associates, 1982-83 (Number of Awards) (Cont'd)

College School, Division	Summer 1982	Fall 1982	Spring 1983
College of Engineering			
Chemical and Nuclear Engr		9	8
Civil Engineering		5	4
Computer Science		13	15
Electrical & Computer Engr		17	18
Mechanical Engr		7	8
TOTAL		51	53
College of Fine Arts			
Art		33	29
Music		14	13
Theatre Arts		5	5
TOTAL		52	47
College of Nursing		3	1
Division of Public Administration		5	5
Other			
Afro-American Studies		0	0
Bureau of Engr Research		1	1
Electronic Technology		0	1
English Tutorial		0	0
Fine Arts Slide Library		0	1
General Library Skills Center		0	1
General Honors/Undergrad Seminar Program		0	1
General College		4	8
Latin American Institute		2	3
Latin American Projects		0	0
Native American Studies		0	1
NM Research & Study Coun		2	2
Pharmacy-CPC		0	0
Women's Studies		1	1
TOTAL		19	27
Graduate Studies - Challenge Assistantships		5	4
GRAND TOTAL		584	575

TABLE 8. Research Assistants and Project Assistants, 1982-83
(Number of Awards)

College, School, Division	Summer 1982	Fall 1982	Spring 1983
Albuquerque Urban Observatory		0	0
American Studies		0	0
Anthropology		1	1
Biochemistry		4	4
Biology		8	3
Bureau of Engr Research		25	29
Cell Biology		3	2
Chemical & Nuclear Engr		1	1
Chemistry		12	12
Clinical Nutrition Program		0	1
Communicative Disorders		1	1
Computer Science		1	1
Contract Archeology		0	0
Economics		0	0
Electrical & Computer Engr		0	0
Elementary Education		0	0
Health, Phys Ed & Rec		0	0
History		0	0
Institute of Meteoritics		2	2
Instructional Media Services		0	0
Linguistics		0	0
Mathematics and Statistics		0	0
Mechanical Engineering		1	1
Microbiology		2	1
NM Energy Inst		0	0
NM Historical Review		1	1
Pathology		2	1
Physics and Astronomy		9	9
Public Administration		0	1
Special Education		0	0
Speech Communication		0	0
Tropical/Geographic Med		0	0
TOTAL		87	86

ANNUAL REPORT

CENTER FOR GRADUATE STUDIES AT LOS ALAMOS

July 1, 1982 - June 30, 1983

Don R. McLaughlin, Director

I. Introduction

Forty-four courses representing ten university departments, divisions and schools were conducted through the Graduate Center at Los Alamos during the 1982-83 school year. Several new courses were added to the offerings; two of these were given in videotape format and one in compressed format.

Six students received master degrees through the Los Alamos programs this year. These graduates, five of whom received the MBA degree and one the master in Medical Science, together with one PhD student in Mechanical Engineering, were recognized at a convocation held in Los Alamos in May. The total number of graduates now stands at 351 (Table I).

Changes in administration included a restructuring of support staff shared with the Branch College and the creation of a Senior Management Team. New procedures were established for tuition accounting and for conducting registration. Highlights of developments in the curriculum, administration and budget are presented below.

II. Curriculum

Curriculum development in Los Alamos begins with an assessment of the interests of the Los Alamos National Laboratory, the needs of the student body and the opinions of the community. In some areas, such as with the MBA program, the courses and students are easily identified; in others, such as geology, external budget and policy considerations direct the course of action. Areas between these extremes require the most attention, planning and insight.

Close communication with Laboratory administrators, including John Fox, the Technical Coordinator for the CGS-LA, has facilitated the direction of the Graduate Center. Several productive meetings were held between the UNM Dean of Graduate Studies, Charlene McDermott and the Laboratory Assistant Director for Institutional Relations, Judith Liersch. When Diane Soran was identified in the Spring to replace Gene Stark as Government Relations Officer, a day of meetings with UNM officials was conducted. In April, the new President of UNM, John Perovich met with the Laboratory Director, Don Kerr.

A meeting between Laboratory group and division leaders and UNM department and college leaders was arranged in November to discuss engineering programs. Several productive lunchtime planning and advisement meetings were held each semester where open discussion between UNM advisors, teachers and students helped determine the course offerings. A number of Laboratory employees with interest in the programs were added to the list of advisors to the Center for Graduate Studies.

In June 1982 a survey, listing suggested offerings for the year, was distributed to all laboratory employees through the Newsbulletin, and made available to the public through media advertising. Responses to the survey proved to be accurate predictors of registration enrollments. Class

schedules were published and distributed to the public each semester through the Los Alamos Monitor newspaper, and the UNM-LA Bulletin was expanded and distributed as an annual publication. These information services were carried out under the direction of the Associate Director for Instruction, Angela Coop.

1. Chemical and Nuclear Engineering

A core course for master degree students in Chemical and Nuclear Engineering was offered Spring semester. The favorable response to this course indicates a viable group of interested students and more core courses are planned for next year.

One of the more popular specialty topics this year, Charged Particle Accelerators, was offered to the professionals at the Laboratory as a two-semester sequence through Nuclear Engineering.

2. Chemistry

Interest in chemistry courses continued to grow in 1982-83 and several new courses were added to the offerings. Courses in radiochemistry, actinide chemistry and aquatic chemistry were stimulated by laboratory interests and were well-attended.

A special cooperative effort at the Laboratory deserves mention. Several staff members under the leadership of Ed Cokal arranged to conduct a laboratory course, Instrumental Analysis, using the National Laboratory facilities and equipment. A number of logistical hurdles were surmounted to allow this popular course to be offered to both laboratory and community students.

Enrollments in Computer Science continued to be strong in 1982-83, and are expected to increase next year, as the first graduates in the associate degree program at the Branch College continue their computer science education. Walt Brainerd continued as a full-time CS faculty member in Los Alamos and as Director of the UNM-LA Computer Center. In response to the increasing interest, he has revised the projected curriculum in CS.

A major issue of concern this year was the master degree program in CS at Los Alamos. A rapidly evolving curriculum on the main campus has placed strains on the Los Alamos program. Heavy demands on the UNM faculty coupled with the changing curriculum has made it difficult to present the same program to part-time students in Los Alamos as is presented to full-time students on the main campus. A great deal of discussion involving the CS Department, students and Laboratory administrators has taken place, but solutions to the immediate problems have not yet been worked out to the satisfaction of all parties. Several proposals are under discussion at the present time.

4. Electrical and Computer Engineering

Interest in electrical and computer engineering has waned during the last several years, in part displaced by an increased interest in computer science. Of the two EECE courses given this year, one, the two-semester sequence of fields and waves, has identified a group of students headed for a bachelor degree. This group will be offered sequel courses next year. Plans have also been

made to offer several courses in the areas of materials and properties directed at the microtechnology professionals.

In an effort to provide an opportunity for students desiring to pursue the master degree, a videotaped version of the EECE accelerated course for migrating majors, Principles for Advanced Students, was prepared. This course can be taken by a few students at a time and when a sufficient number have been prepared the regular graduate curriculum can be initiated.

5. Management

The MBA program continues to be one of the most popular programs in Los Alamos. In addition to five regular core courses offered this year, two elective courses were added. Public Personnel Administration, given Spring semester through the Public Administration Division, and Quality of Working Life Issues, given during the Summer of 1983 are thought to be particularly suited to the Los Alamos environment.

Several students who had missed some of the core courses in previous rounds of the MBA program took these courses this year, increasing their opportunity to complete the MBA requirements.

6. Mathematics

Healthy enrollments in ten math courses were experienced this year. Applied Ordinary Differential Equations was given both semesters, due in part to the response to a need for this upper division course in the associate technology program at the Branch College. A popular course in statistics developed into a two-semester sequence.

In addition to servicing the needs of science and engineering majors, an effort was made to identify those students who might be interested in the master degree in mathematics. Several students have now expressed their interest and plans have been made to offer courses suited to their needs next year.

7. Mechanical Engineering

Although there is a large number of Laboratory employees with bachelor's degrees in mechanical engineering, little interest has been expressed in pursuing the master degree. Two advanced topics courses did achieve sizeable enrollments this year; Finite Element Analysis and Fluid Mechanics.

8. Medical Science

The Medical Science departments at UNM did a notable job of modifying the curriculum in Los Alamos this year in response to suggestions to broaden the subject matter. However, external influences have taken a toll and the Biochemistry of the Nervous System course was cancelled in the Spring. Further revisions of the curriculum are underway to meet the needs of the students in these areas.

III. Administration

A reorganization of the support staff structure and duties has increased the efficiency of the Graduate Center functions this year. Several new policies were instituted this year and some procedures modified to improve the operation of the Graduate Center.

1. Organization

An in-depth study of administration was undertaken by the Branch College in the Fall. This resulted in a reorganization of the functions and duties of the support staff shared with the Graduate Center. New vertical paths of authority were established culminating in a senior management team, and divisions of responsibility along task lines were delineated in the area of office management. A smoother running organization has resulted. The Graduate Center Director participates in senior management meetings to correlate business with the Branch, an increasingly important function as the Branch grows and more students prepare for upper-division undergraduate courses.

2. Policy

Several policies were developed during the year to address the areas of video courses, computer services, renumeration for independent study instruction, and residency requirements. Some of the results of these considerations will be included in an expanded appendix to the contract for next year, with the purpose of clarifying the functions of the Graduate Center.

a) Video Courses

In conjunction with the production of two video courses this year, input was obtained from UNM and the Laboratory in an attempt to establish certain ground rules and operational policies. The result was a video policy statement addressing the issues of copyright, ownership, production and compensation. A proposal is under consideration to convert a classroom in the Farris Engineering Center into a video classroom with the capability of being upgraded to present live broadcasts to a remote classroom in Los Alamos. In this way it is anticipated that the offerings in Los Alamos can be expanded in an economical manner.

b) Computer Services

The use of the VAX 11/750 computer at the UNM-LA campus has continued to stimulate interest in computer-oriented training. In addition to computer science, the computer has been used in management, mathematics and engineering courses this year. The BDM-P statistical package and the PROLOG language were implemented on the VAX this year, preparing the way for expansion into the areas of chemistry, statistics and artificial intelligence next year. Also the Branch College is developing potential in several areas of graphics.

In spite of the demonstrated justification of an instructional computer at the Graduate Center, budget, policy

and management problems have remained as areas of concern. Several people have expended effort in the attempt to deal with the problems. These areas have been addressed in a policy statement to be included in next year's contract.

c) Residency Requirements

Although it has been understood in the past that courses taken through the Graduate Center at Los Alamos carry residence credit, the policy has not been well-documented. The residency issue was presented to the Faculty Senate Graduate Curriculum Committee this year for clarification. An affirming statement was placed into the minutes of the committee with the concurrence of the Dean of Graduate Studies. A similar statement clarifying the residence requirement for undergraduates has been requested of the UNM Registrar.

d) Independent Courses

Students in Los Alamos have traditionally taken research, problems and thesis courses under independent status. Occasionally they also enroll individually in lecture courses under independent status; this provides a useful vehicle for required courses in the enviroment of a small population. UNM instructors conduct such tutorial sessions without renumeration, and this policy has been applied to similar arrangements in Los Alamos. However in occasions such as the completion of a sequence of courses where the enrollment has dwindled, a comparable amount of work may be required to present the

material as would be required to present the same material to a larger class. To address these infrequent occurences a procedure has been established to renumerate the teacher. It is designed with safeguards to prevent unnecessary abuse and should prove helpful to certain students caught in midstream.

3. Procedures

New registration and reporting procedures have been incorporated into the operations of the Graduate Center this year.

The week of regular registration was moved to two weeks before the start of classes in the Spring. This seemed to cause little inconvenience (such as requiring registration twice for those students taking classes through both the Graduate Center and the Branch) but significantly improved the opportunity to prepare for the beginning of classes. Also conflicts arising out of handling the registration of two institutions sharing the same facility were reduced. Changes in accounting procedures and the use of a computer have significantlly reduced the discrepancies between registration revenues and enrollments this year.

Three improvements in the area of reporting are worth noting. Student and financial records were placed in the word processing computer starting in the Spring, under the direction of the Administrative Coordinator, Betty Myers. Rearrangements of the data provided convenient and accurate information for statistical reports. The Testing Division on main campus began to provide summary information for the ICES computerized course evaluation system this

year, thereby easing the burden of these reports. Finally, a reevaluation of the planning and reporting timetable helped to improve the reporting process.

IV. Budget

The instructional budget for 1982-83 is almost equal to that for the previous year. As shown in Table II, this is expected since the number of classes has remained nearly the same.

1. Video Classroom

Twenty thousand dollars have been added to the 1982-83 budget in anticipation of acceptance of a capitalization expenditure proposal to equip a video classroom. It is estimated that a UNM produced video course can be delivered at a cost approximately half-way between that of an adjunct-taught course and a UNM live-lecture course. The cost will be reduced even further for repeated showings of a video-taped course.

2. Contract Format

A general contract form was used this year for the CGS-LA contract, supplemented with a short appendix detailing the particulars. During the year it became apparent that since many important items were omitted from the appendix, compared with previous contracts, it would be desirable to expand the appendix for

the coming year. In order to include the items from previous contracts, a complete revision of the appendix was undertaken. The result was a new organization and detailed statement, including the incorporation of new policies developed during the past few years.

The aim of the new organization has been not only to provide a more accurate statement of the functions and duties of the Graduate Center, but also to provide a convenient mechanism for correlating the scope of work and reimbursement of costs with the CGS-LA budget. In this fashion it should be possible to easily modify the appendix to the contract in the future as needed.

Table I. Degrees Awarded through the Los Alamos Center for Graduate Studies

Year:	Bachelor 54-73	Bachelor 74-83	Master 54-73	Master 74-83	Doctorate 54-73	Doctorate 74-83	Total
Engineering:							
Chemical and Nuclear	0	0	47	6	4	0	57
Computer Science	0	1	0	10	-	-	11
Electrical and Computer	8	13	27	44	3	1	96
Mechanical	1	7	18	1	4	1	32
Materials	-	-	8	1	-	-	9
Science:							
Biology	1	0	0	0	0	0	1
Chemistry	5	0	9	1	18	1	34
Mathematics and Statistics	9	2	6	1	2	2	22
Medical Science	-	-	0	5	-	-	5
Physics	2	0	28	3	14	4	51
Other:							
Business	-	-	0	31	-	-	31
University Studies	0	2	-	-	-	-	2
Total	26	25	143	103	45	9	351

Table II. Enrollment and Budget Trends.

Academic Year	70/71	71/72	72/73	73/74	74/75	75/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83
No. of lecture courses	46	42	45	47	46	41	44	54	52	55	50	45	44
Individuals registered	410	414	522	448	498	450	480	520	608	599	537	425	480
Average enrollment in lecture courses	11	12	13	12	13	13	14	12	14	13	12	11	13
Enrollments:													
Individual study	26	41	63	46	40	38	26	42	57	56	52	33	41
Undergrad. lecture	93	65	75	244	197	319	337	211	398	377	309	238	221
Graduate lecture	425	421	527	310	378	227	259	456	346	341	280	242	302
Total enrollment	544	527	665	600	615	584	622	709	801	774	641	513	564
Student credit hours	1640	1632	1935	1774	1769	1669	1735	2070	2328	2267	1916	1590	1827
Budget ($x1000)	131.6	117.1	147.2	140.9	128.3	140.6	151.2	151.9	196.2	219.0	271.4	347.8*	363.+
Cost per SCH ($)	80	72	76	79	73	84	87	73	84	97	142	219	199
Cost per lecture course ($x1000)	2.9	2.8	3.3	3.0	2.8	3.4	3.4	2.8	3.8	4.9	5.4	7.7	8.3

* Installation of UNM-LA VAX 11/750 computer.

\+ Includes $20K for video equipment.

7/27/83

THE UNIVERSITY OF NEW MEXICO

CENTER FOR GRADUATE STUDIES AT SANTA FE

ANNUAL REPORT

July 1, 1982 - June 30, 1983

Vera John-Steiner, Ph.D.
Director

The Santa Fe Graduate Center has maintained a strong and varied program this last year in spite of some financial difficulties. We have offered the same number of courses as during the previous year (37 courses) but managed to increase the enrollment from 613 students in 1981-82 to 677 students during this last year. The summer session of 1982 was particularly successful as we were able to offer three courses in conjunction with the Latin American Institute.

In order to prevent a downward spiral of fewer courses producing a lessened enrollment, the Director requested that departments accept a lowered replacement fee; from $2500 to $2000. This change was accepted by each departmental chair and, as a result of their generous cooperation, the Center is growing again.

Two evaluations were conducted during this past year: a very informal assessment out of the Center's office early last fall, and a carefully planned evaluation conducted by the Graduate Studies office. Both of these revealed that there is a great need for the Center, coupled with a widespread concern that we should further diversify our program offerings. The greatest needs expressed were for an MBA program in Santa Fe and for more courses in the area of computer literacy.

A. ADMINISTRATIVE PROCEDURES. The routines and procedures are working well and no changes were made in registration, class scheduling, or faculty contracts. But, as a result of some of the financial problems that faced us a year ago, the Center developed a more efficient accounting procedure, as suggested by members of the Graduate Studies office. Both income and expenditure are examined after each registration period and thus we keep a tighter control over our finances. As a result of this improvement, we were able to respond to the request of the University's budget director to refund three percent of our allocation in the Spring of 1982. In addition, we have examined very carefully

the funding formula governing the State allocation to the Center. With this information in hand and with the cooperation of Mr. Wiegmann and his staff, the BEF budget for 1983-84 has provided a substantial increase in the Center's funding.

B. CENTER FACILITY AND STAFF. The physical facility has remained the same, although we have requested better insulation and better ventilation from the College of Santa Fe. Our request has not to date resulted in the needed improvements.

Ms. Clarkson left the Center to take a full-time position elsewhere, and we have only been able to replace her with a permanent employee this summer (Mrs. Roslyn Gomez). In the meantime, we have had excellent temporary people who have served the Center with enthusiasm and who were proficient in performing their duties: Margaret Campos and Patricia Pacheco.

C. PROGRAM DEVELOPMENT. There were no new programs initiated in 1982-83 at the Center, but existing programs were further strengthened.

1. Public Administration Division. Two-thirds of the students enrolled in Public Administration courses are pursuing a Master's degree. Others are in non-degree status only until they complete admissions procedures. There are a few students who receive "C's and I's" in these courses, and for them to be able to take courses in non-degree status is important as they, as well as the faculty, can judge whether or not they can actually meet the requirements of a degree program. The Division is strengthening its course delivery in Criminal Justice and Public Health Administration areas, both of which are in demand in Santa Fe.

2. Counselor Education. This is our most competitive program. There are more prospective students desiring admission into the program in Santa Fe than there are places for them. The department provides an important service

for non-degree students as well; the courses which are not restricted to the students in the block program are very popular, and both teachers and government employees take these.

3. Secondary and Adult Teacher Education. Last year SATE courses were aimed primarily at students in need of re-certification. A new program is starting in 1983-84 with emphasis on Adult Education. The timing of this program corresponds to the opening of the new Santa Fe Community College.

4. Special Education. Enrollment remains strong in this department. While during 1982-83 the department was able to deliver only one course per semester, it is increasing its delivery during the current academic year.

5. Educational Foundations. The department is continuing to offer the required research courses for the College of Education programs. In addition, the Director offers one course a year in her areas of specialization. During the spring 1983 she taught a Language Acquisition Seminar which was well attended.

6. Educational Administration. Student demand continues to be steady in this area. The department is offering a well planned three-year long Master's degree, which attracts students from Santa Fe and other Northern New Mexico communities.

7. Elementary Education. This department has started to offer courses again in Santa Fe in addition to those required for reading re-certification. Of particular interest are courses in Early Childhood Education, an area which was identified for us by the Santa Fe Public School Administration. (We are pleased with our growing cooperation with them.)

8. Civil Engineering. The Center has started to offer courses in Civil Engineering at the request of both the Highway Department and the Civil Engineering Department on main campus. While registration was low in the fall it picked up considerably in the spring, and we expect a similarly strong enroll-

ment for the courses to be offered during the current academic year.

9. Speech Communication. This is a department which has been an enthusiastic participant in our program delivery. We now see a steady increase in enrollment in contrast with the previous year. We are trying to schedule elective courses in such a way that they will not conflict with the time-slots of the required courses in Public Administration. This kind of planning may be partially responsible for the better enrollment.

10. Political Science. This department provides a minimum of one course per academic year. While enrollment remains relatively low, this is an important elective area for Public Administration students.

11. History. Although there is a demand for history courses in Santa Fe, we have had difficulties in negotiating with the department on main campus, as our reimbursement procedure is not a staisfactory one for the History Department. Although we have excellent adjuncts in Santa Fe, and Prof. Jenkins taught a very popular course in summer 1982 in conjunction with the Latin American Institute, the uncertainity of course delivery in this area and the fact that we cannot provide a full-scale Master's degree does not bode well for history courses at the Santa Fe Graduate Center.

12. Anderson Graduate School of Management. It is most unlikely that we can provide a Management degree in the foreseeable future at the Graduate Center. Although the Director has had a number of conferences with AGSM administrators and they do understand our needs for such a program in Santa Fe, they are unable to free members of their own faculty to teach up here. This situation has resulted in some public criticism of the University. (An article about the Center in the Santa Fe New Mexican in January 1983 included complaints voiced by Santa Fe residents who have to travel to Los Alamos or Albuquerque in pursuit of such a program.) Other institutions in the area are planning a

Master's degree in Management as they realize that there is a need for one in Santa Fe.

D. SERVICE. The staff of the Santa Fe Graduate Center responds to a great number of requests concerning the University's programs, procedures, financial aid, etc. The Director advises potential graduate students from Northern New Mexico who are interested in pursuing degree programs through UNM. In addition, a Santa Fe Graduate Center booth was set up during the Governor's Career Development Conference on September 9, 1982, and was manned by Professor Stitelman who represented the Center. Additional advisement is provided by departmental representatives who have been coming more regularly to the Center during this last academic year than previously.

The Center's staff has prepared a brochure explaining the programs, procedures, etc., of the Graduate Center. Approximately five-hundred copies have been mailed or handed out during this past year. A new brochure will be prepared and printed for distribution this year.

E. PROFESSIONAL ACTIVITIES. Dr. Vera John-Steiner received a grant from the Office of Education's FIPSE program to write a book with P. Irvine and N. Elsasser on literacy programs conducted by the group in various settings. She has continued to do research on children's writing and on gender-linked lecture styles with the help of small grants from UNM's Research Allocation Committee.

During the summer of 1982, she presented a paper at the University of Keele, England, during a five-day conference on the "Acquisition of Symbolic Skills"; she has lectured at Rutger's University, at Bank Street College of Education, and at Congregation B'Nai Israel in Albuquerque during the fall semester of 1982. She was a consultant to the Native American Materials Center and she had reviewed grant applications for the National Endowment for the

Humanities and the National Institute of Education.

In the spring of 1983, she spoke at the University of New Mexico's Duke City Linguistics Circle, and at two Office of Education Conferences in Washington.

Non-teaching University Service: Women Studies Advisory Committee, Senate Graduate Committee, Department of Linguistics Policy Committee, and Director of the Santa Fe Graduate Center.

Teaching Responsibilities: In addition to her course-load, Vera John-Steiner chairs 7 doctoral committees and is a member of an additional 18 committees. She received the University's "Outstanding Graduate Teacher of the Year" award in May, 1983.

In summary, the Center has had a productive year without making any major new advances. Plans for the coming academic year include the re-establishment of a Santa Fe based advisory committee; this group will provide guidance to the Center in addition to the departmental advisory group which has been meeting once a semester on main campus with the Center's director. Some interesting new courses are also going to be offered this fall and spring at SFGC. The staff would like to thank the Graduate School for its support of our activities and for their encouragement which resulted in some of these new developments.

Respectfully submitted:

Vera John-Steiner

Vera John-Steiner, Ph.D.
Director

Anne Burrage

Anne Burrage
Administrative Assistant

ANNUAL REPORT

OFFICE OF GRADUATE STUDIES

AFFIRMATIVE ACTION ACTIVITIES

JULY 1, 1982 - JUNE 30, 1983

I. Introduction

II. Graduate and Professional Opportunities Program (G*POP)

III. Recruitment

IV. Applications, Admissions and Enrollment

V. Advising and Counseling

VI. Retention

VII. Financial Aid (G.A.'s, T.A.'s, R.A.'s and P.A.'s)

VIII. State Funded Fellowship Proposal

IX. Other Activities

X. Problems and Recommendations

I. Introduction

The affirmative action activity in the Office of Graduate Studies is conducted by one full-time administrator (the position title was changed from Assistant to the Dean to Assistant Dean in January, 1983) with the assistance of one part-time secretary and occasional assistance from other clerical/secretarial staff. The title change to Assistant Dean and upgrading of the position was accompanied by some changes in responsibilities and duties and is part of the continuing effort to integrate the position and affirmative action activities into the ongoing duties and responsibilities of the Office of Graduate Studies. The following is an overview of these activities for the period July 1, 1982 - June 30, 1983. Information on G*POP for July and August 1983 is also included.

II. Graduate and Professional Opportunities Program (G*POP)

UNM was awarded G*POP grants of $142,800 for six (6) new and ten (10) continuation fellowships for 1982-83, and $149,800 for seven (7) new and eleven (11) continuation fellowships for 1983-84 bringing the total amount of funds awarded to UNM under G*POP since 1978 to $896,311. UNM has consistently been competitive in recent years as regards G*POP awards. Of 119 universities receiving G*POP fellowship awards in 1982-83, only 9 received more than UNM. Of 31 western universities receiving fellowships none received more than UNM in 1982-83. For 1983-84, a total of 128 universities received awards; only seventeen received more fellowships than UNM. Of thirty three western universities receiving awards for 1983-84, only four received more fellowships than UNM.

Since 1978, UNM has awarded G*POP fellowships to 52 students (See Table 1). Nineteen fellows have received graduate or law degrees, three transferred to non-G*POP departments and received degrees, nineteen (8 first year, 7 second year, and 2 third year) are continuing, one transferred to another department and is continuing, and ten (three of whom plan to return to graduate school) have left the program for a number of reasons.

During 1982-83, the UNM G*POP was site visited by U.S. Department of Education staff and received an excellent evaluation; UNM was also nominated as an exemplary program of the department.

Funding is expected to continue in the future given the Congress' reluctance to support the Reagan administration's proposals each year to wipe out the program (See also Table 2).

III. Recruitment

Recruitment of minority graduate students continues to be a primary focus of the OGS. In addition to faculty/staff visits to 17 regional universities in 1982-83, the office sent out two or three thousand letters, brochures, etc. to students listed by the GRE Minority Student Locater Service and the W.I.C.H.E. Western Name Exchange materials to several hundred minority and other faculty, and had other contacts with hundreds of individual students. Other activities concerned with recruitment, such as the state funded fellowship proposal, are covered in other sections of this report.

A proposal to prepare a recruitment video tape as a means of improving our graduate recruitment was submitted to the UNM Foundation during 82-83 but was not approved for funding.

IV. Applications, Admissions, and Enrollment

Data on application by ethnicity/race, sex, etc. continue to elude us given the limited staff and insufficient resources necessary to compile such statistics. Obviously, applications would be the best indicator of progress of our recruitment efforts and a serious effort will be made to attempt to collect this information in a consistent and deliberate manner in the future. Admissions data are equally difficult to determine. Enrollment data have been tabulated by the OGS for a number of years (See Table 3).

Although overall minority graduate enrollment decreased by 42 (6.0%) from Fall, 1981 to Fall, 1982 most of the decrease can be attributed to the College of Education which decreased by 47 (down 12.5%). Other units show increases. For example, Public Administration increased its minority graduate enrollment by 20.8%. Anglo women continue to make up a large portion of our American citizen graduate enrollment in most fields but continue to be underrepresented in physics and most engineering departments (See Table 4).

V. Advising and Counseling

Advising and counseling of undergraduates, graduate school applicants, and graduate students, continues to be a primary function of the Assistant Dean. Several hundred student contacts were conducted by the Assistant Dean during 1982-83.

VI. Retention

No new initiatives concerning graduate student retention were undertaken during 1982-83 although a number of conversations with the

Dean and other OGS and UNM faculty and staff indicate a continuing concern. This area must be studied further and appropriate responses developed. Future projections indicate a need for a complete analysis and program.

VII. Financial Aid (G.A.'S, T.A.'S, R.A.'S, and P.A.'S)

Graduate student employment at UNM, being the major source of institutionally funded financial aid for graduate students, continues to be of great concern to the OGS. Available financial aid has a great effect on many aspects of graduate education including minority student recruitment, admissions, retention, and scholarly production.

UNM employed 840 graduate students in these categories during the fall semester 1982. However, of this number only 66 (7.8%) were members of underrepresented minority groups. Non-citizens comprised 14.2% of these employees, Anglo men 42.5%, and Anglo women 34.0% (See Table 5). During the year every UNM dean and chairperson was informed of her/his unit's graduate student enrollment and employment by ethnicity/race, sex, etc. Additionally, the Affirmative Action Office was informed of the situation and of the need for guidelines and activity in this area.

A preliminary survey of other UNM graduate financial aid available from outside sources was conducted and although results were sketchy and incomplete we estimate that there are approximately fifty fellowships, internships, etc. from outside sources held by UNM graduate students.

VIII. Progress of State Funded Fellowship Proposal

The proposal for state funded fellowships for minorities and women was again presented to the BEF. Although it appeared to have the support of a majority of BEF members, it was a victim (as were all "new initiatives") of the recession, declining state revenues, and budget cutbacks. The proposal's chances this year appear to be somewhat improved since it is President Perovich's number one special program priority, it has the governor's support, there has been a major change in BEF membership, and the new executive secretary has indicated it is one of his top priorities. A key factor, of course, will be the condition of the state's treasury. The effort last year to seek support from the "private sector" (foundations and industry) was totally unproductive. Of thirty-seven philanthropical and industrial foundations contacted, four did not respond and the remainder responded negatively.

IX. Other Activities

A number of other activities occurred under the auspices of the OGS (or involving this Assistant Dean) during 1983-83. Among them are the following:

1. Served as contact for the National Hispanic Scholarship Fund (NHSF) which produced approximately twelve awards to UNM students for 1982-83. During the previous year, when there was no UNM contact, no NHSF awards were made to UNM students.
2. Attended several New Mexico Graduate Deans' meetings.
3. Served on the Southwest Hispanic Research Institute (SHRI) Policy Board.

4. Served on several OGS committees including Challenge Assistantship and Graduate Scholarship Committees and the OGS Planning Committee.
5. Met with GRE staff and arranged for meeting with UNM minority graduate students.
6. Recruited at other universities.
7. Attended national G*POP meeting.
8. Corresponded and met with staff of the Universidad Autonoma del Noreste (Saltillo, Coahuila, Mexico) regarding cooperative programs.
9. Prepared job description, organized search and served on Search/Screening committee for new Associate Dean.
10. Served on Assistant Dean Search Committee.
11. Received $2000 in contributions for recruitment from some of the cooperating G*POP schools and departments.

X. Problems, Needs, Recommendations, Projections

The biggest problem during the past year has been the lack of institutional funding for OGS affirmative action activities. The upcoming year (1983-84) will be the sixth year of organized activity and as yet no institutional funding has been provided for publications, materials, recruitment, etc. although requests continue to be submitted. Another problem, again dealing with budgets, involves funds allocated for those activities. The Dean made available $10,000 from the COEA (which accrues to the graduate office from G*POP) for affirmative action activities during 1982-83 and we were able to

secure an additional $2000 in contributions from G*POP cooperating units. However, an overexpenditure in the COEA account allowed an expenditure for these activities of only about $8000-$9000. It is my understanding that the COEA which will accrue to the OGS in 1983 will be used first to make up the deficit and that the balance will be made available for recruitment. The problems noted in 1981-82 in the OGS, and which created such a difficult situation, were, for the most part corrected.

There is still a great need for improved record keeping in order to better evaluate the OGS Affirmative Action activity.

TABLE 1

UNM G*POP FELLOWSHIP RECIPIENTS

BY ETHNIC/RACIAL BACKGROUND, SEX AND DEPARTMENT

1978-83

(As of August 1983)

	Black		Chicano		Other Hispanic		Native American		White		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
Chemical and Nuclear Engineering	1			1							1	1
Civil Engineering			1		1						2	0
Computer Science			1	1*							1	1*
Electrical & Comp. Engr.	1			1	1					5*	2	6*
Mechanical Engineering			1								1	0
Law	3	1	9	4							12	5
Mathematics/Statistics			2	2			1			4	3	6
Microbiology										2	0	2
Physics	1		1					1		3*	2	4*
Psychology			2	2*						1	2	3*
TOTAL	6	1	17	10*	2	0	1	1	0	15*	26	28*

*One Anglo female (Ms. Janie Page) transferred from Physics to EECE on 8/81, one Chicana (Ms. Linda Baca) transferred from Psychology to Comp. Sci. on 8/82, and both are counted twice.

TABLE 2

CURRENT AND FORMER UNM G*POP STUDENTS

As of August, 1983

NAME OF FELLOW	TENURE BEGAN	PROGRAM AREA & DEGREE	COMPETION DATE AND/OR PROGRESS OF STUDENTS
Donna T. Schultz	9-1-78	Elec. Engr., M.S.	Graduated M.S. 12/80. Employed as a General Engineer, Air Force Weapons Lab., Albuquerque.
Lorraine S. Baca	9-1-78	Mathematics, M.S.	Graduated M.S. 5/80. Employed as a Math Analyst at Sandia National Laboratories, Albuquerque.
Jean Baines	9-1-78	Law, J.D.	Graduated J.D. 5/81. Law School believes she moved to Colorado.
Edward L. Chavez	9-1-78	Law, J.D.	Graduated J.D. 5/81. In private practice in Albuquerque.
Patricia J. Duy	9-1-78	Elec. Engr., M.S.	Received fellowship for 3 years. M.S. received 12/82.
David A. Graham	9-1-78	Law, J.D.	Graduated J.D. 5/81. In private practice in Denver.
Lynn Koehler	9-1-78	Elec. Engr., M.S.	Received fellowship for 3 years. M.S. received 12/82.
Ernest O. Pacheco	9-1-78	Law, J.D.	Graduated J.D. 12/80. Clerked for NM Supreme Court. Employed with government agency in Santa Fe.
Diana L. Peppin	9-1-78	Mathematics, M.S.	Left program 5/79. Vacated fellowship awarded to E. Roybal. Transferred to Secondary Education. Received M.A. 8/81.
Elizia M. Roybal	9-1-79	Mathematics, M.S.	Awarded fellowship vacated by D. Peppin. Received fellowship for one year. Received M.S. 12/80 in Nuclear Engr. Employed by Arizona Public Service.

TABLE 2 (Cont.)

CURRENT AND FORMER UNM G*POP STUDENTS

As of August, 1983

NAME OF FELLOW	TENURE BEGIN	PROGRAM AREA & DEGREE	COMPLETION DATE AND/OR PROGESS OF STUDENT
Lenke E. Vietorisz	9-1-78	Mathematics, M.S.	Left program 5/79. Vacated fellowship awarded to M. Jacobi. Transferred to Secondary Education. Received M.A. 8/80.
Margaret D. Jacobi	9-1-79	Mathematics, M.S.	Awarded fellowship vacated by L. Vietorisz Graduated M.S. 12/81. Math department believes she is teaching in high school in Santa Fe.
Linda L. Cole	9-1-79	Medical Science, Ph.D.	Received Ph.D. 12/82. Employed as Director, Virology Section, St. Joseph's Clinical Laboratories, Albuquerque.
Judith M. Wallace	9-1-79	Medical Science, M.S.	Received fellowship for three years. Took Leave of Absence. Employed as Research Tech. at Veterans Hospital, Albuquerque. Plans to return to graduate program.
Charles E. Davis	9-1-79	Electrical Engr., M.S.	Received fellowship for 3 years. Received M.S. 12/82. Employed part-time on campus at Southwest Resource Center for Science & Engineering.
Mauricio Valencia	9-1-79	Electrical Engr., Ph.D.	Received M.S. 5/81. Entered doctoral Program. Took leave of absence 5/82. Employed as member of Technical Staff at Sandia National Laboratories.
Walter Nails	9-1-79	Law, J.D.	Graduated J.D. 5/82. Assistant D.A. in Gallup, NM.
Ruben S. Cortez	9-1-79	Law, J.D.	Graduated J.D. 5/82.
Arthur Pablo	9-1-79	Mathematics, M.S.	Left program 10/79. Vacated fellowship awarded to J. Torres.

TABLE 2 (Cont.)

CURRENT AND FORMER UNM G*POP STUDENTS

As of August, 1983

NAME OF FELLOW	TENURE BEGAN	PROGRAM AREA & DEGREE	COMPLETION DATE AND/OR PROGRESS OF STUDENT
Joe F. Torres	1-21-80	Mathematics, M.S.	Awarded fellowship vacated by A. Pablo. Left program. Plans to return to graduate program.
George E. Chavez	9-1-79	Law, J.D.	Left program 8/81.
Olene M. Evenmo	9-1-79	Physics, M.S.	Left program 3/31/80. Vacated fellowship awarded to J. Page.
Janie K. Page	8-25-80	Elec.&Comp.Engr., M.S.	Awarded fellowship vacated by O. Evenmo. Transferred from Physics 8/81. Received M.S. 6/83. Employed in California.
Kathleen L. Hood	9-1-79	Physics	Received M.S. 5/82. Employed as Computer Science Analyst with private company, Management Data Base Systems, Albuquerque.
Linda Baca	9-1-81	Computer Science, M.S.	Transferred from Psychology to Comp. Sci. 8/82. Resigned fellowship 5/83. Employed at UNM Hospital. Plans to attend graduate school at N.M.S.U.
Martha Chavez	9-1-81	Elec.&Comp.Engr., M.S.	Received M.S. 12/82. Started with Hewlett-Packard in Ft. Collins, Colo. in February, 1983.
Gilbert Gonzales	9-1-81	Psychology, Ph.D.	Left program 5/82. Partial vacated fellowship ($3420/yr.) awarded to T. Morales. Partial vacated fellowship ($1080/yr.) awarded to D. Silva.
Frederic D. Jones	9-1-81	Law, J.D.	5/84.
Josie Medina	9-1-81	Law, J.D.	Left program 5/82. Vacated fellowship awarded to O. Naranjo.

TABLE 2 (Cont.)

CURRENT AND FORMER UNM G*POP STUDENTS

As of August, 1983

NAME OF FELLOW	TENURE BEGAN	PROGRAM AREA & DEGREE	COMPLETION DATE AND/OR PROGRESS OF STUDENT
Philip E. Moya	9-1-81	Mech. Engr., M.S.	Completed M.S. 5/83.
Joe Sedillo	9-1-81	Law, J.D.	5/84.
Avaine Strong	9-1-81	Physics, M.S.	Received M.S. 8/83.
Eugene White	9-1-81	Chem. & Nuc.Engr., M.S.	Left program 5/82. Vacated fellowship awarded to M. Trujillo. Department believes he is employed in Data Processing in Denver.
Henry Baca	9-1-82	Law, J.D.	5/84. Partial fellowship-$3780/yr. in 82-83. Law contributed $720/yr. to complete $4500 stipend. $720/yr. from this fellowship awarded to D. Silva in 82-83. Awarded full fellowship for 83-84.
Anna Camenisch	9-1-82	Mathematics/Statistics, M.S.	5/84. Making excellent progress.
Placido Gomez	9-1-82	Law, J.D.	5/85
Margarita Griego	9-1-82	Law, J.D.	5/85
Thomas Morales	9-1-82	Psychology, Ph.D.	Awarded fellowship vacated by G. Gonzales. 5/85. Partial fellowship-$3420/yr. for 82-83. Resigned fellowship 12/82. Transferred to Anthro.
Orlinda Naranjo	9-1-82	Law, J.D.	5/85. Awarded fellowship vacated by J. Medina.
Mark Santistevan	9-1-82	Physics, M.S.	Resigned fellowship 3/31/83. Awarded to C. Velasquez.

TABLE 2 (Cont.)

CURRENT AND FORMER UNM G*POP STUDENTS

As of August, 1983

NAME OF FELLOW	TENURE BEGIN	PROGRAM AREA & DEGREE	COMPLETION DATE AND/OR PROGRESS OF STUDENT
David Silva	9-1-82	Civil Engineering, M.S.	Partial fellowship-$1800/yr. for 82-83. Will complete master's 12/83.
Mary Ann Trujillo	9-1-82	Chemical Engr., M.S.	Awarded fellowship vacated by E. White. Making excellent progress. Will complete masters 12/83.
Barbara Vigil	9-1-82	Law, J.D.	5/85.
Sarah Wittrup	9-1-82	Psychology, Ph.D.	5/85. Making excellent progress.
Carmen Velasquez	6-83	Comp. Sci., M.S.	8/85. Awarded fellowship vacated by M. Santistevan.
George Aragon	9-1-83	Mathematics, M.S.	5/84
Mario Dela Huerga	9-1-83	Civil Engr., M.S.	5/84
Latricia Gonzales	9-1-83	Psychology, Ph.D.	5/87
Donavon Roberts	9-1-83	Law, J.D.	5/86
Fermin Rubio	9-1-83	Law, J.D.	5/86
Donna Siergiej	9-1-83	Physics, M.S.	5/85
Susan Sinclair	9-1-83	Elec.&Comp.Engr., Ph.D.	5/86

TABLE 3

UNM MINORITY GRADUATE ENROLLMENT*

FALL SEMESTERS

1970-1982

Year	Black	Hispanic	Indian	All Minority	Women**	Total***
1982	32	503	118	653 (17.2%)	1882 (49.6%)	3797
1981	36	525	132	693 (18.6%)	1891 (50.9%)	3717
1980	52	546	107	704 (19.2%)	1773 (48.4%)	3662
1979	53	531	86	670 (18.4%)	1716 (47.1%)	3642
1978	53	538	98	691 (19.3%)	1639 (45.8%)	3579
1977	43	484	70	597 (17.2%)	1453 (41.9%)	3470
1976	44	482	74	600 (16.2%)	1632 (44.0%)	3697
1975	45	384	52	481 (13.9%)	1477 (42.6%)	3467
1974	29	289	41	360 (13.5%)		2923
1973	38	313	35	387 (12.6%)		2951
1972						2909
1971						2985
1970				321 (10.0%)		3210

* All categoies except "Total", are Citizens only

** Also includes minority women

*** Includes Non-Citizens

UNM GRADUATE ENROLLMENT BY ETHNICITY/RACE
SEX, DEPARTMENT & COLLEGE,
(FALL, 1982)

GRADUATE UNITS	AMER. INDIAN		BLACK		HISPANIC		TOTAL UNDERREPRESENTED MINORITIES*		ASIAN		WHITE		TOTAL STUDENTS
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	
	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	
SCHOOL OF ARCH & PLANNING	(.0)	(.0)	(.0)	(.0)	4 (4.2)	3 (3.2)	4 (4.2)	3 (3.2)	(.0)	(.0)	47 (49.5)	41 (43.2)	95
ARTS & SCIENCES	11 (1.2)	6 (0.6)	7 (0.7)	(.0)	57 (6.0)	41 (4.3)	75 (7.9)	47 (4.9)	(.0)	3 (0.3)	450 (47.2)	379 (39.7)	954
American Studies	(.0)	1 (2.4)	(.0)	(.0)	2 (4.8)	1 (2.4)	2 (4.8)	2 (4.8)	(.0)	(.0)	16 (38.1)	22 (52.4)	42
Anthropology	1 (1.0)	(.0	(.0)	(.0)	3 (3.1)	2 (2.1)	4 (4.1)	2 (2.1)	(.0)	(.0)	42 (43.3	49 (50.4)	97
Biology	(.0)	(.0)	(.0)	(.0)	3 (3.6)	2 (2.4)	3 (3.6)	2 (2.4)	(.0)	(.0)	52 (62.0)	27 (32.1)	84
Chemistry	2 (5.1)	(.0)	(.0)	(.0)	1 (2.6)	(.0)	3 (7.7)	(.0)	(.0)	(.0)	27 (69.2)	9 (23.1)	39
Comm. Disorders	(.0)	(.0)	(.0)	(.0)	(.0)	3 (5.6)	(.0)	3 (5.6)	(.0)	1 (1.9)	4 (7.5)	45 (85.0)	53
Comp. Literature	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	1(100.)	(.0)	1
Economics	(.0)	(.0)	1 (2.0)	(.0)	6 (12.2)	(.0)	7 (14.3)	(.0)	(.0)	(.0)	29 (59.2)	13 (26.5)	49
English	1 (1.4)	3 (4.2)	(.0)	(.0)	2 (2.8)	3 (4.2)	3 (4.2)	6 (8.3)	(.0)	(.0)	18 (25.0)	45 (62.5)	72
Geography	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	12 (70.5)	5 (29.4)	17
Geology	1 (1.5)	(.0)	1 (1.5)	(.0)	3 (4.5)	(.0)	5 (7.6)	(.0)	(.0)	(.0)	45 (68.2)	16 (24.2)	66
History	1 (1.3)	2 (2.6)	1 (1.3)	(.0)	9 (11.5)	3 (3.8)	11 (14.1)	5 (6.4)	(.0)	(.0)	34 (43.5)	28 (35.8)	78
Ibero Amer Studies	(.0)	(.0)	(.0)	(.0)	3 (21.4)	4 (28.6)	3 (21.4)	4 (28.6)	(.0)	(.0)	2 (14.3)	5 (35.7)	14
Latin Amer Studies	(.0)	(.0)	(.0)	(.0)	(.0)	2 (11.8)	(.0)	2 (11.8)	(.0)	(.0)	8 (47.1)	7 (41.2)	17
Linguistics	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	1 (16.7)	5 (83.3)	6
Math & Stat	(.0)	(.0)	(.0)	(.0)	1 (2.2)	2 (4.4)	1 (2.2)	2 (4.4)	(.0)	2 (4.4)	28 (62.2)	12 (26.7)	45
Mod & Class Lang	(.0)	(.0)	(.0)	(.0)	9 (17.3)	13 (25.0)	9 (17.3)	13 (25.0)	(.0)	(.0)	8 (15.4)	22 (42.3)	52
Philosophy	(.0)	(.0)	1 (3.3)	(.0)	1 (3.3)	(.0)	2 (6.6)	(.0)	(.0)	(.0)	12 (40.0)	16 (53.3)	30
Physics & Astron	2 (3.4)	(.0)	2 (3.4)	(.0)	2 (3.4)	(.0)	6 (10.2).	(.0)	(.0)	(.0)	50 (84.7)	3 (5.1)	59
Political Science	(.0)	(.0)	1 (5.0)	(.0)	5 (25.0)	1 (5.0)	6 (30.0)	1 (5.0)	(.0)	(.0)	7 (35.0)	6 (30.0)	20
Psychology	2 (3.2)	(.0)	(.0)	(.0)	4 (6.5)	2 (3.2)	6 (9.5)	2 (3.2)	(.0)	(.0)	34 (53.9)	21 (33.3)	63
Sociology	1 (4.8)	(.0)	(.0)	(.0)	2 (9.5)	2 (9.5)	3 (14.3)	2 (9.5)	(.0)	(.0)	6 (28.6)	10 (47.6)	21
Speech Comm	(.0)	(.0)	(.0)	(.0)	1 (3.4)	1 (3.4)	1 (3.4)	1 (3.4)	(.0)	(.0)	14 (48.3)	13 (44.8)	29
ANDERSON SCH OF MANAGEMENT	2 (0.5)	3 (0.7)	1 (0.2)	1 (0.2)	25 (6.3)	11 (2.8)	28 (7.0)	15 (3.8)	1 (0.2)	1 (0.2)	223 (56.0)	131 (32.8)	399
COLLEGE OF EDUC	20 (1.6)	48 (3.8)	5 (0.4)	6 (0.5)	74 (5.9)	177 (14.1)	99 (7.9)	231 (18.4)	1 (.08)	2 (0.2)	236 (18.8)	689 (54.8)	1258
Art Education	1 (2.4)	2 (4.8)	(.0)	(.0)	4 (9.5)	3 (7.0)	5 (12.0)	5 (12.0)	1 (2.4)	(.0)	5 (12.0)	26 (62.0)	42
Educ Admin	6 (3.3)	4 (2.2)	(.0)	2 (1.0)	23 (12.6)	24 (13.2)	29 (16.0)	30 (16.5)	(.0)	(.0)	38 (20.9)	85 (46.7)	182

UNM GRADUATE ENROLLMENT BY ETHNICITY/RACE, (Cont'd)
SEX, DEPARTMENT & COLLEGE,
(FALL, 1982)

GRADUATE UNITS	AMER. INDIAN		BLACK		HISPANIC		TOTAL UNDERREPRESENTED MINORITIES*		ASIAN		WHITE		TOTAL STUDENTS
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	
	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	
Elem Education	2 (1.0)	20(10.1)	1 (0.5)	(.0)	6 (3.0)	49 (24.7)	9 (4.5)	69 (34.8)	(.0)	(.0)	14 (7.1)	106 (53.5)	198
Educ Foundation	2 (2.0)	1(1.0)	1 (1.0)	(.0)	3 (3.0)	7 (7.0)	6 (6.0)	8 (8.0)	(.0)	1 (1.0)	23 (23.0)	62 (62.0)	100
Counselor Ed	5 (2.9)	7(4.0)	1 (0.6)	2 (1.1)	5 (2.9)	19 (10.9)	11 (6.3)	28 (16.1)	(.0)	(.0)	41 (23.6)	94 (54.0)	174
Hlth, PE & Rec	2 (1.6)	5(3.9)	(.0)	1 (0.8)	12 (9.5)	2 (1.6)	14 (11.1)	8 (6.3)	(.0)	(.0)	37 (29.4)	67 (53.2)	126
Home Economics	(.0)	1(6.7)	(.0)	(.0)	(.0)	5 (33.3)	(.0)	6 (0.4)	(.0)	(.0)	1 (6.7)	8 (53.3)	15
Sec & Adult Tchr Ed	1 (0.6)	2(1.3)	2 (1.3)	1 (0.6)	11 (7.1)	24 (15.6)	14 (9.1)	27 (17.5)	(.0)	(.0)	45 (29.2)	68 (44.2)	154
Business Ed	(.0)	(.0)	(.0)	(.0)	3 (16.6)	5 (27.8)	3 (16.7)	5 (27.7)	(.0)	(.0)	5 (27.8)	5 (27.8)	18
Special Education	1 (0.4)	6(2.4)	(.0)	(.0)	7 (2.8)	39 (15.7)	8 (3.2)	45 (18.1)	(.0)	1 (0.4)	27 (10.8)	168 (67.8)	249
COLLEGE OF ENGR	4 (1.3)	1(0.3)	2 (0.6)	(.0)	16 (5.0)	5 (1.6)	22 (6.9)	6 (1.9)	11 (3.4)	2 (0.6)	231 (72.4)	47 (14.7)	319
Chem/Nucl Engr	(.0)	(.0)	1 (2.5)	(.0)	2 (5.0)	1 (2.5)	3 (7.5)	1 (2.5)	2 (5.0)	(.0)	30 (75.0)	4 (10.0)	40
Civil Engr	2 (3.8)	(.0)	(.0)	(.0)	3 (5.7)	1 (2.0)	5 (9.6)	1 (2.0)	1 (2.0)	(.0)	41 (78.8)	4 (7.7)	52
Computer Science	(.0)	1(1.3)	(.0)	(.0)	(.0)	1 (1.3)	(.0)	2 (2.8)	2 (2.8)	1 (1.3)	46 (64.0)	21 (29.2)	72
Elec & Comput Engr	2 (1.7)	(.0)	1 (0.9)	(.0)	8 (7.0)	1 (0.9)	11 (9.5)	1 (1.9)	5 (4.3)	1 (0.8)	84 (72.4)	14 (12.1)	116
Mechanical Engr	(.0)	(.0)	(.0)	(.0)	3 (7.7)	1 (2.5)	2 (7.7)	1 (2.6)	1 (2.5)	(.0)	30 (76.9)	4 (10.3)	39
COLLEGE OF FINE ARTS	(.0)	1(0.7)	(.0)	1 (0.7)	8 (5.4)	8 (5.4)	8 (5.4)	10 (6.8)	(.0)	(.0)	50 (34.0)	79 (53.7)	147
Art	(.0)	1(1.0)	(.0)	(.0)	4 (4.0)	6 (5.9)	4 (4.0)	7 (6.9)	(.0)	(.0)	30 (29.4)	61 (59.8)	102
Music/Music Ed	(.0)	(.0)	(.0)	(.0)	4 (13.0)	1 (3.3)	4 (13.3)	1 (3.3)	(.0)	(.0)	12 (40.0)	13 (43.3)	30
Theatre Arts	(.0)	(.0)	(.0)	1 (6.7)	(.0)	1 (6.7)	(.0)	2 (13.3)	(.0)	(.0)	8 (53.3)	5 (33.3)	15
MEDICAL SCIENCES	(.0)	(.0)	(.0)	(.0)	2 (4.2)	3 (6.3)	2 (4.2)	3 (6.3)	1 (2.0)	(.0)	18 (37.5)	24 (50.0)	48
COLLEGE OF NURSING	1 (2.4)	3(7.3)	(.0)	(.0)	(.0)	3 (7.3)	1 (2.4)	6 (14.6)	(.0)	(.0)	2 (4.9)	32 (78.0)	41
DIV/PUBLIC ADMIN	8 (3.5)	10(4.4)	5 (2.2)	4 (1.8)	36 (16.0)	30 (13.3)	49 (21.7)	44 (19.5)	(.0)	(.0)	46 (20.4)	87 (38.5)	226
TOTALS	46 (1.3)	72(2.1)	20 (0.6)	12 (0.3)	222 (6.4)	281 (8.1)	288*(8.3)	365*(10.5)	14 (0.4)	8 (0.2)	1303 (37.4)	1509 (43.3)	3487
GRAND TOTAL													3797**

* American Indians, Blacks, & Hispanics
** Grand Total includes 310 non-citizens who are not counted in department and college totals.

TABLE 5

GRADUATE STUDENT EMPLOYEES SEX/ETHNIC SUMMARY REPORT
BY ORGANIZATION, CITIZENSHIP
(NOVEMBER, 1982)*

GRADUATE UNITS	AMER. INDIAN		BLACK		HISPANIC		NON-CITIZENS**		ASIAN		WHITE		TOTAL STUDENTS	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %
SCHOOL OF ARCH. & PLANNING	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	11(78.6)	3(21.4)	11(78.6)	3(21.4)
ARTS & SCIENCES	(.0)	(.0)	3(.6)	1(.2)	14(3.0)	14(3.0)	45(9.6)	18(3.9)	1(.2)	2(.4)	218(46.7)	151(32.3)	281(60.2)	186(39.8)
Amer. Studies	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	3(100.0)	(.0)	3(100.0)
Anthropology	(.0)	(.0)	(.0)	(.0)	1(4.2)	2(8.3)	(.0)	1(4.2)	(.0)	(.0)	8(33.3)	12(50.0)	9(37.5)	15(62.5)
Biology	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	1(1.5)	(.0)	(.0)	(.0)	43(66.2)	21(32.3)	44(67.7)	21(32.3)
Chemistry	(.0)	(.0)	(.0)	1(2.0)	(.0)	(.0)	13(26.0)	4(8.0)	(.0)	1(2.0)	26(52.0)	5(10.0)	39(78.0)	11(22.0)
Comm. Disorder	(.0)	(.0)	(.0)	(.0)	(.0)	1(12.5)	(0)	(.0)	(.0)	(.0)	(.0)	7(87.5)	(.0)	8(100.0)
Economics	(.0)	(.0)	(.0)	(.0)	1(5.9)	(.0)	2(11.8)	(.0)	(.0)	(.0)	11(64.7)	3(17.6)	14(82.4)	3(17.6)
English	(.0)	(.0)	(.0)	(.0)	(.0)	1(1.9)	2(3.7)	1(1.9)	1(1.9)	(.0)	19(35.2)	30(55.6)	22(40.7)	32(59.3)
Geography	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	2(50.0)	2(50.0)	2(50.0)	2(50.0)
Geology	(.0)	(.0)	(.0)	(.0)	(.0)	1(3.2)	(.0)	(.0)	(.0)	(.0)	24(77.4)	6(19.4)	24(77.4)	7(22.6)
Inst. of Meteorics	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	2(100.0)	(0)	2(100.0)	0(.0)
History	(.0)	(.0)	1(4.8)	(.0)	2(9.5)	(.0)	1(4.8)	(.0)	(.0)	(.0)	5(23.8)	12(57.1)	9(42.9)	12(57.1)
Linguistics	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	1(100.0)	(.0)	1(100.0)
Math. & Statistics	(.0)	(.0)	(.0)	(.0)	1(3.0)	(.0)	8(24.2)	3(9.1)	(.0)	1(3.0)	13(39.4)	7(21.2)	22(66.7)	11(33.3)
Mod. & Class Lang.	(.0)	(.0)	(.0)	(.0)	5(9.8)	8(15.7)	4(7.8)	5(9.8)	(.0)	(.0)	10(19.6)	19(37.3)	19(37.3)	32(62.7)
Philosophy	(.0)	(.0)	(.0)	(.0)	1(14.3)	(.0)	1(14.3)	(.0)	(.0)	(.0)	3(42.9)	2(28.6)	5(71.4)	2(28.6)
Physics & Astronomy	(.0)	(.0)	1(2.7)	(.0)	1(2.7)	(.0)	11(29.7)	(.0)	(.0)	(.0)	24(64.9)	(.0)	37(100.0)	(.0)
Political Science	(.0)	(.0)	1(8.3)	(.0)	1(8.3)	(.0)	1(8.3)	(.0)	(.0)	(.0)	6(50.0)	3(25.0)	9(75.0)	3(25.0)
Psychology	(.0)	(.0)	(.0)	(.0)	1(3.7)	(.0)	1(3.7)	1(3.7)	(.0)	(.0)	17(63.0)	7(25.9)	19(70.4)	8(29.6)
Sociology	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	3(33.3)	(.0)	(.0)	1(11.1)	5(55.5)	1(11.1)	8(88.9)
Speech Comm.	(.0)	(.0)	(.0)	(.0)	(.0)	1(9.1)	(.0)	(.0)	(.0)	(.0)	4(36.4)	6(54.5)	4(36.4)	7(63.6)
ANDERSON SCHOOL OF MANAGEMENT	(.0)	(.0)	(.0)	(.0)	1(2.6)	1(2.6)	1(2.6)	(.0)	(.0)	(.0)	18(47.4)	17(44.7)	20(52.6)	18(47.4)
COLLEGE OF EDUC.	1(.9)	1(.9)	1(.9)	(.0)	3(2.6)	9(7.8)	7(2.0)	(.0)	3(2.6)	(.0)	40(34.5)	51(44.0)	55(47.4)	61(52.6)
Art Education	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	3(100.0)	(.0)	3(100.0)
Educational Admin.	(.0)	(.0)	(.0)	(.0)	(.0)	1(14.3)	2(28.5)	(.0)	(.0)	(.0)	3(42.9)	1(14.3)	5(71.4)	2(28.6)
Elem. Education	1(6.3)	1(6.3)	1(6.3)	(.0)	1(6.3)	3(18.8)	(.0)	(.0)	(.0)	(.0)	3(18.8)	6(37.5)	6(37.5)	10(62.5)
Educ. Foundations	(.0)	(.0)	(.0)	(.0)	1(10.0)	(.0)	1(10.0)	(.0)	2(20.0)	(.0)	4(40.0)	2(20.0)	8(80.0)	2(20.0)
Counselor Educ.	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	2(66.7)	1(33.3)	2(66.7)	1(33.3)
HPER	(.0)	(.0)	(.0)	(.0)	1(1.8)	3(5.4)	3(5.4)	(.0)	1(1.8)	(.0)	22(39.3)	26(48.1)	27(48.2)	29(51.8)
Home Economics	(.0)	(.0)	(.0)	(.0)	(.0)	1(33.3)	(.0)	(.0)	(.0)	(.0)	(.0)	2(66.7)	(.0)	3(100.0)
Secondary Education	(.0)	(.0)	(.0)	(.0)	(.0)	1(7.7)	1(7.7)	(.0)	(.0)	(.0)	5(38.5)	6(46.2)	6(46.2)	7(53.8)

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GRAD STUDENT EMPLOYEES SEX/ETHNIC SUMMARY REPORT
BY ORGANIZATION, CITIZENSHIP
(NOVEMBER 1982) *

GRADUATE UNITS	AMER. INDIAN				BLACK				HISPANIC				NON-CITIZENS**				ASIAN				WHITE				TOTAL STUDENTS			
	MALE		FEMALE		MALE		FEMALE		MALE		FEMALE		MALE		FEMALE		MALE		FEMALE		MALE		FEMALE		MALE		FEMALE	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Special Educ.	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	1	(20.0)	4	(80.0)	1	(20.0)	4	(80.0)
COLLEGE OF ENGR.	(	.0)	(	.0)	(	.0)	(	.0)	1	(1.1)	(	.0)	38	(41.3)	4	(4.3)	3	(3.3)	(	.0)	31	(33.7)	15	(16.3)	73	(79.3)	19	(20.7)
Chem/Nucl Engr.	(	.0)	(	.0)	(	.0)	(	.0)	1	(8.3)	(	.0)	7	(58.3)	(	.0)	(	.0)	(	.0)	4	(38.3)	(	.0)	12	(100.0)	(	.0)
Civil Engr.	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	2	(25.0)	(	.0)	(	.0)	(	.0)	5	(62.5)	1	(12.5)	7	(87.5)	1	(12.5)
Elec.& Comp.Engr.	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	4.2)	13	(65.0)	1	(5.0)	(	.0)	(	.0)	2	(10.0)	4	(20.0)	15	(75.0)	5	(25.0)
Mechanical Engr.	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	2	(25.0)	(	.0)	2	(25.0)	(	.0)	4	(50.0)	0	(30.0)	8	(100.0)	(	.0)
Bureau Engr. Resch	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	13	(50.0)	2	(7.7)	1	(3.8)	(	.0)	8	(30.8)	2	(7.7)	22	(84.6)	4	(15.4)
Computer Science	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	1	(5.6)	1	(5.6)	(	.0)	(	.0)	8	(44.4)	8	(44.4)	9	(50.0)	9	(50.0)
COLLEGE OF FINE ARTS	(	.0)	(	.0)	(	.0)	(	.0)	5	(7.4)	1	(1.5)	1	(1.5)	4	(5.9)	(	.0)	2	(2.9)	25	(36.8)	30	(44.1)	31	(45.6)	37	(54.4)
Art	(	.0)	(	.0)	(	.0)	(	.0)	3	(7.3)	(	.0)	1	(2.4)	4	(9.8)	(	.0)	2	(2.4)	11	(26.8)	20	(48.8)	15	(36.6)	26	(63.4)
Music	(	.0)	(	.0)	(	.0)	(	.0)	2	(9.1)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	10	(45.5)	10	(45.5)	12	(54.5)	10	(45.5)
Theater Arts	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	1	(20.0)	(	.0)	(	.0)	(	.0)	(	.0)	4	(80.0)	(	.0)	4	(80.0)	1	(20.0)
MEDICAL SCIENCES	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	1	(8.3)	(	.0)	6	(50.0)	5	(41.7)	7	(58.3)	5	(41.7)
Biochemistry	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	3	(60.0)	2	(40.0)	3	(60.0)	2	(40.0)
Microbiology	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	2	(50.0)	2	(50.0)	2	(50.0)	2	(50.0)
Pathology	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	1	(100.0)	(	.0)	(	.0)	(	.0)	1	(100.0)	(	.0)
Cell Biology	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	1	(50.0)	1	(50.0)	1	(50.0)	1	(50.0)
COLLEGE OF NURSING	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	3	(100.0)	(	.0)	3	(100.0)
WOMEN'S STUDIES	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	1	(100.0)	(	.0)	1	(100.0)
CLINICAL NUTRITION	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	1	(100.0)	(	.0)	1	(100.0)
DIV/PUBLIC ADMIN	(	.0)	2	(25.0)	(	.0)	1	(12.5)	1	(12.5)	3	(37.5)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	1	(12.5)	1	(12.5)	7	(87.5)
LATIN AMER.PROJECT	(	.0)	(	.0)	(	.0)	(	.0)	1	(50.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	1	(50.0)	1	(50.0)	1	(50.0)
NM HISTORICAL	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	1	(100.0)	(	.0)	1	(100.0)
Latin Amer.Inst.	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	1	(33.3)	(	.0)	(	.0)	(	.0)	2	(66.7)	(	.0)	3	(100.0)
SW Hisp. Inst.	(	.0)	(	.0)	(	.0)	(	.0)	1	(100.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	(	.0)	1	(100.0)	(	.0)

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GRAD STUDENT EMPLOYEES SEX/ETHNIC SUMMARY REPORT
BY ORGANIZATION, CITIZENSHIP
(NOVEMBER, 1982) *

GRADUATE UNITS	AMER. INDIAN		BLACK		HISPANIC		NON-CITIZEN**		ASIAN		WHITE		TOTAL STUDENTS	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %
Graduate Studies	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	3(60.0)	2(40.0)	3(60.0)	2(40.0)
Gen.Lib.Skills Ctr.	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	1(100.0)	(.0)	1(100.0)
General Colleges	(.0)	(.0)	(.0)	(.0)	1(25.0)	(.0)	(.0)	(.0)	(.0)	(.0)	3(75.0)	(.0)	4(100.0)	(.0)
Special Services	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	1(100.0)	(.0)	1(100.0)	(.0)
NM Research & Study Council	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	(.0)	1(50.0)	1(50.0)	1(50.0)	1(50.0)
GRAND TOTAL	1(.12)	3(.36)	4(.48)	2(.24)	28(3.3)	28(3.3)	92(11.0)	27(3.20)	8(.95)	4(.48)	357(42.5)	286(34.0)	490(58.3)	350(41.7)

* T.A.'s, G.A.'s, R.A.'s

** NON CITIZENS

	M	F	Total
Asian	47	8	55
Hispanic	16	7	23
Black	4	0	4
White	24	13	37
	91	28	119

SOURCE: UNM - DPC HH071-1

TABLE 6
GRADUATE STUDENT EMPLOYEES BY
JOB CODE AND ORGANIZATION*
(2-24-83)

GRADUATE UNITS	T.A. Regular (02400)	G.A. Regular (02401)	T.A. Special (02402)	G.A. Special (02403)	Teaching Associate (02404)	Research Assistant (02405)	TOTAL
SCHOOL OF ARCH & PLAN	1	15			2		18
COLLEGE OF ARTS & SCIENCES	215	83	54	24	38	56	470
American Studies	1		2				3
Anthropology	1	14	3	4	2	1	25
Biology	33	1	10	3	2	11	60
Chemistry	33	2			1	13	49
Comm. Disorders		7				1	8
Economics	8		12	1			21
English	29		2		19		50
Geography	2	2					4
Geology	16					15	31
History		18		2	1	1	22
Inst.of Meteor.						2	2
Linguistics			1				1
Math. & Stat.	21	4	2		6		33
Mod. & Class.Lang.	43	2	2	2	3		52
Philosophy	6			1			7
Physics & Astron.		23		7	1	8	39
Political Science	5	6	2				13
Psychology	10		9	4	1	4	28
Sociology	4	4			2		10
Speech Comm.	3		9				12
ANDERSON SCHOOL OF MANAGEMENT	1	31		5	2		39
COLLEGE OF EDUCATION	25	24	50	13	7	2	121
Art Education	3						3
Counselor Educ.		4					4

GRADUATE STUDENT EMPLOYEES BY
JOB CODE AND ORGANIZATION*
(2-24-83) (Cont'd) P.2

GRADUATE UNITS	T.A. Regular (02400)	G.A. Regular (02401)	T.A. Special (02402)	G.A. Special (02403)	Teaching Associate (02404)	Research Assistant (02405)	TOTAL
Educational Admin.		2		4			6
Educ. Foundations		6		2	1		9
Elem. Education		5	4	4	4		17
HPER	17		42			2	61
Home Economics		2	1				3
Secondary Ed.	5	2	1	3	2		13
Special Ed.		3	2				5
COLLEGE OF ENGINEERING	23	24	17	7	1	38	110
Chem/Nucl Engr.	1	8		3		1	13
Civil Engr.		7					7
Elec & Comp. Engr.	11		8	4	1		24
Mechanical Engr.	1	7				1	9
Bureau Engr. Resch	1	2				34	37
Computer Science	9		9			2	20
COLLEGE OF FINE ARTS	39	15	9	3			66
Art	24	13	5	2			44
Music	14	2	2	1			19
Theatre Arts							
F.A. Slide Lab	1		2				3
MEDICAL SCIENCES						8	8
Biochemistry						5	5
Microbiology						1	1
Pathology						1	1
Cell Biology						1	1
COLLEGE OF NURSING			3				3

GRADUATE STUDENT EMPLOYEES BY
JOB CODE AND ORGANIZATION*
(2-24-83) (Cont'd) P.3

GRADUATE UNITS	T.A. Regular (02400)	G.A. Regular (02401)	T.A. Special (02402)	G.A. Special (02403)	Teaching Associate (02404)	Research Assistant (02405)	TOTAL
WOMEN"S STUDIES	1						1
CLINICAL NUTRITION						1	1
DIV/PUBLIC ADMIN		7		1		1	9
LATIN AMER.PROJECT		1		1			2
N.M. HIST.REVIEW						1	1
LATIN AMER.INST.		1		1			2
SW HISP. INST.					1		1
GRADUATE STUDIES	1		3	1			5
GEN.LIB.SKILLS CTR				2			2
GENERAL COLLEGE	4		3	1			8
ELEC. TECH.	1						1
GEN.HON.PROGRAM			1				1
N.A.S.			1				1
GRAND TOTAL	311	201	141	59	51	107	870

*Taken from UNM-DPC HH071-1 "Graduate Student Employees Sex/Ethnic Summary Report By Organization, Citizenship, and Job Codes."

See attachment for explanation of job codes

EXPLANATION OF JOB CODES

02400 - Teaching Assistant Regular
Stipend charged to an 012 account
Tuition charged to a central account (020-899-057)
Job Description:
A teaching assistant is directly involved in producing student credit hours, as by being responsible for one or more classes or lab sections. (Note: the teaching assistantship should be used whenever the assistant is specifically responsible for one or more separate labs or discussion sections, even when those sections do not carry separate credit hours.)

02401 - Graduate Assistant Regular
Stipend charged to an 012 account
Tuition charged to same 020-899-057 account as Teaching Assistant Regular
Job Description:
Graduate assistant: one whose duties are related to instruction but not directly involved in producing student credit hours.

02402 - Teaching Assistant Special
Stipend is also charged to an 012 account, however, it is an account funded from sources other than the basic allocation made to the department. The account is indicated on the ARC form.
Tuition is charged to an account ending in 057 or sometimes 150, but charged directly to the department.
Job Description:
See 02400 above

02403 - Graduate Asistant Special
Stipend charged same as for 02402
Tuition also charged as for 02402
Job Description:
See 02401 above

02404 - Teaching Associate
Stipend is funded from departmental sources other than the original allocation of assistantships made to the department. Account number to be charged must be indicated on the ARC.
Tuition: Teaching Associate does not receive a tuition waiver.
Job Description:
Teaching Associate: an advanced teaching assistant who holds the master's degree (or equivalent) and who directly produces student credit hours by being

responsible for one or more classes or sections. The teaching associate is funded from departmental sources other than the original allocation of assistantships made to the department; the account number to be charged must be indicated on the Assistantship Recommendation and Contract (ARC) form. The teaching associate may be employed to teach up to 6 hours (FTE=.50) if not yet advanced to doctoral candidacy, or up to 9 hours (DTE=.75) if advanced to doctoral candidacy. This category is not to be used for graduate student employment not related to instruction, and the teaching associate does not receive a tuition waiver. The stipend range approximates that for temporary part-time faculty (category B); it is currently $410.00 to $630.00 per adjusted credit hour.

02405 - Research Assistant

Stipend charged to 012 account.

Tuition: Does not receive a tuition waiver, but is eligible for the resident tuition rate, provided his/her FTE is .25 or higher.

Job Description:

Research Assistant: assists in research work that is relevant to and ultimately used for the candidate's thesis, dissertation, or other requirements for the graduate degree.

The Graduate Student Association Annual Report was not available for inclusion with this report.

ANNUAL REPORT
OFFICE OF INSTITUTIONAL RESEARCH
1982-83

Prepared by: R. H. Cady
Director, Institutional Research

Significant Developments in 1982-83

1. The admissions model for new freshmen, the "formula" for Plan B entry to UNM, was implemented without difficulty. Assessment of the first cohort's performance so admitted will be performed in 1984.

2. The enrollment projections prepared by Institutional Research have proved to be quite accurate. For Fall 1981 the error on total student credit hours was -1.0% and for Fall 1982, the error was -.22%. In January 1983 a revision to the enrollment projections was made. It incorporates a 21st year (1982) of data in the series and slightly modified assumptions on unemployment and average per capita income. To support the internal budget process IR produced alternative projections to 1986 by college.

These enrollment projections are now routinely used in the five-year facilities plan and seem to be credible enough for use by senior management.

3. Several standard management information reports were put into production by CSIS using specification and developmental work in IR. These reports receive a wide distribution in academic affairs and are used for several purposes. They are:

a. Student Credit Hours by level of instruction by unit by semester;

b. Student Academic Majors by level of student by unit by semester;

c. UNM-9, the "official" instructional workload index for faculty;

d. Production and Consumption Report which shows contributions of SCH by departments to majors and consumption by majors from departments. The report quickly shows interdependency of programs and departments. The quantity. 1-diagonal entry, is an excellent measure of centrality of a department.

Analytical Studies

IR was assigned the task of assessing the effects of the Reagan administration's proposed cuts in student financial aid programs. IR had previously furnished the first estimate of the effect of statutory reductions in Social Security survivor benefits for college

students. The task of assessing the proposed reductions was made difficult by both the rapid changes in proposed federal policy and the gross inadequacy of the information system for student financial aid. Results of this analysis, showing effects by family income, race-ethnicity, grade point average, and residency status, were produced by a form of simulation. The project was overtaken by events when the administration was defeated in the House of Representatives and programs were left essentially unchanged.

Complaints of bias according to sex of employees were lodged in 1982-83 with the President. Inquiry into these charges was delegated to the Provost's Office which coordinated its work with the Affirmative Action Office. IR made a thorough analysis of the salaries of teaching faculty and concluded that no evidence of systematic salary bias against the class, women, existed in 1982. IR recommended that certain cases be examined on a "counterpart" basis at the level of departments.

To assist the recruiting effort IR conceived and executed a study of market shares of high school graduating seniors. We tested several hunches which various persons convey as armchair wisdom about the process of selection of UNM. For example, it is said UNM now gets

the lower-scoring end of the ACT composite distribution, or it is charged that UNM does not recruit actively enough for minority students. The final results showed (not surprisingly) that distance, size of high school graduating cohort, minority proportion in the school district, and average ACT composite score were significant predictors. We generated residual scores, actual share minus model's estimate, to guide recruitments. It is not known whether these results were internalized or acted upon by student affairs personnel.

Analysis of faculty salaries is a perennial undertaking. What is new in 1982-83 is that IR supplied important facts and advice to the Provost and President, to the Faculty Senate's Budget Review Committee and the Staff and Faculty Welfare and Benefits Committee. Several useful displays were developed showing how UNM's faculty compares with various peer groups, a time series from 1968, the effects of inflation, and the relative standings of faculty vs. other occupational groups in New Mexico over the past decade .

Priority Tasks Not Completed in 1982-83

1. The taxonomy and crossover tables on academic degree programs is wrong, out-of-date, and redundant. This major task is half-finished, needs concurrence of A&R and should be assigned to a competent office for maintenance.

2. Departmental performance indicators, a high priority with Provost Hull, have progressed somewhat. Expenditures for sponsored research and other projects have been assembled for three years and related to faculty size for all departments. Production and consumption patterns have been produced. What remains is measurements of scholarly output, which we believe is impossible to do on a valid basis across all disciplines.

3. Consolidation of faculty and unit reporting is needed to remove redundancy. IR is assigned this task.

4. Measures of student outcomes which provide necessary feedback to the academic program are much needed at UNM. IR has proposed a beginning with three groups of alumni, using a commercially-available product at a cost of $4000/year. Funding has been repeatedly denied, this time even from the University of New Mexico Foundation.

5. A computer program which simulates flow of faculty through the system was purchased from USC. The program generates future distributions of rank, tenure, sex, and race-ethnicity, given certain variable input parameters. If this program can be made to work efficiently on UNM's computer, we can estimate alternative futures based on varying policy assumptions and

characteristics of faculty.

Significant Problems

The university's machine-readable sources of information are still a problem. We believe that the conversion to integrated data base operations has done little or nothing to improve the data.

Working with a "closed shop" administrative information system remains awkward, cumbersome, and subject to delays. The coordinator system doesn't work well. Insufficient human and machine resources in CSIS are allocated to the solution of management information for academic administrators.

Salaries for two persons in IR are well below market and an estimated $6000/year below wages in comparable or lesser positions at UNM.

The institutional research function remains diffused at UNM. Some work in performed in the University College, Admissions and Records, and the Architect's Office. Greater output with more efficiency would result from a consolidation.

Publications and Presentations

At the Rocky Mountain Conference of the Association for Institutional Research and the Society for College and University Planning held at the University of

Arizona, October 27-29, 1982, these presentations were made:

(a) Thomas Field, "Norms for Student Ratings of Instruction: Additive vs. Interactive Procedures"

(b) Richard Cady and John Forester, "Market Shares of New Freshman Students"

(c) Richard Cady, "Some Characteristics of UNM's Students (and Other Information)," UNM Alumni Board and Council Meeting, June 9-12, 1983, Albuquerque.

Other Activities and Service

John Gregory was admitted to the doctoral program in Political Science at UNM. Thomas Field was admitted to the doctoral program in Experimental Psychology at UNM.

Richard Cady chaired a session for contributed papers at the Rocky Mountain Educational Research Association's annual conference, held in Albuquerque, November 2-5, 1982.

Richard Cady delivered two talks on arms control and disarmament to the Rio Rancho Rotary Club and to the staff at the District Court. These sessions were arranged by the UNM Speakers' Bureau.

Richard Cady taught courses in U.S. Foreign Policy and Introduction to World Politics on an overload, uncompensated basis for the Political Science department.

Richard Cady accepted appointment to the national research and development advisery committee of the College Board.

Richard Cady consulted with New Mexico Highlands University under its large Title III grant for institutional development.

Personnel from IR served on screening committees for two important positions.

Staff support and participation occurred for the Budget Review Committee, Faculty and Staff Welfare and Benefits Committee, Admissions and Registration Committee, the Adult Reentry Committee, the A&S Instructional Improvement Committee, and the Human Resources Information Systems Committee.

Appointments to Staff

No changes in staff were made during this year. John Forester, our project assistant who is an advanced graduate student in psychology, was reappointed at half-time (20 hours/week) for twelve months. We have found that a work study clerk typist at half-time is essential to the proper functioning of the office.

Separations

There were none in 1982-83, but the severe budget cut for FY84 has caused us to leave vacant the project assistant position after August 15, 1983 when Forester will have completed the doctorate and when he will leave for a new position in Ohio. This cutback is 14% of IR's professional labor and is bound to be felt because we have obtained so much useful output from Forester.

The Report of the Women Studies Program
July 1, 1982 - June 30, 1983
Helen M. Bannan, Acting Director

1) Significant Women Studies Program Developments, 1982-83

This has been a year of continued growth and development for the Women Studies Program. Ann Nihlen's leave of absence from her administrative position as Director, followed by her decision to move into full-time faculty status in the Department of Educational Foundations, led to a change in personnel in the director's position. However, this change was not disruptive, since Helen Bannan, Acting Director, has been active in the Program for several years, and has been able to guide the Program in the directions established in the past toward academic strength, influence within the University, and service to the community.

Women Studies enrollment growth this year was remarkably high considering general declines in humanities. In the 1981-82 academic year, plus summer session, we enrolled 327 students; in the 1982-83 academic year, plus summer session, 398 students enrolled in courses Women Studies paid for, a growth of 21.7% overall.

Women Studies enrollments in courses paid for by Women Studies Program

Fall	1981	168	Fall	1982	162
Spring	1982	149	Spring	1983	204
Summer	1982	10	Summer	1983	32
		327			398

% overall growth 1982-83: 21.%

This growth was most substantial in summer session; our new topics course, Women in World Cultures, taught by Dr. Donna Seifert which

we cross-listed with Anthropology, drew 32 students, compared to 10 in last summer's course. In fall semester, we offered 8 courses with Women Studies numbers, and paid for 2 courses in other departments, Economics of Feminism (ECO 239) and Women and the Law I (Pol. Sci. 300). In addition, 5 courses with Women Studies content were offered in other departments which we advertised and listed in our schedule of classes. In spring we offered 9 courses with our course numbers, paid for Women and the Law II in Political Science, and advertised 6 Women Studies content courses offered by other departments. Our spring offerings included 3 new topics courses, all of which were well received: Women's Health & Medical Practice, taught by Nancy Theriot, M.A.; Women, Religion and Spirituality taught by Carol Jensen, M.A.; and Women and Work, taught by Dr. Helen Bannan. We are pleased by the response to these courses, which introduced students to important areas of Women Studies scholarship, and will consider adding them to our curriculum after another trial run (course brochure enclosed.)

Our courses continue to be rated highly be students for their quality - ICES departmental summaries show our departmental "average of means" well above average, particularly in spring semester, when our courses and instructors averaged well above 5 points on a 6 point scale.

ICES Departmental Averages in Women Studies Courses, 1982-83

1 = poor		6 = excellent	
	Fall 1982	Spring 1983	Summer 1983
course content	4.92	5.37	4.2
instructor	5.16	5.49	4.0
course in general	4.85	5.28	4.0
course included	9	10	1

Women Studies has also been involved this year in activities involving the broader campus community in discussion of women's issues. One of the most important of these issues in an educational institution is the creation of an equitable classroom climate -- one that stimulates the intellectual growth of female as well as male students. The Association of American Colleges published a report in spring 1982 entitled, "The Classroom Climate: A Chilly One for Women?" Acting Director Helen Bannan, and Women's Center Director Kathryn Brooks consulted Associate Provost Joel Jones about this report, and decided to distribute it among a select group of prominent faculty and administrators, to use as the basis for a faculty development workshop. Two intense afternoons of discussion produced a consensus on the importance of increasing awareness of the problem at UNM, and participants sent a letter to President Perovich asking for support to continue this process. We were most pleased by the faculty response, and anticipate good results continuing next year (enclosed.)

Another campus-wide project begun this year, but expected to expand next year, has been the compilation of a list of UNM faculty, staff and graduate students working on research involving women.

Our initial query letter produced 41 responses (list enclosed.) Next year, we plan to announce our project more widely, and hope to use the list to begin to develop a more formalized network of Women Studies researchers, possibly culminating in an ongoing research colloquim series. This would expand and complement our other 2 research-oriented programs, the Brown Bag series and Instructors' Seminar.

Our Brown Bag lunch series, which we co-sponsor with the Women's Center, provides a more informal setting for the sharing of Women Studies research, and has continued to draw enthusiastic responses from presenters and audience, both of which include students, faculty, staff, and community members (enclosed.)

The Women Studies Instructors' Seminar is geared toward a smaller, more select group -- those who are teaching Women Studies courses. Since most of our courses are taught by temporary part-time faculty hired on a per-course basis, the necessity of arranging a program to increase commitment to the Program and communication among staffmembers is vital. Continuity in our courses is enhanced when instructors share their own research and teaching interests with others. This year, under the direction of half-time instructor Mary Adams Trujillo, seminars were held bi-weekly. Most sessions were led by an instructor, but we did invite one special guest lecturer, Maggie Gregory, who spoke on instructional design. We have found that these seminars produce the desired results - increased communication - and plan to continue the program in the future.

Program governance continues to be shared with the Women Studies Committee, composed of students, staff, and faculty, with the Women Studies Advisory Board, composed of faculty, the major final decision making body. Although shared decision-making is sometimes cumbersome and slow, we remain committed to it in principle. We have been attempting to streamline the process by establishing sub-committees of the Women Studies Committee to focus on curriculum, University liaison and community outreach, personnel, and grievance. While the new system still has some glitches to be worked on, we think it has enabled us to accomplish more. The Curriculum Sub-committee prepared lengthy course descriptions for most of our courses, which will aid in hiring by providing prospective instructors with more complete information. The Liaison Sub-committee planned and directed our activities for International Women's Week in March, which were more extensive than usual, and focused on working women in the Southwest and Latin America. This Sub-committee also arranged the Women Studies "adoption" of the Shelter for Victims of Domestic Violence, which has led to more student and staff involvement in volunteer work at this most important institution.

We have also continued our organized communication with other ethnic and women's programs. We jointly produced a booklet describing our services for students (enclosed.) The directors of ethnic and women's academic and student service programs meet monthly to discuss our individual activities and common interests. These meetings have helped us gain support for our programs and

gain new insights into the situations typical and unique to programs geared to specific campus populations.

2) Personnel Changes

Dr. Helen Bannan became Acting Director of the Program on June 1, 1982 to replace Dr. Ann Nihlen during her administrative leave. When Dr. Nihlen announced her resignation as Director on February 3, 1983, the Women Studies Committee and Women Studies Advisory Board recommended that Dr. Bannan continue in the position as Acting Director for the 1983-84 academic year, and requested that during that year, we hold a national search for a permanent director, whose administrative position will remain joined to a tenure track appointment in one of the University's departments.

Dr. Nihlen's leadership and skills make her a difficult person to replace. During her very successful term as Coordinator, she led the Program to increased growth and stability, particularly by establishing the critical precedent of Women Studies course numbers. We are glad she will continue to be involved with the Program she helped found (enclosure.)

From January until June 30, 1983, Women Studies had the services of Staff Assistant, Sara Schwartz who performed some of the advisory functions Dr. Bannan had during 1981-82, as 1/3 time Assistant Director for Academic Programming. Ms. Schwartz, a graduate of the Program, was most effective in the position. Her research on the minor, internship course, and course descriptions, and her active Committee work especially in chairing the Personnel Sub-committee, contributed much. She also was extremely helpful in academic advising, and tutoring Women Studies students. Her graphics skills added much to the appearance of our advertising. Unfortunately, the funds for that position were only available for 6 months, since they primarily come from the money "freed" by Dr. Nihlen's leave of

absence. We will sorely miss her services. She will begin graduate school in history at Columbia in the fall.

Mary Adams Trujillo completed the second year of her 2 year term as half-time instructor. In addition to her excellent teaching, which placed her on the LOBO list of outstanding teachers according to ICES in 1982, Ms. Trujillo contributed much time and energy to the Instructors' Seminar Program. She also took an active role in Women Studies Committee activities, chairing a special meeting on racism in spring, 1983. She is moving to Ohio next year, and will also be missed.

The rest of our instructional staff was composed of temporary part-time instructors and graduate assistants hired on a per-course basis annually. This system is difficult for everyone involved: each year, we go through the process of advertising, interviewing, and hiring, and each year we disappoint a number of well qualified people, due to our small budget and the limited number of openings. Even the people we hire must be disappointed by the small remuneration they receive for their excellent work. I think Women Studies should establish more half-time, and eventually full time positions, so that more continuity would be built into our curriculum, and that our instructors would receive salaries more commensurate to their worth.

The temporary part-time instructors and graduate assistants in Women Studies this year were:

Marilyn Gayle Hoff, Women and Creativity, fall 1982
Rita Gonzales Mahoney, Introduction to Women Studies, fall 1982
Chris Ruggiero (T.A.), Introduction to Women Studies. fall 1982
Carol Jensen, Women, Religion, and Spirituality, spring 1983

Lee Reynis, Economics of Feminism, fall 1982

Nancy Theriot (T.A.), Women's Health & Medical Practice and Contemporary Feminist Theory, spring 1983

Kathryn Brooks, Reducing Math Anxiety, fall & spring 1982-83

Patricia Franzen (T.A.), Heterosexism & the Oppression of Women and another section of Intro., fall & spring 1983

Junella Haynes, American Indian Women, spring 1983

Sofia Martinez, La Chicana: Historical & Contemporary, fall & spring 1982-83

Catherine Aguilar, Women and the Law I & II, fall & spring 1983

Donna Seifert, Women in World Cultures, summer 1983

Kathryn Brooks, Catherine Aguilar, Patricia Franzen, and Junella Haynes will teach the same courses again for us in 1983-84. Nancy Theriot completed her dissertation, and has been hired to teach full time next year by the History Department of the University of Missouri at Columbia. The other instructors did not reapply. We are not offering Women & Creativity and Economics of Feminism in 1983-84, and our budget did not permit us to offer any topics courses again, so we were not able to repeat Women, Religion and Spirituality. Sofia Martinez decided to devote more time to her growing family, and Chris Ruggiero to her dissertation. Rita Gonzales Mahoney is returning to graduate school at the University of Arizona, in the English as a Second Language Program. Donna Seifert has moved to Virginia.

3) Professional Activities and Accomplishments of Women Studies Staffmembers

As usual, the Women Studies Program at UNM took an active role in state and national Women's Studies conferences. The State Women Studies Conference was held this year in November, 1982 in Las Vegas, New Mexico at New Mexico Highlands University.

Six UNM representatives participated. Helen Bannan was a workshop leader for discussion of Women Studies in the Humanities.

Eight UNM representatives attended the National Women Studies Association convention in Columbus, Ohio in June, 1983. In order to defray travel expenses, which our Program budget was inadequate to meet, we held a garage sale, which raised over $300.00. Drs. Ann Nihlen and Becky Bailey presented papers. Sandi Gonzales-Smith, a student in the Program, was elected a member of the National Coordinating Council of the organization. We plan to begin working on paper proposals and fundraising early this fall to ensure that UNM will again have a strong representation next year, when the convention will be even farther away, at Rutgers University in New Brunswick, New Jersey.

Women Studies was also involved this year in a conference on Women and Chemical Dependency, sponsored by the Albuquerque area office of the National Council on Alcoholism. We offered one independent study credit to those who attended the conference and wrote a paper analyzing the information gathered there.

Individuals connected with the Women Studies Program participated in many professional conferences this year. Many of us attended the Women Studies section of the Western Social Science Association convention held in Albuquerque in May, 1983, and several of our Advisory Board read papers or served as commentators there. Ann Nihlen presented a paper on sex roles at the Rocky Mountain Educational Research Association Convention in Albuquerque in November, 1982. Helen Bannan read a paper on Women Studies Courses in Honors Programs at the National Collegiate Honors Council

conference held in Albuquerque in October, 1982. She and Carol Jensen both read papers on their research dealing with Southwestern Women at the Western Speech Association conference held in Albuquerque in February, 1983. Carol Jensen also read a paper on Women and Religion at the American Academy of Religion meeting in Fullerton, California in April, 1983. Half-time instructor Mary Adams Trujillo and student Sandi Gonzales-Smith also spoke at a Sexual Assault Awareness Training conference in Albuquerque in spring 1983.

Since Women Studies is an activist field of scholarship, involvement of staffmembers in community organizations dealing with women is also important. Two of our instructors, Junella Haynes and Trisha Franzen, served this year on the governing Board for the Center for Victims of Domestic Violence, which was chaired by another instructor, Kathryn Brooks. Student Sandi Gonzales-Smith served on the Search Committee for the new director of the Rape Crisis Center and Junella Haynes also serves on its Board. Department Secretary Yolanda Moya and Staff Assistant Sara Schwartz were active members of the planning committee for Rape Awareness Week. Instructor Donna Seifert was a founding member of the steering committee of the Friends of New Futures School. Helen Bannan gave a guest presentation for the "Lunch and Learn" series sponsored by the Federal Women's Program Manager at the Albuquerque office of the Department of Energy. Sandi Gonzales-Smith was recently named to the Coordinating Council for the National Coalition Against Sexual Assault.

In terms of publication, Women Studies staffmembers have been somewhat less active, reflecting the time constraints both of administration and of part-time status. Dr. Lee Reynis has been working on a manuscript with New Mexico Public Interest Research Group on the Economic Status of New Mexico Women that is due to be publushed shortly. Carol Jensen published "Cleoflas Jaramillo on Marriage in Territorial Northern New Mexico" in the New Mexico Historical Review in spring, 1983. Helen Bannan's review of Frontierswomen appeared in that journal in October 1982, and several of the entries she wrote for American Women Writers: A Critical Reference Guide from Colonial Times to the Present appeared in the abridged edition of that work, published this spring by Frederick Ungar. Nancy Theriot is the editor of a special issue of New America, "The Child in Contemporary America," dated spring 1983. She also wrote a review of Women of the Republic for the Social Science Journal, and completed her PhD dissertation in American Studies.

Some Women Studies staffmembers have also been involved in outside-sponsored research projects. This is an area we hope to move assertively into this year, with our successful grants-getters leading the way. Ann Nihlen's research on "An Elementary Curriculum for Vocational & Career Choice" was funded from February to June 1983 by the New Mexico State Department of Education, Division of Vocational Education. Carol Jensen was chosen as 1 of 6 researchers working on the University of Natre Dame Study of Catholic Parish Life sponsored by the Lilly Foundation. She began in April to research the history of Catholic parishes in the Intermountain region.

Helen Bannan was an instructor in "The Extended Teacher Institute in Integrated Women into the Secondary History Curriculum," sponsored by the National Endowment for the Humanities at the University of Arizona in June-July, 1983.

4) Future Plans

We intend to continue our growth and development as a Program along the lines mentioned elsewhere in this report, and summarized below. Some of these are immediate goals, and others long range hopes.

1. National search for a permanent faculty-level Director.
2. Continued curriculum development.
3. Establishment of internship course to involve students in community work for women.
4. Approval of Women Studies Minor by College of Arts and Sciences.
5. Approval of Women Studies courses for group requirement credit.
6. Continued publicity and work to improve the classroom climate for women at UNM.
7. Development of a Network for Research on Women at UNM, including a colloquium series.
8. Hiring of more half-time and full time instructors, rather than temporary, part-time staff.
9. Hiring of a full time Assistant Director, who would organize a research consortium, advise students, and teach part time.
10. Beginning an annual feminist film festival, or other popular event, to draw attention to the Program and raise funds.
11. Sponsorship of a grant-writing workshop, followed by application of the knowledge gained to obtain outside funding for the Program.
12. Continued and increased outreach and communication to women of the various communities we serve on campus, and in this city, state, and nation.

With hard work, and the continued support of the University's administration, faculty, and students, we know that these goals are attainable.

FALL 1982

WOMEN STUDIES

HARRON HALL, ROOM 233 (277-3854)
UNIVERSITY OF NEW MEXICO

The Women Studies Program at the University of New Mexico is an interdisciplinary program offering undergraduate and graduate courses for and about women focusing on women's oppression through race, heterosexual bias and class. The courses are concerned with studying women's contributions in the past, their present situations and their future possibilities. In addition, special research projects may be undertaken by enrolling for Individual Studies. Students wishing to concentrate in this field are advised to consult with the Women Studies Coordinator about their program.

The Women Studies Office in Harron Hall, Room 233, is open Monday through Friday, 8:30 - 5:00. A quiet reading room has selected reference materials on Women Studies as well as information about programs at other universities. It is open to all interested persons--students, teachers and staff at UNM and people from the Albuquerque community.

SEMINAR IN *RETURNING* WOMEN STUDENTS
Women Studies 181.001/181.400
Mary Adams Trujillo T-Th 11-12:15

Intended for women who are entering or returning to the University after an interruption in their formal schooling. The objectives of the seminar are to identify and solve some of the basic problems associated with re-entry, to review academic skills (through skills workshops) which will facilitate a successful college experience, and to provide an opportunity for women students to begin to define their own educational needs and problems. The class will also include educational and career counseling, personal coping skills as well as financial aide information.

INTRODUCTION TO WOMEN STUDIES
Women Studies 200.001 Women Studies 200.002
Staff T-Th 9:30-10:45 Staff M-W-F 9-9:50

What is the status of women in society? What are the myths and the realities of her situation? Introduction to Women Studies will address these questions by examining the importance of factors such as sex, race, class, culture and their effect on women's socialization. In addition, we will explore the economics of her oppression as well as the role of education and family in defining "women's place."

LA MUJER CHICANA: HISTORY
Women Studies 232.001
Staff T-Th 12:30-1:45

This is a two semester course whose purpose is to introduce and familiarize students with special and political evolution of la Chicana. The first semester will begin with an historical review of the Pre-Columbian era, progressing through the early development of Spanish communities in the United States and culminate with the Mexican Revolution of 1910. Material presented will keep in mind their relationship in forming la mujer de hoy día.

REDUCING MATH ANXIETY
Women Studies 279.400
Kathryn Brooks M 6:30-8:30pm

Designed to offer students individual assessment of math needs and methods of coping with math related anxiety. Individualized instruction in math will be supplemented with experience designed to alleviate math anxiety. Exploration of math related careers will be included in the class.

HETEROSEXISM AND THE OPPRESSION OF WOMEN
Women Studies 335.001
Staff W 6:30-9:15pm

What is heterosexism? What is its relationship to women's oppression? What are the commonalities and divisions between heterosexual and homosexual women? We will approach these questions both theoretically and practically, as well as analyze and design strategy. Prerequisite: Women Studies 200 or permission of instructor.

WOMAN ABUSE
Women Studies 339.001
Mary Adams Trujillo T 6:30-9:15pm

This course is a multi-disciplinary examination of the phenomena of woman abuse. Through direct involvement with anti-woman abuse projects, we will analyze the causes, incidents, and consequences of violence against women. Students will select an area of concentration (e.g. sexual assault, battering, etc.) and use their work as a focus of analysis.

WOMEN AND CREATIVITY
Women Studies 353.001
Staff T-Th 2-3:15

A study of the creative process as it is linked to the artist in society. This class is an exploration of women's creativity within women's culture. We will focus on how women's art and their creative process have been oppressed through racism, sexism, and class. We will discuss the myths that have suppressed and hidden our creativity and our art. Particular emphasis shall be placed on the distinction between the traditional arts and fine arts, political and personal art, collective and individual art, as well as the issues of competition, criticism, diligence, and perfection within our lives. Prerequisite: Women Studies 200 or permission of instructor.

PSYCHOLOGICAL DEVELOPMENT OF WOMEN
Education Foundations 486.596
Vera John-Steiner M-W 3-4:15

This course is planned around four major topics. First, the exploration of theraputic literature on women; writings of female therapists, such as Karen Horney and Phylis Chesler. Secondly, genes and gender and the intense contemporary debate over the effects, if any, of these will be discussed in class. Thirdly, Cross-Cultural Perspectives on women's roles will be discussed. Fourth, synthesis. I am hoping to explain the way in which a social science approach to the study of psychology of women can be combined with a humanistic point of view. Open to juniors, seniors and graduate students drawn from social sciences, psychology, education and others who may be interested. I would like to keep enrollment at thirty.

CROSS LISTED COURSES

BLACK WOMEN
Afro American Studies 250.001
Marion Metivier T-TH 9:30-10:45

The course will survey the literature as it describes the lives of black women in America, in comparison to historical realities in order to sort the fact and fantasy of the black women, ascertain the truth of her existence, purpose, and survival as either the victim or creator of historical, environmental, sociological, psychological paradigms.

WOMEN AND NATURE
American Studies 301.501
Vera Norwood W 3-5:20

This course will study American women's writings on nature. Nature, in particular wilderness nature, has been crucial to the development of American character and culture. We will first address the broader issue of the values Americans have placed on their natural environment and the sexual imagery which they have used to describe these values--from the "virgin land" to the "raped land." Then we will study the contributions women have made to our understanding of the American environment, looking specifically at the sexual imagery women use in discussing the land.

ECONOMICS OF FEMINISM
Economics 239.001
Staff M-W-F 11-11:50

This course is a study of the economic status of women in western society, feminism and alternative economic systems, economic implications of family and other traditional structures, and economic policies for achieving feminist goals. We will also examine women's economic position in socialist and peasant economies. Readings will include selections from classic accounts of women in the economy and contemporary studies. Prerequisite: Economics 201 or permission of instructor.

HISTORY OF WOMEN--ANCIENT
History 315.001
Jane Slaughter M-W-F 1-1:50

"History as written and perceived up to now is the history of a minority who may well turn out to be the subgroup." This course attempts to redress this imbalance. Beginning with prehistory and continuing to the industrial revolution, we will look at women first on the objective level i.e., what was their legal, political and educational status, their role in the economy and the culture. Then we will turn to the subjective level: current myths about women, processes of socialization and what women thought of themselves and their own status

HISTORY OF THE WOMEN'S RIGHTS MOVEMENT
History 330.001
Jane Slaughter M-W 5:30-6:45

This course examines the varieties of feminist movements in the U.S. and Europe in the 19th and 20th centuries. The background, composition, ideology, program and successes and failures of the various groups will provide the focus for this course. Material is approached topically; for each topic there will be background lecture, discussion of assigned readings and specific oral reports by all members of the class (two per semester). A final written examination provides each student with the opportunity to assess general meaning and impact of feminism in the 19th and 20th centuries.

WOMEN AND THE LAW PART I
Political Science 300.002
Catherine Aguilar Th 6:30-9:15pm

The first semester of Women and the Law should serve three functions: (1) to provide the intellectual tools and vocabulary necessary for non-law students to address the legal issues: (2) to provide a relatively broad background in constitutional law so that students may comprehend the relationship of women's rights to other guarantees and protections: (3) to introduce the three broad federal methods for attacking sex discrimination - the Equal Protection Clause with regard to state action; Title VII with regard to employment; Title IX with regard to education.

Women Studies
University of New Mexico
Marron Hall 233
Albuquerque, NM 87131

WOMEN STUDIES

★★★NEW COURSES★★★

WOMEN IN WORLD CULTURES
Women Studies 279.003 Call Number 5186
Seifert T-Th 9:30-10:45

This course examines the statement "Anatomy is Destiny" from an anthropological perspective. Using readings about a variety of cultures, both traditional and industrial, class discussion will focus on questions of women's status and roles in different societies in an attempt to identify causes. We will also explore the questions of power and authority, and their relationship to economic and political factors.

WOMEN'S HEALTH & MEDICAL PRACTICE
Women Studies 279.002 Call Number 4704
Theriot T-Th 12:30-1:45

What is the impact of organized medicine on the lives of American women? Using historical and contemporary materials we will explore women's health care experience before medicine was organized, during the process of professionalization, as well as the current medical establishment. We will also consider the ways in which modern medicine determines women's lives and develop strategies for taking our bodies back.

SPRING '83

REDUCING MATH ANXIETY
Women Studies 182.001 & 182.400
Kathryn Brooks M 4:30-6:20pm

Designed to offer students individual assessment of math needs and methods of coping with math related anxiety. The class explores the phenomenon of "math anxiety" and its relationship to sex role stereotypes and learning. Individualized instruction in math will be supplemented with experience designed to alleviate math anxiety.

INTRODUCTION TO WOMEN STUDIES
Women Studies 200.001
Ann Nihlen T-Th 9:30-10:45am

Women Studies 200.002
Patricia Franzen W 6:30-9:15pm

What is the status of women in society? What are the myths and the realities of her situation? Introduction to Women Studies will address these questions by examining the importance of factors such as sex, race, class, culture, and their effect on women's socialization. In addition, we will explore the economics of her oppression as well as the role of education and family in defining "women's place."

AMERICAN INDIAN WOMEN
Women Studies 233.001
Junella Haynes M 6:30-9:15pm

The course is a general survey of American Indian women ranging from early societies to colonization to contemporary times. It will examine the role of American Indian women in reproduction, child care and socialization; division of labor, economic contribution and control over production, property and resources; power and political influence. The focus of the course will be the political, economic and social forces which affect the changing roles of American Indian women.

HER OWN VOICE: BLACK WOMEN WRITERS
Women Studies 234.001
Mary Adams Trujillo T-Th 11-12:15pm

The voice of the Black Woman, as poet Mari Evans relates, can be heard "singing in a minor key." The stories, poems, essays, and dramas of Black women writers encompass a wide range of voices, reflecting the diversity of the Black female experience. In a mutually supportive environment, we will listen to those voic see those visions, and develop group or individual projects to facilitate a personal integration of the literature.

LA CHICANA: CONTEMPORARY ISSUES
Women Studies 279.001
Soffa Martínez T-Th 2-3:15pm

La Chicana, who is she? What is she doing? What is she saying? What are her goals and concerns? How are racism, classism, and sexism affecting her today? These questions will be discussed as we attempt to analyze the current social, political, and economic scatus of the Chicana.

TOPICS: TO BE ANNOUNCED **MYSTERY SOLVED**
Women Studies 279.002
Staff T-Th 12:30-1:45pm **SEE FRONT COVER**

We are now in the process of hiring an instructor for an exciting NEW Women Stu course. Watch for flyers announcing the topic before preregistration begins. enroll for a "mystery course" certain to be innovative and challenging.

CONTEMPORARY FEMINIST THEORY
Women Studies 324.001
Theriot Tu 6:30-9:15pm

Investigates selected feminist theoretical writings from the past three decades. Stresses learning and applying the skills of analysis to theory. Includes a broad spectrum of recent feminist thought. Prerequisite: WS 200

N AND WORK
men Studies 379.001
len Bannan MWF 12-1:00pm

ave all heard that "women's work is never done," but what that work consists of,
e it is performed, and how society and individual women workers evaluate it, have
ed considerably. We will explore the effects of class, ethnicity, and geography
atterns of female work options and individual experiences in historical and
emporary America. We will also analyze major issues confronting working women
y, including sexism, racism, sexual harassment, and balancing personal and
essional life choices in career planning.

WOMEN, RELIGION, AND SPIRITUALITY
Women Studies 379.002
Jensen MWF 9-9:50am

Examines the role of religion in women's lives, including historical and cross-cultural analysis of both their formal, institutional involvement and informal aspects of female spirituality. Discusses contemporary religious activism of women both within and outside of traditional organized religions.

ISM AND FEMINISM
men Studies 479.001
e Reynis MW 3-4:15pm

ides brief introduction to Marxian methodology and political economic analysis.
les from growing literature (including radical feminist analysis) which applies
ian methodology toward understanding women's situation, and the diversity of
n's experience in different societies and depending upon race, class, etc.
ically assesses the contribution of the Marxist approach, including its usefulness
eveloping strategies for social change.

UNDERGRADUATE PROBLEM (1-3 credits)
Women Studies 499.001
Ann Nihlen

Women Studies 499.002
Helen Bannan

Gives individual students the opportunity to design and carry out, with faculty guidance, projects of their own, including research, directed readings, etc., on a topic involving women. Permission of instructor required for registration.

● ● ● Courses offered in other departments: ● ● ●

EER WOMEN EXPERIENCE
erican Studies 302.006
rd Gibbens MWF 1-1:50pm

frontier world of the 19th century, charged with an interplay of men, women, earth,
tics. and economy, involved blurring and redefining of sex roles and family patterns.
omprised a world unlike the myth still played out on TV screens today. Through
onal documents of frontier women (and men) this course will examine the reality of
pioneer experience--for both women and men.

WOMEN ARTISTS, 19th and 20th CENTURIES
Art History 429.004
Patricia Mathews T-Th 2-3:15pm

An examination of women as image and artists in past and present art with emphasis on the 20th century. Lectures and slide presentations with discussion encouraged. Mid-term and final exams. Two short papers. Text: taken from Lucy Lippard, From the Center, Nochlin and Sutherland-Harris, Women Artists 1550-1950, John Berger, Ways of Seeing.

E WOMAN AS HERO
English 211.001
Cheryl Fresch MWF 10-10:50am

a hero is "the chief character of a work," one who "is pitted against an important
ponent," first-rate literature offers us innumerable women who are heroes. Their
ponents have been old age, ignorance, the American frontier, poverty, sexual prejudice,
tional enemies, and the men and women they have loved and trusted. Heroic women have
sponded to such opponents by doing more than fainting, weeping, and sticking their
ads into ovens. Readings include fiction, drama, and autobiographical writings, from
blical and classical times to the present, from a variety of cultures.

WOMEN POETS
English 211.003
Sharon Barba MWF 11-11:50am

This course is an introduction to a variety of women's voices in poetry; readings will include poems in translation from other cultures as well as works by contemporary American poets such as Audre Lorde and Marge Piercy. It isn't necessary that you have any background in poetry to take the course; if you have questions, contact instructor.

WOMEN AND/IN ORAL AND FOLK LITERATURE
English 306.001
Marta Weigle T-Th 5:30-6:45

Women in myth, tale, song, and such. Goddesses, guides, Amazons, heroines, witches, healers, virgins, mothers, whoever, in the folklore and mythology of various cultures and societies worldwide. Women's use of language and their own mythology, beliefs, humor, gossip, folklore, and customs.

VIRGINIA WOOLF
English 360.003
Harvena Richter MWF 1-1:50pm

A close look at Virginia Woolf as a woman of letters: her personal life, her socio-political concerns, her fiction, her milieu of Bloomsbury. Literature, gossip, psychology, history.

WOMEN IN THE MODERN WORLD
History 316.001
Jane Slaughter MWF 1-1:50pm

This is a general survey of women in both the U.S. and Europe in the 19th and 20th centuries emphasizing broad social and economic interpretations which provide the context for women's experiences discussed in such topical areas as divisions of labor, public and private work, women's culture, female networks and strategies, the interplay of race, class and sex, marriage, family and sexuality.

WOMEN AND THE LAW II
Political Science 300.006
Catherine Aguilar Th 6:30-9:15pm

This semester the course will look at substantive due process, reproductive freedom, domestic relations, women in the military, and women in the criminal justice system. There is a continuing emphasis on learning legal procedure and research. It is not necessary to have taken Women and the Law Part I (fall semester) to enroll in this course.

HISTORY OF WOMEN IN EDUCATION
Education Foundations 593.002
Ann Nihlen T-Th 12:30-1:45pm

Why are women not of equal status with men in education? The data suggests that the schools' authority, staffing patterns and curriculum reflect the gender inequality prevalent in society, and that the roles of women in any educational system reflect women's position in that society at large. This course will analyze the historic roles women have played in education as well as the ways education has affected the role of women. Some of the topics we will explore are: the "Dame" schools, early female academies, underground slave schools, working class factory schools, BIA boarding schools, the female "salons" of the Northeast, early childhood education, the women's colleges, coed land grant colleges, normal and vocational colleges, and the recent growth of the field of Women Studies in universities and high schools.

DATE: May 6, 1983

John Perovich, President

Classroom Climate Discussion Group

CT: The Classroom Climate For Women Students

Many faculty members and administrators have long been concerned with subtle and overt behaviors which express different expectations of, and stereotypical attitudes toward, men and women on campus. A recent publication of the Association of American Colleges, The Classroom Climate: A Chilly One For Women?, indicated the nationwide awareness of this problem, and led Joel Jones, Kathryn Brooks and Helen Bannan to convene a group representing a cross-section of UNM faculty to discuss the applicability of this study to our University. Two lively afternoons of discussion led to a consensus on the following points:

1. Discriminatory attitudes and behavior toward women compromise the dignity and respect for individuals that should be valued at any institution of higher learning.

2. We are particularly concerned that female students may find their intellectual enthusiasm and confidence seriously undermined by patterns of faculty behavior in which they are either ignored or singled out because of their gender. Remarks such as "a pretty good grade for a woman," addressed to the person who earned the highest grade in the class, not only degrade women, but reinforce whatever prejudices men in the class may hold.

3. It is increasingly recognized that there may have been many incidents on the campus involving discriminatory practices toward women. During our own discussions, several faculty women described incidents of such behavior directed toward them by colleagues or administrators. Discrimination affecting female faculty members serves to reinforce negative student perceptions of the value of the contributions women make at all levels in the University.

4. Perhaps the effects of subtle discriminatory behaviors and attitudes may be the most profound upon women who are graduate students, because they necessarily must work more closely with their faculty advisors. Such discrimination may serve to discourage them from continuing their educations, or from entering particular fields of graduate study, constituting a real loss both to individuals and to society at large.

5. Discriminatory behaviors and statements have been most blatant in traditionally male fields, and, although these are changing as more women enter them, special efforts should be made to continue to address discrimination in these fields.

6. During the discussion, discrimination of the subtle "classroom climate" variety was differentiated from blatant sexual harassment for discussion purposes. However, sexual harassment is a matter of great concern. We

think existing channels for remediation of sexual harassment cases need more publicity, and university policy in this area needs to be defined in clear uncertain terms, but separate and specific action should be taken to remedy this concern.

We wish to share our sense of urgency with you. To this end, a subgroup of this discussion forum is most eager to work with you to establish a permanent committee that would explore and coordinate concrete efforts to alleviate the problem of discrimination against women in the classroom. In addition, since unequal treatment of women on campus compromises the excellence for which we strive, we hope you will also urge your Committee on Excellence to add this issue to their agenda for discussion and action. We hope that addressing the issue of discrimination against women will open the way to dealing with other forms of discrimination.

Becky Bailey
UNM
Educational Foundations
126 Onate Hall
Albuquerque, NM 87131
277-6196

Research Interests: Human Growth & Development: sex role development and vocational sex equity.

Helen M. Bannan,
UNM
Women Studies Program
Marron Hall 233
Albuquerque, NM 87131
277-3854

Research Interests: American Women's History: immigrant women; women in SW multicultural; women & work; relationships between Anglos and Native Americ women.

Alice Brasfield
1237 45th St.
Los Alamos, NM 87544
662-2143

Research Interests: Women and religion.

Maire Tults Buckman
UNM
Medicine
3211 Lomas NE
Albuquerque, NM 87131
277-4064

Research Interests: Endocrinology/metabolism; women in medicine: prolactin and pathopysiology.

Judith Busch
UNM
Educational Foundations
117-D College of Education
Albuquerque, NM 87131
277-5967

Research Interests: Statistics, research & design, sex role differences, mentoring: sex role differences pre-school children mentoring & sex role differences in graduate schools.

Jane Caputi
UNM
American Studies
Humanities Bldg.
Albuquerque, NM 87131
277-4125

Research Interests: Popular culture, film and television, mass med sex crime - 20th century mas sexual murder.

Helen Damico
UNM
English
Humanities Bldg.
Albuquerque, NM 87131
277-4247

Research Interests: Old English and old Norse literature and language, Medieval literature: the image and status of women in Medieval literature and society; in particular those in the Germanic languages and literatures.

Patricia Elliott
UNM
Anderson Schools of Management
Albuquerque, NM 87131
277-4804

Research Interests: Federal Estate, gift and income taxes: individual taxes, especially in relation to women.

Trisha Franzen
UNM
Women Studies/Educational Foundations
Marron Hall 233
Albuquerque, NM 87131
277-3854

Research Interests: Introductory women's studies courses, lesbianism, heterosexism: the above focused on New Mexico.

Sandi Gonzales-Smith
UNM
Women Studies
Marron Hall 233
Albuquerque, NM 87131
277-3854

Research Interests: Psychology & counseling: minority issues in psychology & counseling.

Mary Harris, PhD
UNM
Educational Foundations
Albuquerque, NM 87131
277-2925

Research Interests: Social, developmental, and educational psychology: sex role stereotypes, obesity, social learning and behavior modification.

Junella Haynes
UNM
Women Studies
Marron Hall 233
Albuquerqqe, NM 87131
277-3854

Research Interests: American Indian women; China; third world women: Southwest women, feminist theory & American Indian cultures (early societies); race, class and sex as socio-culture categoric

Vivian Heyward
UNM
Physical Education
Johnson Gym
Albuquerque, NM 87131
277-2318

Research Interests: Physical performance of women: comparative strengths of women and men.

Carol Hunter
UNM
Women Studies
Marron Hall 233
Albuquerque, NM 87131
277-3854

Research Interests: Research on women in service organizations-A.R.C., USO, Special Services-during the Vietnam War.

Carol Jensen
UNM
Women Studies
Marron Hall 233
Albuquerque, NM 87131
277-3854

Research Interests: Women and religion: Southwestern women and religions, religious autobiography.

Vera John-Steiner
UNM
Educational Foundations/Linguistics
Santa Fe Graduate Center
College of Santa Fe
St. Michael's Drive
Sante Fe, NM 87501
827-8919

Research Interests: Psycholinguistics, cognitive psychology, psychology of women: within the field of Women Studies; gender differences in teaching at the university level; more generally; productive and creative thinking.

Vonda Long
UNM
Counselor Education
4020 Mesa Vista
Albuquerque, NM 87131
277-4867

Research Interests: Adult development, human development, and development of positive self-concept: develop ment of positive self concept in adult women.

Sofia Martinez UNM Women Studies Marron Hall 233 Albuquerque, NM 87131 277-3854	Research Interests:	Bilingual Education, Southwest history, and the history of Chicanas.
Charlene McDermott UNM Office of Graduate Studies Humanities 125 Albuquerque, NM 87131 277-2334	Research Interests:	Medieval philosophy, Buddhism, Philosophy of language, Logic.
Marion Metivier UNM Affirmative Action/Afro American Studies 1700 Las Lomas NE Albuquerque, NM 87131 277-5252	Research Interests:	Black women, Black literature, EEO, Civil Rigl Black history, Human relations.
Norma Milanovich UNM Secondary and Adult Teacher Education Albuquerque, NM 87131 277-2411	Research Interests:	Vocational education/sex role stereotyping/ leadership development/curriculum development.
Kay Morgan UNM Physical Education Johnson Gym 110 Albuquerque, NM 87131 277-5151	Research Interests:	History; women & sports: sports; education (history, curriculum, sociological aspects, physiological aspects, psychological aspects).
Ann S. Nihlen UNM Educational Foundations/Women Studies Marron Hall 233 Albuquerque, NM 87131 277-3854	Research Interests:	Sexism in education, history of women in education, vocational sex equity and race equity in elementary schools: women studies.
Rebecca Phillips UNM Secondary & Adult Teacher Education 3090 Mesa Vista Hall Albuquerque, NM 87131 277-5737	Research Interests:	Professional Career Development, adult life cycle: mentoring, carber/life planning.
Mary Power UNM English 357 Humanities Albuquerque, NM 87131 277-3712	Research Interests:	Irish literature, women in modern literature: James Joyce; Image of Queen Maeve in Irish renaissance.

Lee Reynis UNM Economics 1915 Roma NE Albuquerque, NM 87131 277-5810	Research Interests:	Economic situation of women, international economics, labor marxism: women & multi-national firms, women in poverts, marxism-feminism; US foreign investment, economy of tl military.
Janet Roebuck UNM History Mesa Vista Hall Albuquerque, NM 87131 277-2451	Research Interests:	Aging & society, women & aging, women and publ policy U.S. west.
Debra Rosenthal UNM Political Science Ortega Hall 319 A Albuquerque, NM 87131 277-5231	Research Interests:	Public policy/political theory: women and politics.
Ann Scales UNM School of Law 1117 Stanford NE Albuquerque, NM 87131 277-5804	Research Interests:	Constitutional & civil rights law: sex discrimination law, pregnancy, power of government to regulate morale choice.
Candace Schau UNM Educational Foundations Educational Research & Evaluation Center College of Education Albuquerque, NM 87131 277-5967	Research Interests:	Sex-role development, sex-typing, educatinnal equity; applied statistics, "canned" computer statistical packages, evaluation. Occupationa sex-role development in children, multiple dependent variables, SPSS effects of sexist and nonsexist instructional materials; multiple regression.
Sandra Schwanberg UNM Nursing Albuquerque, NM 87131 277-2637 or 277-4221	Research Interests:	Community health nursing: women and health care; historical images of women in health care literature.
Jane Slaughter UNM History Albuquerque, NM 87131 277-2246	Research Interests:	Women's History/Italian History: Women and Radical Politics.
Elizabeth Stefanics UNM Health, Physical Education & Recreation 112 Johnson Gym Albuquerque, NM 87131 277-5919 or 277-5151	Research Interests:	Administration; law; microcomputers; leadershi outdoor recreation, programming, philosophy an theory of leisure: women in management in leisure services; legal education for women; women and leisure; learning in a noncompetitiv and cooperative play environment

Anne Taylor
UNM
School of Architecture & Planning
Albuquerque, NM 87131
277-5059

Research Interests: Environmental design and built environment education: effects of physical environment on learning and behavior and aesthetics.

Nancy Theriot
UNM
Women Studies
Albuquerque, NM 87131
277-3854

Research Interests: Women's History; History of childhood: Women and Medicine (history of); Feminist Theory; Sexual Ideology (history of); Mothers & Daughters; Women and Reproduction.

Susan Tiano
UNM
Sociology
1915 Roma NE
Albuquerque, NM 87131
277-2725

Research Interests: Women in development; sociology of development Latin America; political sociology: women's labor force participation in urban areas; the maguiladora workforce, class & gender consciousness.

Pauline Turner
UNM
Home Economics
COE 109
Albuquerque, NM 87131
277-4135 or 277-4316

Research Interests: Parent-child interactions (especially in non-traditional families), day care needs (esp. of non-traditional parents): Gay/Lesbian parents single parents.

Andrea Vierra
UNM
Educational Foundations
Albuquerque, NM 87131
277-2240

Research Interests: Education & Anthropology: women's roles cross-culturally; role overload of contemporary US women, especially working women.

Marta Weigle
UNM
Anthropology
Albuquerque, NM 87131
277-3531

Research Interests: Folklore and mythology; southwest studies: women & folklore/mythology; New Mexico folklore and social history.

Mary Bess Whidden
UNM
English
Humanities 217
Albuquerque, NM 87131
277-2305

Research Interests: Literature of the English renaissance--just now beginning research and ultimately teaching in women's humor.

Carolina Yahne
UNM
Student Mental Health Service
Student Health Center
Albuquerque, NM 87131
277-4537

Research Interests: Feminist counseling interventions; psycholtherapy; counseling psychology developing therapeutic interventions that meet the special needs of women clients.

THE UNIVERSITY OF NEW MEXICO WOMEN'S CENTER
Division of Student Affairs ■ Alumni Relations and Development
1824 Las Lomas NE ■ Albuquerque, New Mexico 87131 ■ Telephone: (505) 277-3716

WOMEN'S CENTER

Volume 2 #1
Spring 1983

* * * WOMEN'S WEEK, March 7-11, 1983 * * *

to celebrate

International Women's Day, March 8

National Women's History Week, March 6-12, 1983

Monday, March 7

NOON "A CRIME TO FIT THE PUNISHMENT" - a film documentary about "Salt of the Earth"
Mariné Dominguez, Guest Discussant

4:00-5:00 "ORGANIZING WOMEN IN THE NEW MEXICO WORKPLACE"
Panel Discussion

7:00P.M. "SALT OF THE EARTH and "A CRIME TO FIT THE PUNISHMENT"
Film Presentation and Discussion
Mariné Dominguez, Guest Discussant

Wednesday, March 9 and Friday, March 11

7:00P.M. "INTERNATIONAL WOMEN'S FILM FESTIVAL"

Locations and Other Events - To Be Announced
Brochures available in February

BROWN BAG SERIES

Women's Center/Women Studies

Wednesday Noons (Except April 21)

February 2 Anorexics, Athletes and Amazons
Nancy Theriot, Ph.D., Instructor, Women Studies

February 16 From Historian to Curator: A Woman's Career in a Male World
Janet Fireman, Ph.D., Curator, Social Cultural History
Natural History Museum, Los Angeles County (California)

March 2, 23 and April 6 - to be announced

April 21 (Thursday, 12:15p.m.) Women and Leisure
Liz Stefanics, Ph.D., Assistant Professor,
Health, Physical Education and Recreation

* * * WORKSHOPS * * *

REGISTRATION POLICY

Because our space is limited, we require registration for all workshops. Registration must be IN PERSON at the Women's Center; Monday - Friday 8:00 - 5:00 p.m., Saturday 9:00 - 12:00 noon during the semester. Participants MUST ATTEND THE FIRST SESSION. Remember, if you register and do not attend, you may have eliminated someone else's opportunity to participate. REGISTRATION FOR SPRING WORKSHOPS WILL BEGIN JANUARY 17.

BASIC ASSERTIVENESS TECHNIQUES - 6 weeks
UNM STUDENTS, STAFF AND FACULTY ONLY
Tuesdays, February 1 - March 8, 12:00 - 2:00 p.m.
OR Tuesday Evenings, March 22 - April 26, 7:00 - 9:00 p.m.
Facilitator: Landra White Fee: $2.00 for materials
Assertiveness has become a very popular and frequently misunderstood concept. Assertive behavior is often confused with aggression or manipulation. Problems also arise in determining your legitimate rights in situations and balancing those with the rights of others.

This workshop presents basic concepts and techniques, with an opportunity for discussion of situations encountered by workshop participants. What you get out of the group will be determined by YOUR NEEDS and YOUR INPUT. Role-playing techniques may be utilized. Each person will set a specific goal of a behavior to practice or a situation to confront during the six weeks, and will report back to the group.

DEALING WITH ANGER - 12 weeks
Thursday Evenings, January 27 - April 21, 7:00 - 9:00 p.m.
(will not meet March 17)
Facilitator: Landra White and Claudia de Lorenzo. Fee: $2.00
Anger is one of the most basic emotions, yet most people have difficulty expressing anger. We may feel we have no right to be angry, not recognize that we are angry, or "bottle it up" in harmful ways. If we do not understand and deal with our anger directly, the tension causes other problems such as ulcers, depression or explosions over minor things.

This workshop explores the indirect ways in which anger becomes expressed, and alternative techniques for dealing with angry feelings. The emphasis will be on techniques of direct expression. Role-playing will be used for discharge of anger. The purpose is to enable women to handle emotions of irritation or anger without being destructive.

JOURNAL (Diary) WORKSHOP
Monday, March 7th, 7:00 - 9:00 p.m.
Facilitator: Sally Currie
Recording feelings in a journal during times of stress can be an extremely therapeutic experience. This short introductory workshop will explore the various forms of expression possible in a diary as well as the kinds of insights which can result. Group discussion will follow experimentation with actual diary entries. No writing, spelling, punctuation, etc. ability is required. A very useful workshop for people seeking to relieve stress, clarify a philosophy of life, or make important decisions.

CAREER EXPLORATION - 6 weeks
Tuesdays, February 1 - March 8 7:00 - 9:00 p.m.
Facilitator: Landra White Fee: $2.00 for materials
Besides interests and abilities, many factors affect how well you "fit" in an occupation. What are your present skills? What are your values and personal priorities? Do your values match the demands of the job? What are your motivations for working? How do you approach work tasks and your co-workers? These questions will all be addressed in this unique workshop.

The workshop will also present sources of information about occupations. Vocational interest testing will be available for a small fee, and the tests will be interpreted in the last session. The process will be helpful (and Fun!) for those choosing a first career, for career changers, or for those just thinking about what they want out of work.

PERSONAL GROWTH - 10 weeks
Monday Evenings, January 31 - April 11 (will not meet March 14) 7:00 - 9:00 p.m.
Facilitator: Claudia de Lorenzo
WOMEN ONLY PLEASE
A ten week counseling group focusing on personal growth. Each participant will be asked to formulate personal goals for the 10 week period. Goals may deal with changing old patterns, behaviors, feelings or relationships. The facilitator will provide exercises focusing on a variety of issues. The process will include weekly structured sharing, and may utilize role-playing.

COPING WITH STRESS
Saturday, April 16th, 12:00 - 4:00 p.m.
Facilitator: Claudia de Lorenzo
Stress is an ever present aspect of all our lives. This workshop will focus on identifying the stresses in your life and developing strategies for coping. Wear comfortable clothing for relaxation and tension-release exercises.

BODY IMAGES
Saturday, February 26th, 12:00 - 4:00 p.m.
Facilitator: Claudia de Lorenzo
A workshop to explore how we perceive our body and its effects on our daily lives and relationships. Focus will be on body awareness and the process of acceptance. Discussion will focus on personal feelings; imagery exercises will be used.

FINDING YOUR CREATIVE SELF
Saturday, March 26, 12:00 - 4:00 p.m.
Facilitator: Claudia de Lorenzo
We all have creative abilities and talents. Creativity is not limited to the arts. Workshop will focus on uncovering our own creativity and learning to develop it. Be prepared to experiment, laugh and play.

HOW TO SUCCEED SOCIALLY AS A SINGLE
Wednesday, March 2, 7:00 - 9:00 p.m.
Facilitator: Sally Curie
Led by a counselor who has been a happy "midlife" single for six years. The workshop will explore some of the reasons people fail to find happiness as a single in the area of interpersonal relationships. The importance of self-esteem, effective communication, objectivity, etc. will be addressed as well as ways to achieve them along with numerous anecdotes from the facilitator's personal life. Group discussion will follow.

WOMEN STUDIES CLASSES

REDUCING MATH ANXIETY - Women Studies 182.001/182.400 M 4:30-6:00 Kathryn H. Brooks

INTRODUCTION TO WOMEN STUDIES - Women Studies 200.001 T-TH 9:30-10:45 Ann Nihlen 200.002 W 6:30-9:15p.m. Patricia Franze

AMERICAN INDIAN WOMEN - Women Studies 233.001 M 6:30-9:15p.m. Junella Haynes

HER OWN VOICE: BLACK WOMEN WRITERS - Women Studies 234.001 T-Th 11-12:15p.m. Mary Adams Trujillo

LA CHICANA: CONTEMPORARY ISSUES - Women Studies 279.001 T-TH 2-3:15p.m. Sofia Martinez

* WOMEN"S HEALTH AND MEDICAL PRACTICES - Women Studies 279.002 T-TH 12:30-1:45p.m. Nancy Theriot

* WOMEN IN WORLD CULTURES - Women Studies 279.003 T-TH 9:30-10:45 Donna Seifert

CONTEMPORARY FEMINIST THEORY - Women Studies 324.001 T 6:30-9:15p.m. Nancy Theriot

* WOMEN AND WORK - Women Studies 379.001 MWF 12-1:00p.m. Helen Bannan

* WOMEN, RELIGION, AND SPIRITUALITY - Women Studies 379.002 MWF 9-9:50 Carol Jensen

MARXISM AND FEMINISM - Women Studies 479.001 MW 3-4:15p.m. Lee Reynis

UNDERGRADUATE PROBLEMS Women Studies 499.001 Ann Nihlen 499.002 Helen Bannan

PIONEER WOMEN EXPERIENCE - American Studies 302.006 MWF 1-1:50p.m. Byrd Gibbens

WOMEN ARTISTS, 19th and 20th CNETURIES - Art History 429.004 T-TH 2-3:15p.m. Patricia Mathews

THE WOMAN AS HERO - English 211.001 MWF 10-10:50 Cheryl Fresch

WOMEN POETS - English 211.003 MWF 11-11:50 Sharon Barba

WOMEN AND/IN ORAL AND FOLK LITERATURE - English 306.001 T-TH 3:30-4:45p.m. Marta Weigle

VIRGINIA WOLF - English 360.003 MWF 1-1:50p.m. Harvena Richter

WOMEN IN THE MODERN WORLD - History316.001 MWF 1-1:50p.m. Jane Slaughter

WOMEN AND THE LAW II - Political Science 300.006 TH 6:30-9:15p.m. Catherine Aguilar

HISTORY OF WOMEN IN EDUCATION - Education Foundations 593.002 T-TH 12:30-1:45p.m. Ann Nihlen

* Exciting New Class for Spring 1983. Call Women Studies Program 277-3854 for description.

" CONSIDERING HOW DANGEROUS EVERYTHING IS
NOTHING IS REALLY VERY FRIGHTENING"
Gertrude Stein

Women's Center
University of New Mexico
1824 Las Lomas N.E.
Albuquerque, N.M. 87131

* * * SUPPORT GROUPS * * *

WOMANSOURCE

Thursday evenings, beginning February 3, 7:00 - 8:30p.m.
Facilitators: Caryl Trotter, Rape Crisis Center Counselor
Josie Abbenante, Art Therapist

A peer support group for survivors of incest. The group is designed for women who are experiencing difficulties as a result of the incest experience or who just want to stop keeping the secret. Womansource will be ongoing and will ebb and flow according to the needs of its members. Any survivor of incest is welcome. No registration is necessary. For further information, contact Caryl at 247-0707.

UNPLANNED PREGNANCY SUPPORT GROUP - 6 weeks
Monday Evenings, January 24 - February 28, 7:00 - 9:00 p.m.
Facilitator: Bonnie Musselman, M.S.W.
An unplanned pregnancy creates stress and will demand an extraordinary output of physical and/or emotional energy for the individual. The intent of the program is to provide educational information and support for women who are dealing with or have dealt with an unplanned pregnancy. Individuals will have an opportunity to vent feelings and to begin to deal with the adjustment they must make in order to cope with this stressful period. Individuals will be encouraged to use community resources to build their own support systems.

No registration necessary. New members may be allowed after the first week after talking to the facilitator. The group may continue if there is sufficient interest.

* * * MONEY MANAGEMENT SERIES * * *

FINANCIAL SURVIVAL - THE BASICS
Wednesday, January 26, 7:00 - 9:00 p.m.
Instructor: Betty Jean Stetson, Financial Consultant, private practice
The single session is prepared for the budget beginner. It will cover the basics in budgeting, credit, basic insurance, emergency savings or investment.

INVESTMENT SEMINAR - 3 weeks - Must register by March 11.
Wednesday Evenings, March 16, 23 and 30, 7:00 - 9:00 p.m.
Instructor: Cathie Rush, Stockbroker, Blinder Robinson and Co.
This workshop will offer basic information on financial planning through investments, and will demystify the Wall Street jargon. Cathie Rush, licensed through the National Association of Security Dealers, has offered her services to explain market theory, terms you should know, stock transcations, alternate investments such as bonds, investment companies, Keogh and IRA accounts, etc. Investor knowledge such as how to choose a broker and how to read the financial news will also be covered. Registrants must attend all three sessions. Note taking is strongly encouraged.

* * * COMMUNITY GROUP * * *

PSYCHODRAMA GROUP FOR LESBIANS
Mondays, January 31 - March 7
$60 for six sessions
Facilitators: Pat Graves and Kay Hankinson
FOR FURTHER INFORMATION CONTACT: 821-9038
Exploring lesbian issues and relationships through psychodrama.

WOMEN'S CENTER EXTENDED HOURS

THE WOMEN'S CENTER WILL BE OPEN TUESDAYS and WEDNESDAYS UNTIL 6:00 P.M. DURING JANUARY. This is a part of the services for Re-Entry students. Special academic advisement for beginning students and University information will be available.

This spring we can also offer some EVENING COUNSELING HOURS, Tuesdays at 5:00 and Wednesdays at 5:00 and 6:00 p.m. These hours will be available during spring semester and will begin the first week of classes.

SERVICES FOR ADULT RE-ENTRY STUDENTS

NEW HOURS - In order to accomodate adult students, most of whom are employed, the University is extending hours for the month of January for most of the services. New hours will be TUESDAY AND WEDNESDAY until 6:00 p.m. during JANUARY. The following offices will be open. The list may not be complete; if you have questions about a specific office, please call them before coming to campus.

Admissions
Advisement Centers
Bookstore
Cashiers
Continuing Education
Dean of Students
Financial Aids
Graduate Studies
Registration Center
School Relations
Skills Center/Zimmerman Library
Student Union Food Services
Veterans Affairs
Women's Center

Additional hours until 6:00 p.m. are maintained by Registration and Cashiers. Please check their schedules.

ORIENTATION FOR NON-TRADITIONAL STUDENTS

Adults returning to school have many questions about procedures, services and how to get information. Join us at the Orientation for information on:

University policies and procedures
Campus services including financial aid, career planning and academic support services

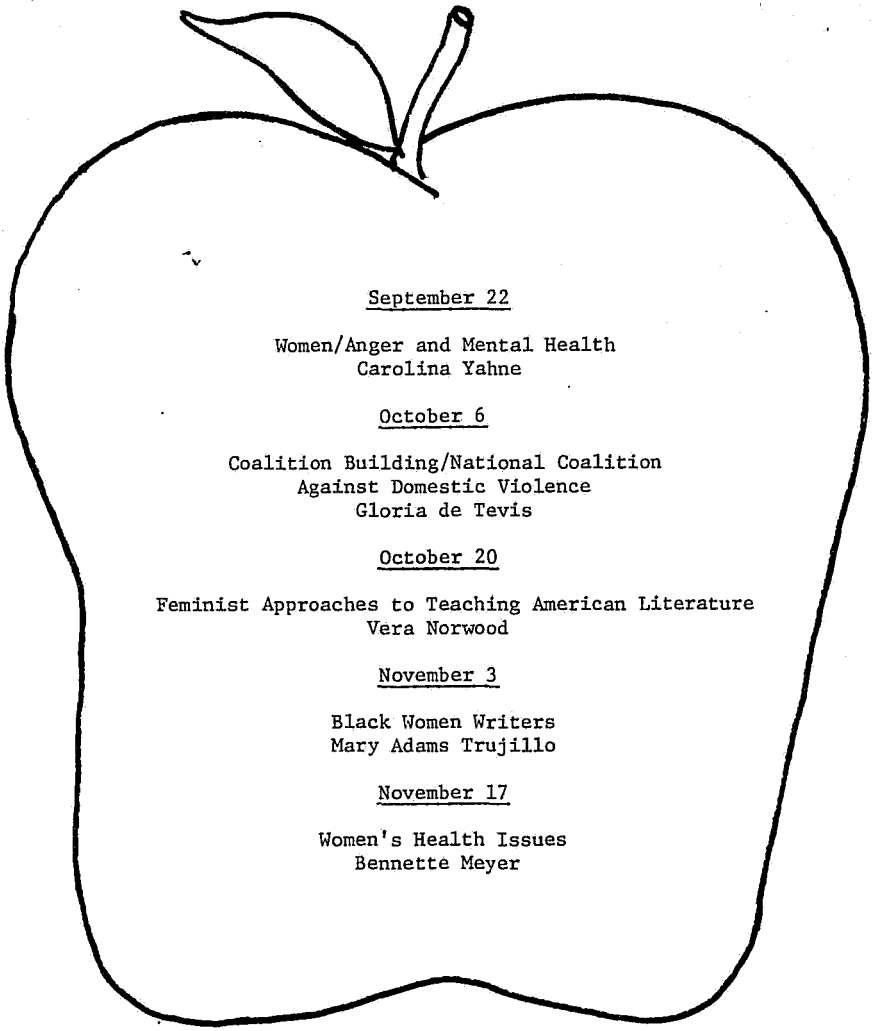
You'll meet other "older" students, and have an opportunity to participate in discussions about possible lifestyle changes you may experience.

Tuesday, January 11, 1:00 - 5:30p.m.
(Includes campus tour. Parking must be arranged through Dean of Students or at the check-in at 12:45p.m.)

Wednesday, January 12, 6:00 - 9:15p.m.
(Please check in at 5:45p.m.)

WOMEN'S CENTER/WOMEN STUDIES

BROWN BAG SERIES



September 22

Women/Anger and Mental Health
Carolina Yahne

October 6

Coalition Building/National Coalition
Against Domestic Violence
Gloria de Tevis

October 20

Feminist Approaches to Teaching American Literature
Vera Norwood

November 3

Black Women Writers
Mary Adams Trujillo

November 17

Women's Health Issues
Bennette Meyer

Time: 12:00 - 1:00 p.m.

Place: Women's Center
1824 Las Lomas N.E.

Women's Center
277-3716

Women Studies
277-3854

UNIVERSITY OF NEW MEXICO
ETHNIC & WOMEN'S COALITION

STUDENT GUIDE TO PROGRAMS & SERVICES

FOREWORD

This publication was made possible through the efforts of a coalition composed of Women, Afro-Americans, Chicanos, and Native Americans who are organized through their respective academic and student service programs at UNM. The booklet provides information to questions or concerns you may have about the programs. We hope it will arouse your interest; our main objectives are to serve students and to provide information to the community at large.

In past years, women and ethnic programs have united on issues of concern to us all. In the fall of 1981, we organized into an on-going coalition, to increase communication among ourselves and strengthen our voice within the university.

Each of the programs involved in the Coalition has prepared a statement for this publication. Included in each section is a brief history of each program, a description of the services it provides, and a listing of the courses offered. When you arrive on campus, come in and visit the centers, you will be welcomed and helped with any problem you may experience while adjusting to university life.

This publication was funded by the University of New Mexico Foundation, Inc., the Alcoa Corporation Funds, donated through Office of School Relations and the Coalition.

AFRO-AMERICAN CENTER
ACADEMIC AFFAIRS
DR. SHIAME OKUNOR, DIRECTOR

The Academic Affairs Division is the educational wing of the Afro-American Center. It is an interdisciplinary program offering courses independently. Some of the courses are however, cross-listed with other departments. All courses may be taken as electives and or substitutes for required courses by Prior Arrangements with the students major department.

The department also participates in the sponsorship of other Community directed educational projects such as After School Academy, College Experience, Senior Recognition Day, etc.

Other services provided are: Emergency Loan, Academic Counseling and Information.

PARTIAL LIST OF COURSES

AAS 250-001
BLACK WOMAN

A survey of the literature as it describes the lives of Black Women in America, in comparison to historical realities; fact and fantasy are sorted to ascertain the truth of their existence, purpose, and survival as either the victim or creator of historical, enviromental, sociological and psychological paradigms.

Instructor, Metivier

AAS 284-001
AFRO-AMERICAN HISTORY I

The course will explore each of the major historical eras, Black leaders of those times and their influence on the social and political advancement of Afro-Americans.

Instructor, Harding

AAS 294-001

FOUNDATIONS OF AFRO-AMERICAN STUDIES

The psychological, philosophical and cultural basis for the creation and existence of Afro-American Studies is analyzed. It further examines the interdisciplinary nature of the field by redefining prevailing Western thoughts underpinning education, sociology, history and other fields. A strong enquiry into the Black community will be encouraged.

Instructor, Okunor

AAS 301-001

INSTITUTIONAL RACISM

Structured to provide a definition of institutional racism as opposed to traditional "individual" racism. The pervasive nature and broad effect of institutional racism is delineated. Emphasis is placed on the class collectively identifying institutional racist practices and policies and discerning solutions.

Instructor, Harding

AAS 309-001/Pol. SC 309-001

BLACKS IN POLITICS

This course seeks to familiarize students with Black elected officials as well as those of other minority groups. In so doing, an analysis of the political process will be necessary to explore the causes and consequences as well as the limitations on Black political participation.

Instructor, Malry

AAS 387-001/His. 387-001

BLACKS IN LATIN AMERICA

This course is designed to provide the student with a comprehensive understanding of the Black plight in Latin America compared with their plight in North America, from the 15th Century.

Instructor, Williams

AAS 390-001
BLACK THEOLOGY & PHILOSOPHY

The intent of this course is to give the student a survey-level knowledge of what has been written by persons of African decent in the areas of philosophy and theology. This instructor finds it necessary to spend time reviewing major figures within the Western philosophical tradition as well.

Instructor, McDowell

AAS 395-001
EDUCATION & COLONIAL WEST AFRICA

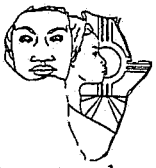
The course traces the historical development of education in Africa (with particular reference to West Africa). It further examines the psychological, cultural, and social impact of European education and technology on traditional African societies.

Instructor, Ntiforo

AAS 391-001
PROBLEMS (ARR)

Instructor, Okunor

AAS 391-002
PROBLEMS (ARR) Instructor, Okunor



AFRO-AMERICAN STUDENT SERVICES
INFORMATION SHEET

The Afro-American Student Services Program offers many benefits to Black students, on campus and within the community. The following are some of the services made available by the Afro-American Center:

Career, Academic and Personal Counseling - a trained counselor is available to aid students in career selection, give academic guidance and provide personal counseling.

Registration Assistance - Having trouble selecting the classes you need, then we can be of assistance.

Tutorial and Financial Aid Information - Counseling with regard to your tutorial needs and referrals to University wide services that meet those needs. Providing tutoring assistance in Math, English and some Sciences. Assisting students in the preparation of Financial Aid Forms.

Emergency Student Loan Fund - In case of emergency, students may borrow up to $50.00 from the Afro-American Center Emergency Student Loan Fund.

Scholarship Information - Numerous scholarships are offered during the year through several colleges on campus and from community organizations. The Afro-American Center can help you find out the information necessary to apply for these scholarships.

Career Preparation Seminars - If you have decided or are in the process of deciding what career you would most likely be interested in, the Afro-American Center can help you. Several major corporations visit the Center during the year to discuss opportunities available within their organizations.

Full and Part-Time Employment Information - All employment notices received by this office are posted or filed; you can drop by and select the job that best suits your needs.

Typewriter and Emergency Typing Service - Students may use typewriters in the Black Student Union office at no cost. Free Emergency Typing Service is available for those who need it. (There is a page limit) Appointments must be made for consultation before your paper will be accepted, positively no exceptions!

Study Area - The Afro-American Center Conference Room, which houses books and resource materials donated by University departments and community persons can be reserved by students for group study sessions and individual studying.

OTHER SERVICES PROVIDED ARE:

Free Telephone Service (local calls only)
Black Student Union Office
Black Fraternities and Sororities mail boxes

SPECIAL SERVICES AND PROGRAMS

"The Black Experience" Television Program
A bi-monthly public service program which focuses on a variety of concerns pertinent to local as well as national Black communities.

Afro-American Student Services After School Academy
The program staffed by volunteers is designed to motivate excellence in the scholastic development of children. Offered free during the Fall, Spring and Summer.

College Experience Day
This program is designed to give high school students an opportunity to come to the University campus for a full day to attend classes with students and participate in other student activities.

Senior Recognition Day
Afro-American Student Services and Black Student Union co-sponsor this event which acknowledges Seniors at the University and recognizes outstanding achievement by Black students.

The staff of Afro-American Student Services would like to welcome you to the University of New Mexico and offer any assistance you may need to make your stay as comfortable and academically rewarding as possible.

Stop by 1819 Roma N.E. or call
Afro-American Center 277-5644 or 5645

SEE YOU SOON!

Johanna "Juba" Clayton
Director
Afro-American Student Services

Shirley McDowell
Secretary

THE UNIVERSITY OF NEW MEXICO
ALBUQUERQUE, NEW MEXICO 87131

CHICANO STUDENT SERVICES

STAFF: Antonio Mondragón, Jesus Valencia, Gloria Montoya

Chicano Student Services attempts to serve all the needs of Chicano students and prospective students in their survival at and admission into the University of New Mexico.

I. ADVOCACY

Many times a student needs to resolve a difficulty but is not knowledgeable as to where to turn. We are committed to help and intercede for students on any realistic problem within our scope. We sometimes feel the need to investigate beforehand to find out where the cause lies.

A) Racial Difficulties

With 5,093 Chicano students at UNM, the probabilities are that there will be a racial, or allegedly racial, controversy emerging at one time or another. We get right in the middle of these difficulties and attempt to resolve them.

B) Individual Professors

Occasionally we need to speak with professors regarding a student's concern. Although we sometimes run into an exception, most are cooperative and approachable. It makes matters much more pleasant when students don't wait until the very last minute.

C) Financial Aid Office

Although we are not experts on financial aid, we have been known to listen more attentively to the details of students' problems and thereby made it possible for them to establish their eligibility after having been told "NO" at the front desk of the Financial Aid Office or in a denial letter.

Most of the help we give, however, involves students who don't know enough to ask the right questions or even how to apply.

D) Admissions and Records

1) Prospective students often have difficulties due to their lack of information as to what the Admissions Office requires.

We intercede for marginal applicants who show more potential than what their transcripts or ACT indicated.

2) Occasionally, we aid students to trace certain records when they feel they aren't getting sufficient attention regarding their problems.

E) Due Student Loans

Students whose financial aid loans have become due because of having been out of school for a specific length of time often feel that there is no way to continue attending. We explore different possibilities for them and usually the circumstances warrant an extension or deferral.

F) Employment

1) Since work-study eligibility is merely a hunting license, we advise many students in their search for jobs. We call different departments within UNM on the student's behalf, starting with those we already know to be cooperative.

2) We receive job announcements regularly from various establishments and agencies and we have helped many parents of students to find employment.

II. ADVISEMENT AND COUNSELING

A) Most career and academic advisement we refer to the respective departments of UNM. Very often, however, students don't have the slightest idea what their potential is and we help them dig it out. For example, a student might have a strong math background but no one has ever told him or her what engineering means or the earning power that the degree carries.

B) Counseling

1) Most of the counseling we do is personal and deals with assisting the student to feel more confident about staying in school.

We handle family problems which are not clinical in nature. Otherwise, we refer them to the proper place, such as Mental Health Center. We do the same with legal matters. Many students don't know of the existence of the Clinical Law Program.

2) Now and then we attempt to help in alcohol or drug related difficulties. Often our suggestion to refer them is refused because of embarrassment and we do the best we can.

3) Rarely, we deal with unmanageable students and we try to persuade them to seek professional help. It could happen to the best of us!

III. REFERALS

1) Throughout the years we have become a clearing house for students who know what they need but don't know where to ask. Besides the programs mentioned above, UNM has tutoring services and special programs which are designed specifically toward the student's academic survival. There are over twenty (20) which serve Chicanos directly.

2) We have assisted many students with advise on sources for their term papers and other types of research.

IV. INSTRUCTION

One member of our staff is a librarian who takes freshmen, either individually or in small groups, and teaches them how to use the library most effectively.

We have found that many first-time freshmen, especially from smaller towns, have never used a library. The majority don't even know that there are easy ways to find the material they need if they only learn basic library procedures.

All they have to do is make an appointment with Jesus Valencia at our office.

V. ORGANIZATIONS

Chicano Student Services office cooperates with all the Chicano student organization on campus.

The following are statements from two organizations housed right here within our building:

ESTUDIANTES POR LA CULTURA

The purpose of this organization is to promote our culture, to be recognized, to share culture with others and to maintain our identity. Some of the cultural events have included: Chicano, Mexicano, Hispanic Week which this year was proclaimed by Mayor Harry Kinney through an executive order; Mexican Independence and Fiestas. We are an ASUNM chartered organization with an annual budget of $4,000. Our membership is diverse with members coming from Albuquerque, Carlsbad, Chama, Colorado Springs and Santa Rosa and diverse majors in: economics, pre-med, pharmacy, architecture, pre-law, sociology, political science, business and engineering. We invite all persons to come to weekly meetings. Our phone number is 277-2748.

M.E.C.H.A.

Movimiento Estudiantial Chicano De Aztlan (M.E.C.H.A.) represents Chicano students on political issues that affect the Chicano community and affect students on campus. M.E.C.H.A. became actively involved in the recent re-apportionment case Vargas v. King, et.al. M.E.C.H.A. has been actively involved with prisoners' rights. With the selection of a new U.N.M. president, M.E.C.H.A. will combine efforts with L.U.L.A.C. and Hispanic Chamber of Commerce to lobby for a Chicano president. M.E.C.H.A. is part of the minority coalition which saw the election of a Chicano president, Chicano vice-president and an overwhelming majority of A.S.U.N.M. senators.

M.E.C.H.A. has represented U.N.M. students at the National Chicano Student Conference. We encourage participation at all levels. Our phone number is 277-3944.

Other student organizations on campus include:

- Mesa Chicana, a graduate student group.
- N.C.H.O. (National Chicano Health Organization), a group of students in the health sciences.
- M.A.L.S.A. (Mexican-American Law Student Association)
- A.T.M., Chicano business students

CHICANO STUDIES

ROOM 201
FACULTY CLUB
1805 ROMA N.E
277-6414 277-2965 277-3967

PROGRAM

The Chicano Studies Program was established in 1969. It was created to study economic, political, and social problems, past and present, of people in New Mexico and the Southwest with an emphasis on the nineteenth and twentieth centuries.

Works on literature, poetry, drama, social history and labor studies, and materials on economic and political conditions written by Chicanos and Chicanas are featured in the courses offered. Most of the recent scholarly work used in classes is about the people who have contributed to the development of New Mexico and the Southwest border region, their participation in social change, and class conflict.

General topics in the courses include: economic contradictions, political struggle, resistance, and origins of racism and discrimination.

In the fall of 1982 Chicano Studies will merge with the Southwest Hispanic Reasearch Institute (SHRI). The mission of both programs will be to combine teaching, learning and research; thereby providing better resources and support for the people of New Mexico.

SERVICES

ACTIVITIES: Chicano Studies sponsors various cultural activities such as the Miguel Caro Dancers, the National Chicano Dance Theater, concerts and art exhibits. Educational activities sponsored by the program include events such as the Reapportionment Forum, the Undergraduate Paper Forum, speakers, etc. These activities are often co-sponsored with other organizations within UNM or by community groups.

LIBRARY: Chicano Studies in cooperation with Chicano Student Services and presently, SHRI offer the use of a small library housing Chicano/Chicana related books, periodicals, journals and a vertical file.

COURSES

AMERICAN STUDIES

241-001 Chicano Experience in the Southwest (R. Burrola) - Investigation of the historical and social conditions that have shaped the development of Chicano life.

302-001 Chicanos and the Media (E. Díaz) - This course will constitute a compact, critical examination of the treatment by mass media of Chicanos in New Mexico (and to a lesser degree in other areas of the Southwest). Part of the focus will be on the media history of Chicanos, while the other part will focus in on this thing called mass communications media and what the nature of its relationship is vis-a-vis Chicanos, and why Chicanos (and the general public as well) have a serious stake in it.

341-001 History of Conflict in New Mexico (T. Durán) - Conflict - economic, political and racial - has been prevalent in New Mexico since the early 19th century. Racism, discrimination and exploitation are New Mexico's best known secrets. In this course economic, political and social problems will be analyzed from the perspective of the "inarticulate", the working people, and the paisanos and vecinos who have fought for their way of life.

HISTORY

283-001 La Raza: History of Mexican Americans (T. Durán) - This is an introductory history course about Mexicanos in New Mexico, Texas, California and other parts of the Southwest during the 19th and 20th centuries. Topics included in the course: economic conquest, political and social conflict, protestant-catholic conflict, land grants, and the "Spanish Myth".

WOMEN STUDIES

232-001 La Mujer Chicana: History (S. Martínez) - The purpose of this class is to introduce and familiarze students with the social, economic and political evolution of la Chicana. The course will begin with a historical review of the Pre-Columbian era, progressing through the early development of Spanish communities in the United States and culminating with the Mexican Revolution of 1910 and statehood. Material presented will keep in mind their relationship in forming la mujer de hoy.

332-001 La Chicana: Contemporary (S. Martínez) - The contemporary Chicana, who is she? What is she doing? What is she saying? What are her concerns? How are racism, classism and sexism affecting her today? These questions will be discussed as we attempt to analyze the current social, political and economic status of the Chicana.

PHILOSOPHY

115-001 & 002 Introduction to Chicano Thought (Staff) - Contemporary Chicano culture: Intellectual roots in the history of ideas and current philosophical issues.

SOCIOLOGY

216-001 Race and Cultural Relations (Staff) - Historical, comparative, social, and psychological study of race and ethnic relations in the United States and elsewhere.

326-001 Sociology of New Mexico (N. Valdés) - New Mexico as a social system; the infrastructure of communities and ethnic groups, stratification, major social institutions, deviance and inter-group relations.

328-001 Sociology of Mexican Americans (Staff)

SPANISH

300-001 Chicano Literature (E. Gonzales-Berry) - Survey of the thought and lifestyle of the Southwestern Spanish-speaking peoples through literature. Works from Spain and Spanish America influencing the Southwestern people to be studied through contemporary Chicano literary art forms. Does not count for Spanish major or minor.

304-001 Southwest Hispanic Folklore (J. Reyna) - Folkways of Spanish-speaking people of American Southwest; language, customs, beliefs, music and folk sayings. Taught in Spanish. Does not count for the Spanish major or minor.

437-001 Literatura y Pensamiento Chicano (E. Gonzales-Berry) - Major characteristics of Chicano literature; critical analysis of works: oral traditions of Chicano literature; literary genres; the Chicano heritage.

POLITICAL SCIENCE

307-001 Politics of Ethnic Groups (Sánchez) - The ethnic basis of group politics in the U.S.; its historical, sociological, and psychological foundations; the role of white ethnics; traditional and unconventional strategies and tactics; special emphasis on the politics of regional ethnic minorities.

308-001 Chicano Politics (Staff) - The status, role, and activities of Mexican/Spanish Americans in the American political system.

ENGLISH

211-004 Southwest Literature (Márquez) - A survey of Indian, Hispanic and Anglo literary works dealing with the southwestern experience. The course concentrates on the literature and lore of New Mexico; a third of the course focuses on the Chicano experience and its literature.

306-001 Oral and Folk Literature (Staff) - Historical and comparative study of tales, legends, songs, proverbs, and popular beliefs in American culture. (This course often includes Hispanic folklore or the Southwest e.g. the cuento, the corrido, and legends and archetypes such as La Llorona).

397-001 Studies in Chicano Literature (Márquez) - A survey course that covers the social, historical and political conditions that have influenced the Chicano Experience and its literature. Focus is on the dynamic growth and maturity of modern Chicano literature and criticism.

411-001 Special Topics: Chicano Novel (Staff) - Literary history course surveying the development of the Chicano novel; concentration is on the thematic and stylistic elements that make the Chicano novel unique and a singular contribution to American literature. Focus is on modern and contemporary Chicano novels and novelists (Villarreal, Anaya, Rivera, Acosta, Méndez , etc.).

UNIVERSITY of NEW
NIZHONI

WOMEN'S CENTER
1824 LAS LOMAS

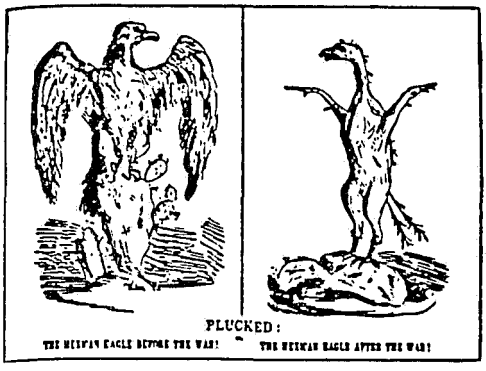
PUBLIC ADMINISTRATION

497-001 Social Planning Seminar (J. Rivera) - The seminar is designed around six topics: History and Introduction; Theories and Models of Social Planning; Social Planning and Current Social Policies; Planning Frameworks, Program Design and Service Delivery Systems; Analytic Tasks and Tools of Social Planning; and Political--Organizational Contexts and Strategies.

569-001 Seminar in Rural Community Development (J. Rivera) - The seminar is built around five contemporary topics: (1) Rural development Policy-federal and state block grant programs; (2) Planning for small towns and rural communities - innovations for the 1980's; (3) Community Development-Planning at the local level; (4) Community development-structures and models; (5) Energy and rural development.

373-001 Cross-Cultural Psychology (E. Padilla) - The relationship of culture to thinking, learning, perception, and personality. Methods, findings and theoretical perspectives in cross-cultural research will be examined.

when raza?



when raza?
when...
yesterday's gone
and
mañana
mañana doesn't come
for he who waits
no morrow
only for he who is now
to whom when equals now
he will see a morrow
mañana la Raza
la gente que espera
no verá mañana
our tomorrow es hoy
ahorita
que VIVA LA RAZA
mi gente
our people to freedom
when?
now, ahorita define tu mañana hoy

The NATIVE AMERICAN STUDIES CENTER at the University of New Mexico

History: The Native American Studies Center was established in the fall of 1970. However, the history of Native Americans at UNM dates back earlier when only a handful of Indian students were attending UNM. In 1952, the first Native American student organization, the Kiva Club, was organized. Initially developed as a social club, it later expanded into an issue oriented organization. It was while addressing its concerns for Native American issues that the establishment of a center for Native Americans at UNM, was won.

Today, the number of Indian students enrolled at UNM is approximately 700. UNM rates high among the major institutions with the largest American Indian student enrollment. Part of that is explained by the fact that UNM is situated in the hub of the southwest and within close proximity to the Apache, Navajo, and Pueblo reservations. In addition, though, there are representative tribes from across the country at UNM.

The Native American Studies Center comprises a number of major components. These are as follows: Academic Programs; Student Services; Institute for Native American Development; and the Kiva Club.

The Center also has a commitment to the non-native sector. Often, the Native American is misunderstood by modern society given the persistence of stereotypes and differing lifestyles, therefore, it is necessary for the Native American Studies Center to serve the entire University community while simultaneously promoting a sincere interest in American Indians attending UNM.

NATIVE AMERICAN STUDIES

The role of Academic Programs is a university wide one. It seeks as its main objective, the development and promotion of a Native American course curriculum. Because of the unique status of tribal communities and their special needs, course in Native American studies were developed with the intent of structuring offering to address tribal issues.

A degree in Native American Studies is not offered at this time. Credits, however, are earned by taking course offerings by NAS and are applicable toward any baccalaureate degrees. A list of course offerings follows:

COURSE OFFERINGS CROSS-LISTED WITH NATIVE AMERICAN STUDIES *

American Studies

221 - Southwestern Indian Communities
302 - St/Nat/Hopi Land Conflict
321 - Indians in Multi-Cultural Society
322 - Five Civilized Tribes
326 - St/Indian in American Popular Culture

Anthropology

255 - Ancient Southwest
260 - Southwestern Crafts
305 - The American Indian - North America
306 - The American Indian - South America
315 - Current American Indian Issues
333 - Ritual Symbols and Behavior
338 - Southwest Indians - Modern
356 - Southwestern Archaeology - Archaic to Present
385 - American Archaeology - North America
405 - North American Indian Language
530 - T/Native American Ethnology
537 - Seminar - Southwestern Ethnology

Art History

280 - Native American Art

Economics

340 - American Indian Economic Development

English

211 - Indian Autobiographies
397 - St/Native American Literature
411 - Native American Literature

History

360 - History of New Mexico
369 - American Indian History
381 - History SW-Mex-Amer Per.
574 - Seminar - American Indian History

Law

685 - Indian Child Welfare Issues

Navajo

101 & 102 - Elementary Navajo
201 & 202 - Intermediate Navajo
497 - Undergraduate Problems in Navajo
551 - Graduate Problems in Navajo

Community & Regional Planning

470 & 570 - Planning Process on Native American Reservations

Public Administration

590 - S/Issues Tribal Organization

Women Studies

233 - American Indian Women

*Please check appropriate semester schedules for classes being offered under Native American Studies.

NATIVE AMERICAN STUDIES / STUDENT SERVICES
INSTITUTE FOR NATIVE AMERICAN DEVELOPMENT
1812 LAS LOMAS DR., NE TELEPHONE: 505-277-3917

▽ ▽ ▽ ▽ ▽ KIVA CLUB ▽ ▽ ▽ ▽ ▽

The Kiva Club is an organization of UNM Indian students. They carry on a number of activities throughout the year, the most recognized of which is its Nizhoni Days. The Club also resounds of issues that reflect social and political themes affecting Native Americans. Foremost, however, is the concern for academic achievement among Native Americans in attendance at UNM. Membership is open to all students attending UNM. The fall term of each academic year is utilized by interested students for organizing the Club and selection of officers. Campus phone: 277-5750.

▽ ▽ ▽ ▽ ▽ NATIVE AMERICAN STUDENT SERVICES ▽ ▽ ▽ ▽ ▽

University of New Mexico, Albuq., NM

PURPOSE:

To assist the University in retaining, recruiting, and work with students of American Indian heritage toward the enhancement of their desired educational goals. Furthermore, to serve as a responsible representative that reflects Indian student thinking and relevant concerns while attending the University of New Mexico.

SERVICE FUNCTIONS:

Academic advisement-which includes assistance with admission procedures for UNM; assistance with registration; course selection; and information regarding academic policy within the University.

Liaison for students with the financial aid offfice and other scholarship programs, including BIA and private foundations.

Tutorial assistance-independent tutors are provided free of charge to students who demonstrate a need for tutorial help.

Helping students cope with individual personal concerns, in addition to, assisting with crisis situations affecting students.

Short term loan referral assistance.

Faciliate and work with students in addressing topics related to Native American affairs locally and nationally, through workshops, lectures, course work, and through community involvement projects.

Identify and recruit prospective students to UNM by making site visits to native communities and their respective schools.

Prepare a monthly newsletter, UNM Native American Student Newsletter, for interested students which serves as a means of communication among the Indian students attending UNM about various activities and topics.

Miscellaneous services include the use of the Native American Center as a place to study or relax and inquire about upcoming events. The Center subscribes to a number of Native American papers from around the country which are made accessible for visitor's to the Center. Other materials about graduate programs and special programs for students are also on display for student use.

THE UNIVERSITY OF NEW MEXICO WOMEN'S CENTER
Division of Student Affairs ■ Alumni Relations and Development
1824 Las Lomas NE ■ Albuquerque, New Mexico 87131 ■ Telephone: (505) 277-3716

WOMEN'S CENTER

STATEMENT OF PURPOSE

The purpose of the Women's Center at the University of New Mexico is to improve the status of women and provide services for women in the academic community.

The goals of the Center are:

1. to make a concerted effort to act upon the needs of minority women;

2. to provide support systems and communication networks for women on campus; and

3. to increase public awareness of the current and changing state of women.

HERSTORY

The Women's Center was established in 1971 by a group of concerned women, primarily to facilitate communications between existing women's groups. Initially the Center was the focus of feminist activities in Albuquerque, since there were no other resources. Over the years the Center has housed an outreach office of the UNM Law Program and was the initial home of the Rape Crisis Center and the UNM Women Studies Program, both of which have since received separate funding. The UNM Re-Entry Program also began at the Center, and now is housed at the Office of School Relations.

The Center now is a service primarily to UNM students, staff and faculty. One primary function of the Center is as an advocate for women on campus. This takes a variety of forms: planning and implementing programs fo interest to women, providing personal counseling and referral as well as group counseling opportunities, academic advisement for returning women students, topical workshops and services, and helping an individual with a complaint by referral to appropriate offices and/or becoming involved on the individual's behalf. In order to be effective in its function, the Center's staff maintains liaison with a wide range of University departments.

NEWSLETTER

A newsletter is published prior to each semester announcing our workshops, Women Studies classes and other services or events. The newsletter is sent to all women staff and faculty and will be mailed to students and public upon request. In addition it is distributed at several places on campus.

COUNSELING

Personal problems, uncertainty about academic goals or the new expectations caused by being in school sometimes overwhelm students. A trained counselor is available for individual appointments about vocational or personal counseling. Talking to a counselor may help you to develop a more objective perspective, may suggest coping techniques, or reduce stress. Emphasis is on short-term counseling, not long-term therapy.

ACADEMIC ADVISEMENT FOR RETURNING ADULT STUDENTS

For adults who have interrupted their education, entering the University can be very confusing. The Center's counselor can help to "translate" the academic regulations, make an initial selection of classes, or provide referral to the appropriate office.

LIBRARY

The Center houses a library with a large collection of short articles, 20 - 30 periodicals and approximately 800 books. A number of books for the UNM Women Studies classes are available on reserve. The library is open to the public.

REFERRAL

The Center maintains a referral file of women's organizations and resources. Local services for battered women, displaced homemakers, and rape victims are included, as well as counselors, lawyers and medical and employment services. A limited number of job listings are posted at the Center.

PROGRAMS AND SEMINARS

Programs and seminars of interest to women are offered on an ongoing basis. Such topics focus on issues in science, aging, financial survival, political issues, religion, and mental and physical health.

"BROWN BAGS

"Brown Bags" are offered in conjunction with the Women Studies Program during Fall and Spring semester. This noon hour series is advertised through the participating programs, in the newsletter and through the Lobo.

MATH/SCIENCE ACTIVITIES AND RESOURCE CENTER

Many math, science or engineering activities are coordinated through the Center. There is a small resource center with a loan library and career related media presentations available. Advertisement of activities is carried in local media and the Lobo but stop by the Center for current information. A Student Chapter of the Women in Science and Engineering Network is forming at the Center.

MATH ANXIETY

A Math Anxiety class is offered in conjunction with the Women Studies Program. This course is designed to offer students individual assessment of math needs and methods of coping with math related anxiety. Non-students may enroll through Continuing Education.

WORKSHOPS (on a rotational basis)

CAREER EXPLORATION - 6 weeks
Facilitator: Landra White

Besides interests and abilities, many factors affect how well you "fit" in an occupation. What are your present skills? What are your values and personal priorities? Do your values match the demands of the job? What are your motivations for working? How do you approach work tasks and your co-workers? These questions are all addressed in this unique workshop.

BASIC ASSERTIVE TECHNIQUES - 6 weeks
Facilitator: Landra White

Assertiveness has become a very popular and frequently misunderstood concept. Assertive behavior is often confused with aggression or manipulation. Problems also arise in determining our legitimate rights in a situation and balancing those with the rights of others. This workshop presents basic concepts and techniques, with an opportunity for discussion of situations encountered by workshop participants.

DEALING WITH ANGER - 8 weeks
Facilitator: Landra White

Anger is a basic emotion, yet most people have difficulty expressing anger. We may feel we have no right to be angry, or not recognize that we are angry, or "bottle it up" in harmful ways. If we do not understand and deal with our anger directly, the tension causes other problems such as ulcers, depression, or explosions over minor things. The purpose of this workshop is to enable you to express your anger in a responsible manner, without being destructive to yourself or others.

STRESS MANAGEMENT

Stress is an integral part of life, but can de debilitating if you have too much. This workshop will briefly cover the effects of stress on the body, how to analyze your own stress, and mechanisms to reduce the negative effects of stress in your life.

PERSONAL DEVELOPMENT - 12 weeks
Facilitator: Landra White

A general counseling group to explore feelings, needs and relationships. The format will include exercises which encourage self-exploration, sharing with other group members, and time for dealing with concerns of individual members. Techniques utilized will depend upon the needs of group members. The focus is on changing old patterns and on taking responsibility for personal growth.

DEVELOPING A POSITIVE SELF-CONCEPT - 6 weeks
Facilitator: Vonda Long, Asst. Professor, Guidance and Counseling

Six weekly sessions focusing on self-analysis and developing a more positive self-concept. Sessions will include an individualized look at impact of concept formation, ways we internalize and maintain negative self-image, and an approach for changing self-defeating behaviors which perpetuate that image.

SUPPORT GROUPS

ANOREXIA NERVOSA AND BULIMIA
Tuesday evenings, 7:00 - 9:00 p.m.
Sponsored by: UNM Women's Center and the National Association of Anorexia Nervosa and Associated Disorders
Facilitator: Norma Wilkes and Judy Bierbaum

This group offers an opportunity for those with an eating disorder to diminish their isolation and suffering by relating to others with the same problem.

WOMEN FOR SOBRIETY
Wednesdays, 12:00 - 1:00 p.m. & Saturdays, 12:00 - 1:00 p.m.
Sponsored by: UNM Women's Center and the National Council on Alcoholism, Albuquerque Area, Inc.

The "Women for Sobriety" Program offers a meeting and discussion format designed with a positive approach toward the drinking problems of women. Meetings last one hour with a social time following. The program provides information, counseling, treatment and help, and the opportunity for a positive recovery for women with a drinking problem.

WOMEN STUDIES PROGRAM

UNIVERSITY OF NEW MEXICO

MARRON HALL, ROOM 233

ALBUQUERQUE, N. M. 87131

505-277-3854

The Women Studies Program at UNM celebrated its tenth birthday in 1981, making it one of the oldest programs in the nation. Here, as elsewhere, women faculty and students were concerned that women's issues and activities were not being given sufficient consideration in the University's courses. Thus the first Women Studies courses were begun, combining commitment to feminism with commitment to scholarship, crossing the boundaries of various departments in a well-rounded, interdisciplinary approach to the study of the female half of the population.

From these beginnings, the Program has grown, and student participation has been crucial in this growth. We in Women Studies emphasize community, and we encourage you to become involved in ours.

WOMEN STUDIES PHILOSOPHY

Women Studies, as a product of feminism, reflects that philosophy. Very briefly, feminism can be defined as commitment to ensuring that each woman is free to make her own choices to determine her life, with no artificial barriers to her achievement. In addition, feminism insists that each woman be respected as a full, independent, and capable person. We recognize that sexism, discrimination on the basis of sex, is not the only negative force affecting women's lives. Our courses focus also on the other social constraints--racism, class structure, and heterosexual bias--that oppress many women, and sometimes divide us from other women. This Program also includes a strong regional emphasis, incorporating materials on the multicultural Southwest throughout our curriculum. We believe that knowledge about women's contributions in the past, situations in the present, and possibilities for the future should enhance each student's understanding of self and society, and help create a better, more egalitarian world for us all.

WOMEN STUDIES CURRICULUM

Acting on these beliefs, we offer a wide range of courses about women, some directly through the Program, and others cross-listed with departments throughout the University. A list of these courses follows our Program description. Students interested in the field should take our Introduction to Women Studies (WS 200.) early in their UNM careers,

since it provides essential background for our more specific advanced courses. We also offer independent study and internship courses, through which students can, under faculty direction, pursue individual research projects or integrate volunteer or other work experience in a women's organization into their academic life. Our courses can help provide students in different majors with a feminist view of women's issues in their fields. As electives, our courses broaden a student's education by enriching her or his understanding of women's experience.

Some uninformed people mistakenly think that Women Studies courses consist only of "consciousness raising," all feeling and no thinking. All education, if it truly teaches, raises consciousness, and learning is enhanced when both emotion and rationality are involved. Feminism is much deeper and more complex than the media image of "women's lib." The courses we offer train students to understand how oppression and discrimination operate against all people (men and women), and how they can be overcome.

The Women Studies Program does not yet offer a major or minor. In consultation with the Program's Coordinator or Academic Advisor, a student can plan a program through the Bachelor of University Studies degree that emphasizes Women Studies. Also, with careful selection of courses, a Women Studies focus is possible within the major or minor in American Studies in the College of Arts and Sciences. This level of Women Studies training can help lead to a career in a women's service organization, or enhance a career in law, medicine, counseling, business, journalism, creative writing, or education.

OTHER ACADEMIC SERVICES

Advisement services offered by our Academic Advisor and Coordinator help students integrate Women Studies into their college and career plans, and also offer students help with academic problems.

Women Studies also has a small library and research archive (Marron Hall 237) with materials available for student use for term papers and research projects on women, and information about Women Studies programs and courses at other universities.

PROGRAM STRUCTURE AND STUDENT INVOLVEMENT

When you come to the Women Studies Program office, 233 Marron Hall, you will meet the Program Secretary, our work-study students, and the Women Studies Coordinator. These staff members handle the daily administration of Program business.

The major decisions of the Program are made by the Women Studies Committee, composed of students, staff, and faculty, and are then referred for approval to the Women Studies Advisory Board, composed of faculty. Committee work can be time consuming, but we are sincerely committed to the principle of collective action. We believe that group participation is both excellent training for those involved and productive of well-considered decisions, since many different viewpoints are listened to and heard. Student members of the Women Studies Committee and its subcommittees have full voting privileges, and can thus be directly involved in the Program.

CAMPUS ACTIVITIES

Although the major focus of our Program is on offering useful and stimulating courses to UNM students, we also involve ourselves in other campus activities, in order to make our presence known and our influence felt. With the Women's Center, we co-sponsor a series of Brown Bag Lunces, each a presentation of research on women. During International Women's Week in March, we generally sponsor a film or other special event to raise campus consciousness. We also regularly hold pot luck dinners and women's entertainment, both to raise money for Program activities and to enhance our community spirit.

COMMUNITY INVOLVEMENT

Off campus, Women Studies has been involved in countless organizational efforts on behalf of women's rights, issues, and needs. For example, this Program, along with the New Mexico Commission on the Status of Women, helped organize an annual state Women Studies conference. Women Studies has also participated in the Governor's Conference on Women in State Employment. We have co-sponsored a symposium on Women's Health,

a conference on Women and Chemical Dependency, and Rape Awareness Week. On a national level, the Program has held leadership positions in the Women Studies Division of the Western Social Science Association and the National Women Studies Association.

COURSE LISTINGS

The following lists of courses include both our own Women Studies courses and those with Women Studies content offered by other departments. The "Topics" course numbers listed below are used for different, mostly new, courses each semester. For instance, in fall of 1982, WS 279. had a section subtitled "Reducing Math Anxiety"; WS 479. was used for "Research and Methods in Women Studies."

181. Seminar for Returning Women Students (3)
(Alos offered as Ed Fdn 181.) Designed for women who are entering or returning to school after an interruption; will identify problems associated with re-entry; will review academic skills; will provide an opportunity to begin to define edca-tional needs and issues.

200. Introduction to Women Studies (3)
Focuses on women's status in society-the myths and realities. Examined are women's socialization by sex, calss, race, and culture; the economics of discrimination and role of education and family.

222. Race, class and the Feminist Movement (3) A detailed study of how the institutions of racism, class and sexism have effected the growth of the feminist movement.

232. La Chicana Histórica (3) (Also offered as Am St. 231) The purpose of this class will be to intro-fuce and familiarize students with sociological and political evolution of the Chicana.

233. American Indian Women(3)
An interdisciplinary course which focuses on the historical cultural, economic, and political issues which impinge on the changing role of the American Indian Woman. No Prerequisite.

234. Her Own Voice: Black Women Writers (3)
An exploration of the body of work written exclusively by black women as well as a multi-disciplined approach to black women's experiences through her own writings, art, media. No Prerequisite.

279. Interdisciplinary Topics (1-3)
Can be repeated for credit three times.
Prerequisite: 200 or permission of instructor.

324. Contemporary Feminist Theory (3)
An investigation of selected feminist theories from the past three decades. Learning the skills of analysis and applying these skills to theory will be stressed.
Prerequisite: 200 or permission of instructor.

331. Third World Women (3)
A survey of women in various third world countries. Course will focus on particular regions in turn; Asia, Africa, Latin America, the Middle East. Titles of individual sections will vary as regions vary.

335. Heterosexism and the Oppression of Women (3)
Descriptive and theoretical focus on the role of heterosexual and homosexual women in the community and within the women's movement.
Prerequisite: 200 or permission of instructor.

339. Women Abuse (3)
A comprehensive study of the phenomena of abuse, both subtle and overt, against women. Included will be sexual assault, medical malpractice, forced sterilization, domestic violence, as well as other kidns of social and cultural abuse.

353. Women and creativity. (The Creative Process and Women) (3)
A study of the creative process linked to the artist's position in society. A rotation course which will deal successively with women artists in the visual arts, literature, crafts and with the creative process itself.
Prerequisite: 200 or permission of instructor.

357. Media-Arts and Women (3)
(Also offered as Art Education 357.) Will present overview of women in art and media; will survey history; will serve as a workshop for developing skills; will interpret how the media influences status of women.
Prerequisite: 200.

379. Interdisciplinary Topics (1-3)
Can be repeated for credit three times.
Prerequisite: 200 or permission of Instructor.

386. Women in Sports (3)
An historical and sociological study of women and sports in American culture and an examination of the recent changes in women's athletics.

392. Senior Seminar (3)
An advanced course for seniors in Women Studies. Emphasis is on synthesis and development of research skills.
Prerequisites: 200, senior standing and permission of instructor.

460. Legality of Class Based Discrimination: History of the 14th Amendment (3)
Investigation of the progress our society has made towards developing a principle of equality which prevents unequal treatment of people under the law.
Prerequisite: Pol Sc. 300.

479. Interdisciplinary Topics (1-3)
Can be repeated for credit three times.
Prerequisite: 200 or permission of instructor.

487. Sexism in Education (3)
(Also offered as Ed Fdn 487) Course will focus on an historical and sociological analysis of discrimi-nation as well as the psycological effects on children and adults. Will include the development of sex roles, the effects of curricula materials and Title IX.
Prerequisites: 200, Ed Fdn 290 or Permission of Instructor.

499. Undergraduate Problem (1-3)
Student is expected to present a topic for study. Can be repeated for credit three times.
Prerequisite: Permission of instructor required before registering.

CROSS-LISTED COURSES

AMERICAN STUDIES

AM ST 231. Women's Experience in the United States

AM ST 301.-302. Interdepartmental Studies in the Culture of the US
Sex and Symbol
Dance in America
Women and Nature

AM ST 312. The Black Woman

AM ST 331. Classics of Feminism in the United States

AM ST 332. Immigrant Women

AM ST 498. Internship

AM ST 501. Interdepartmental Seminar in the Culture of the US
Interdisciplinary Feminist Research

ANTHROPOLOGY

ANTH 341. Biosocial Bases of Sex Roles

BIOLOGY

BIOL 402. Women in Science and Engineering

ECONOMICS

ECON 239. Economics of Feminism

EDUCATION FOUNDATIONS

ED FDN 293. Topics
History of Women in Education

ED FDN 384. Women and Self-Education

ED FDN 386. Psychological Development of Women

ED FDN 486. Psychological Development of Women

ED FDN 493. Topics
Sexism in Education

ENGLISH

ENGL 206. Topics in Popular Literature
Women Comic Writers

ENGL 280. Readings in Literature
Fallen Women in Literature

ENGL 300. Studies in Literature
Women in Literature
Women in Asian Literatures
Modern Feminist and Sexist Fiction

ENGL 305. Women and/in Folklore and Mythology

ENGL 360. Individual Authors
Virginia Woolf
Women Writers of the South
The Brontes
Willa Cather

ENGL 459. Irish Literature
Image of Irish Women in Literature

ENGL 470. Contemporary Literature
Contemporary Women Poets

ENGL 488. Special Topics
Images of Victorian Women

ENGL 580. Special Topics: History of Ideas, Literary Movements, etc.
Twentieth-Century Women Writers

GUIDANCE AND COUNSELING

GUID & COUN 593. Topics
Non-Sexist Counseling

HEALTH, PHYSICAL EDUCATION & RECREATION

HPE & R 493. Topics
Women in Sports

HISTORY

HIST 315. History of Women from Ancient Times to the Enlightment

HIST 316. Women in the Modern World

HIST 320. Studies in History
Women in the West
Women; War and Revolution

HIST 330. History of the Women's Rights Movement

HIST 554. Seminar and Studies in Women's History

HOME ECONOMICS

H EC 293. Topics
Maternal and Infant Nutrition

H EC 493. Topics
Maternal and Infant Nutritions

LAW

LAW 728. Women's Legal Services

NURSING

NURS 307. Problems in Nursing: Selected Topics
Women and Health Care

POLITICAL SCIENCE

POL SCI 300. Political Topics
Women and the Law-Public Sphere
Women and the Law-Private Sphere
Women and Politics

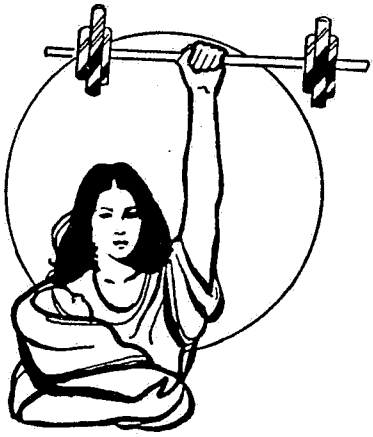
POL SCI 420. Undergraduate Seminar
Sex and Politics

POL SCI 521. Research Seminar in Comparative Government and Politics
Sex and Politics

SOCIOLOGY

SOC 308. Sociology of Sex Roles

SOC 507. Women and Development



THE UNIVERSITY OF NEW MEXICO
ALBUQUERQUE, NEW MEXICO 87131

Dr. Ann Nihlen
Educational Foundations
University of New Mexico
Albuquerque, NM 87131

Dear Ann,

On behalf of the Women Studies Committee and Women Studies Advisory Board, I would like to thank you for your outstanding service as Coordinator of the Women Studies Program. You led the Program well, towards greater stability, academic standing, and community support. Due primarily to your work within the National Women Studies Association, this Program is recognized nationally as an excellent one, with a unique level of commitment to combatting racism. Your efforts in organizing the now-annual State Women Studies Conference have created a Women Studies network within New Mexico, coordinated with the regional SIROW (Southwest Institute for Research on Women) network. Your outreach to the local community has won the Program increasing support, visibly demonstrated at the Women Studies Tenth Year celebration last spring.

Perhaps most importantly, you have also won recognition for the Program on campus. Through your work, Women Studies courses were first granted their own course numbers, and enrollments in these courses have steadily increased. The establishment of the Women Studies Advisory Board, which you helped organize, has increased the involvement of many experienced UNM faculty members in the guidance of the Program. Our relationship with the Women's Center has dramatically improved, represented most clearly by the co-sponsored series of Brown Bag Lunches you and Kathryn Brooks organized. The Seminar series for Women Studies Instructors that you first proposed has become an established program, increasing the participation of temporary part-time instructors in the Program, and raising crucial pedagogical and feminist issues for discussion. Your efforts to win outside funding for program-related activities produced results, establishing an important precedent and direction for the future.

Everyone connected with the Program appreciates the large amount of your time and energy that such splended service consumed, and thus we understand the basis for your decision to resign as coordinator. We understand, also, that you can never dissolve your commitment to a Program you helped found, and have led to greater strength. We expect you to remain an active member of the campus Women Studies community, and look forward to your continued participation.

Sincerely,

Helen M. Bannan

Helen M. Bannan
Acting Coordinator

cc: McAllister Hull Albert Vogel
Joel Jones Regina Crouse
[illegible]

OFFICE OF THE ASSOCIATE PROVOST
FOR COMMUNITY EDUCATION
JULY 1, 1982-JUNE 30, 1983
ALEX A. SANCHEZ, ASSOCIATE PROVOST

The units reporting to the Office of the Associate Provost for Community Education include: UNM's three branches--Gallup, Los Alamos and Valencia, the Division of Continuing Education and Community Services, and the Telemedia Activities Service Center project. Whether dealing with budget constraints, accommodating increased enrollments, preparing for building expansions, or investigating new initiatives, all of the above units were quite active through 1982-83.

I. The three branches continued to experience increased enrollments drawing from a previously untapped clientele within their respective communities. UNM-main campus continues to draw approximately the same percentage of high school graduates from these areas, while the branches seem to be serving the previously non-college bound student. Thus, it can be confirmed that the branches are providing services to a new clientele rather than the sometimes vocalized conjecture that the branches are taking students away from the main campus. Funding for the branches for 1982-83 was adequate and allowed for the purchase of much needed equipment in

both the computer science and electronics technology fields.

Physical Plant expansions are taking place at all three branches. Los Alamos' Campus building project will near its Phase I completion in late 1983, while Gallup's construction of additional facilities will start in 1984. The Valencia Branch has expanded within its current facility such that it now spans a total of 28,000 square feet vs. the original 20,000 square feet.

II. The Division of Continuing Education and Community Services on the other hand experienced cutbacks not only in its staff but also in course offerings/enrollments (both credit and non-credit). The reduction of available money for credit courses in the Division was due to the channeling of those funds to support basic skills courses which have now become the joint responsibility of General College and academic departments. The excess enrollment in the skills courses necessitated the establishment of 34 additional courses/sections which reflected as General College offerings.

Overall the greatest hardship the Division faced was that of a cutback in staff. Budget constraints required that six staff positions be abolished. The resultant

workload for remaining staff was rather heavy--but Division staff rose to the challenge.

On a brighter note, the Division did accomplish the following during 1982-83:

1) Main frame access terminal installed,
2) the purchase of several micro-computers, and
3) the Bureau of Conferences and Institutes redeemed 1981-82 deficits with a sound fiscal year in 1982-83.

III. The Office of the Associate Provost for Community Education enjoyed a successful year in many aspects. Events worthy of mention are the following:

1) Co-sponsorship of the Connections for the Future Conference with the New Mexico Association for Community Education Development. The conference focus was on the cooperative efforts that might be pursued in order to provide a mutually beneficial future among the business, education and public sectors. Along with keynote addresses by University of Michigan faculty member, Dr. Curtis Van Voorhees and Dr. Elizabeth Young, President of Public Service Satellite Consortium in Washington, D.C., the conference included panel discussions involving statewide business, educational and government leaders. Additionally, the conference was addressed by

by Senator Harrison Schmitt on national trends in education and business. This very successful and informative day had over 110 statewide participants.

2) The completion of articulation agreements in business technology, computer science and electronics technology between UNM, its branches and T-VI. The process of arranging these agreements was lengthy and painstaking. These agreements provide an academic bond between the institutions that did not previously exist and surely this arrangement will serve students better and more efficiently through the transfer process.

3) The fruition of two-years work on a Department of Corrections grant was the establishment of UNM's newest degree, the Bachelor of Arts in Criminal Justice. Cooperative working agreements at the level of the Secretary of Corrections as to appropriate academic training bode well for the future of this program.

4) The installation of a facsimile transmitter for instantaneous communication with the Los Alamos and Gallup branches.

IV. The ongoing telecommunications project fared well through

its second year of funding. Various conferences with statewide postsecondary institutional representation served to emphasize to BEF and legislative bodies the importance of this type of media system in the higher education setting. The coming year will, hopefully, see a solidifying of inter-institutional and funding agreements.

CONCLUSION:

1983-84 presented all units under the aegis of the Office of the Associate Provost for Community Education with dramatic management challenges in both fiscal and manpower areas. All units responded with professional aplomb, marking the year as a successful one in spite of the problems they all faced.

The purchase of high tech equipment and the continuing intra-state linkages in both the technological and academic areas completed by this office bespeak a year of accomplishment in community educational outreach.

The Report of the Los Alamos Branch College

July 1, 1982 - June 30, 1983

Herbert C. Lyon, Director

I. Enrollments and Finances.

The year 1982-83 saw a continued large increase in student enrollments at the University of New Mexico-Los Alamos. Enrollment in the Fall was 765 students for 299 FTE, an increase of 60% over the previous Fall. In the Spring, enrollment was 759 students for 277 FTE, and in the Summer, 1982, it was 289 students for 76 FTE, an increase of nearly 65% over the previous summer. The final official FTE enrollment figure for 1982-83, based upon Summer and Fall, 1982, and Spring 1983, was 327 FTE. This compares well with 217 for the previous year. The largest single component of this enrollment continued to be in computer classes.

State funding for Instructional and General purposes also followed this pattern. The 1983 New Mexico Legislature appropriated $735,700 for UNM-Los Alamos for 1983-84, an increase of more than 39%. In addition, the Vocational Education Department of the State Department of Education recommended $90,000 in grants to UNM-Los Alamos for 1983-84. At this writing, however, this amount remains subject to rescission from Washington.

II. Facilities.

The year 1982-83 saw the construction of most of the first phase of the UNM-LA campus. Bids were opened in October, with the Jaynes Corporation of Albuquerque being the successful bidder. Their low bid was approximately $140,000 below the official architect's estimate. Construction began in late fall, but very little was accomplished until

March, 1983. Much of the delay was occasioned by the discovery of an unpredicted amount of moisture in the ground at the site, but after some change orders which absorbed a considerable amount of the contingency fund, the work again began to proceed as expected. As of this writing, it is expected that the first portion of phase one, consisting of the three new buildings housing classrooms, laboratories, and the computer center, together with the administrative area, will be completed by September, 1983, and the Library will be occupied by late October, 1983. These new facilities will give UNM-LA a total of approximately 20,000 square feet.

Associated with this campus development is the question of vehicle access to the campus. The previous Los Alamos County Council denied UNM-LA access from Diamond Drive, suggesting that all campus traffic use 40th street. However, the new County Administrator, with the knowledge and consent of the new County Council, has granted UNM-LA temporary curb cut access for a construction road, and it is hoped that this will become a permanent access drive. At this writing, a consultant hired by the County is evaluating the situation prior to making a recommendation.

UNM-LA requested a new building of the 1983 Legislature for the new program in Basic Laboratory Skills. At the eleventh hour, the Legislature did appropriate $400,000 for the construction of the shell of this building, with the understanding that an appropriation for equipment of the building will be requested of the 1984 Legislature. At this writing, a Basic Laboratory Skills facility of about 8,000 square feet is being designed by Hoshour and Pearson, the same firm which designed the first phase of the campus. It is hoped that some additional classrooms

and offices will also be built, but it remains to be seen if the funds will be available.

III. Curricular Developments.

UNM-Los Alamos continued to take maximum advantage of local citizen and professional task forces in its curriculum development during 1982-83. The new Associate of Arts Degree in Liberal Arts was implemented. The Behavioral Research Division of UNM conducted an extensive and very positive needs analysis regarding the proposed new curriculum in Basic Laboratory Skills (BLS). Thus, the new BLS Building (above) is under design and a full time BLS faculty member will be employed in the fall. A similar positive needs analysis was conducted regarding the proposed courses in Computer Aided Design and Drafting (CADD), and courses in this area will begin in fall, 1983. A number of UNM-LA faculty members developed new courses in their areas of expertise: e.g., a new history course entitled "Introduction to Medieval Times". Most of the preparatory arrangements for a new Associate of Science Degree in Science were made in 1982-83, and it is expected that this degree will be approved in 1983-84. Discussions were begun regarding the establishment of a program in Criminal Justice, and it appears that such a program may be implemented in fall, 1984.

IV. Computer.

The UNM-LA VAX Computer continues to serve a large proportion of the UNM-LA students. In 1982-83 the computer was upgraded to include additional dial-up lines and six GIGI graphics terminals. Other enhancements, including a hard disk which increases disk capacity by a factor of six, were also ordered. Arrangements were also concluded whereby UNM-LA is able to use the very sophisticated CD 2000 Computer

Aided Design Software System of the Los Alamos National Laboratory. At this writing, a Tektronix 4014 terminal has been ordered for the joint use of the LANL Training Office and UNM-LA.

V. Relationship with UNM-Albuquerque.

UNM-LA continues to enjoy excellent relationships with the Albuquerque Campus. Greg Nunz serves as a member of the Faculty Senate Curricula Committee, and Barbara DuBois was elected, in a precedent setting move, as the UNM-LA representative on the UNM Faculty Senate.

VI. Staff.

The following staff changes occurred during 1982-83. Dr. C. Robert Emigh was hired in August as Technical Programs Administrator. Jan Hickman resigned her position as Librarian in September, and she was replaced by Linda Reichert in December. Sarah Carpenter was hired as receptionist in December, and she resigned in June. Geraldine Edwards was hired as a Staff Assistant in January. Fermin Romero was terminated as Custodian in July, and he was replaced by Michael LaGrange in October. Dr. Angela Coop was promoted to Associate Director for Instruction in January. Greg Nunz was re-elected by his colleagues as the head of the Science Division, as was Barbara Dubois to the similar position in the Humanities Division. Professor Nunz served on the UNM Faculty Senate Curricula Committee in 1982-83, and he will continue in that position in 1983-84. Professor DuBois will represent UNM-Los Alamos on the UNM Faculty Senate in 1983-84.

ANNUAL REPORT OF UNM VALENCIA BRANCH

July 1, 1982 - June 30, 1983

Omero Suarez, Director

I. ENROLLMENT AND PROGRAMS

Academic 1982-1983, saw a continued increase in student enrollment at UNM Valencia. The increase for Fall 1982 over Fall 1981 was 54% with figures of 280 FTE and 152 FTE respectively. Spring figures also compare well, with Spring 1982 FTE at 204 and Spring 1983 at 366. The total FTE was 273 which is a dramatic increase of over the previous year's 178.

Associate degree program development was of prime concern in the Branch's second year of operation. Between Fall 1982 and Spring 1983, an additional five degrees were added to the Valencia offerings of Education and Liberal Arts. Four of the new degrees are Associate of Applied Science and are in the following fields:

business technology	computer science
construction technology	electronics technology

An Associate of Science in Correctional Studies has also been approved and accepted by the Faculty Senate. The UNM Valencia Branch continued to serve community needs in the non-credit area by offering a variety of skills and academic courses through its Community Education program. The total number of students served through 1982-83 was 228.

A renewed state contract for the Developmental Studies Program at Valencia enabled this unit to provide services in both Adult Basic Education (ABE) and General Education Development Studies (G.E.D.). In 1982-83, Developmental Studies hired three new tutors for programs in remedial English, math and the sciences. This department houses the Guidance Information System (G.I.S.), a computer bank for career exploration and

planning. This computer system aided in advisement and counseling of many high school graduates and entering freshmen.

In the fall of 1982, the Valencia Branch received a state contract to sponsor the Vocational Information Program Services (V.I.P.S.). The staff of three works out of facilities provided by the Branch and travels statewide disseminating materials on vocational education.

II. FIVE YEAR PLAN -- FACILITIES-FUNDING

UNM Valencia's Five Year Planning Committee completed its study and recommendation on the future site of the campus at Tome. Planning money granted by the 1983 legislature totaled $260,000. A portion of the revenue for the proposed site will be raised through a bond election in Valencia County planned for October, 1983; additional capital outlay funds will be requested at the next legislative session.

The architectural firm of Barker-Bol and Associates has been awarded the contract for the design of the first phase of the campus site.

Current facilities have been expanded to include an additional 8,000 square feet of the Valley Improvement Association complex. The added classroom and lab space is used chiefly for instruction in Computer Science and Electronics.

Funding allocations granted by the State Legislature for 1983-84 totaled $703,200 as opposed to $712,223 for the 1982-83 year. Adequate course and program delivery will be difficult this coming year in view of the overall decrease of 1.3% in addition to the 2% cut mandated by the Governor's Office during fiscal year 1983.

III. FACULTY/STAFF

Full-time faculty members at Valencia are exclusively in the vocational area and include the following:

Alex Sanchez, Construction
Dave Knott, Electronics
Harry Houtz, Computer Science

A listing of staff who left and new staff members follows:

Dr. Job Ebenezer	resigned June 1983
Dr. Amarante Fresquez	resigned June 1983
Georgia Garcia	resigned March 1983
Patricia Murphy	hired April 1983
Alicia Alarcon	hired November 1983

Faculty serving on UNM Main Campus committees from Valencia Campus are:

Dr. Greg Candela	Admissions & Registration Committee, Rep. to Faculty Senate
Dr. Shirley Rawls	Community Education Committee

ANNUAL REPORT

THE UNIVERSITY OF NEW MEXICO-GALLUP CAMPUS

July 1, 1982 - June 30, 1983

John M. Phillips, Ed.D., Campus Director

UNIVERSITY OF NEW MEXICO-GALLUP CAMPUS
JULY 1, 1982 - JUNE 30, 1983
JOHN M. PHILLIPS, Ed.D., DIRECTOR

ENROLLMENT

The Gallup Branch is continuing to enjoy constant enrollment increases. Fall 1982 enrollment amounted to twelve hundred fifty (1250) students which resulted in five hundred fifty-three (553) FTE. This indicates an increase of nearly ten per cent (10%). Spring 1983 enrollments jumped to fourteen hundred seventy-two (1472) students resulting in six hundred thirty six (636) FTE. This represents a student increase of twenty one per cent (21%) over last spring's twelve hundred seventeen (1217) students.

Summer 1983, upon recommendations of Dr. de Bruin, Associate Director of Instruction, and with the enthusiastic participation of the faculty, both an eight week summer session and two four week sessions were offered. It is undoubtedly partly because of this more flexible course scheduling that the enrollments rocketed to nine hundred twenty-two (922) students resulting in three hundred two (302) FTE. This represents a rewarding increase of over fifty-nine per cent (59%) in credit production.

Progress like this could not have happened without each member of the faculty and staff not only doing their jobs well, but each one giving an extra degree of effort that made this happen. This shows that the

individual efforts, attitudes and concern for the students of the faculty and staff and the delivery of quality education is recognized by the students.

CURRICULUM AND PROGRAM DEVELOPMENT

This summer, 1983, The University of New Mexico-Gallup successfully developed, printed and distributed a new 72 page catalog. This catalog contains course descriptions of over four hundred courses that are offered on the Gallup Campus.

The "College Learning Assistance Center" has been reorganized. It is now staffed by full time instructors. Further, one instructor was hired who is fluent in Navajo and one fluent in Spanish. We feel this will facilitate the development of student/teacher rapport which is so important, especially for these type of courses.

More courses were offered by the Gallup Branch in Zuni. Some were academic courses some were vocational. The student demand for courses in this area is consistently increasing. We have found that once a student takes a course in his/her home area, they are very likely to come to our campus for additional courses.

The Navajo Health, Physical Education and Recreation program which moved its base from main campus to Gallup Campus last fall semester is now serving 70 students in Gallup's AA Degree program and 38 students in the main campus' BA Degree program. This program is also responding to, and serving well, the need for recreation

directors on the reservation. This is an excellent example of a multi-purpose program. It educates the program participants and provides recreation programs and instruction in sports, swimming, physical development, etc. to the Navajo BIA school children.

Our Criminal Justice Department has now developed a curriculum that will allow them to serve pre-service law enforcement students as well as in-service upgrading of working police officers. This has been accomplished through the help and cooperation of the New Mexico Police Academy of which we are grateful. The personnel at the Academy have shared their curriculum content with us and will participate in student evaluations.

The need to train qualified citizens to become police officers has been urgently expressed by the local law enforcement officials. We can now address this need. Further, our Criminal Justice Program can now appeal to a new and larger population of students. Through this development the Criminal Justice Program is assured of both growth and local support.

The Gallup Campus Nursing Program has expanded its services to include a plan for students who cannot attend full time. These students will take courses in the evenings and, over a period of time, earn a degree and state nursing registration. This may be the only program of its kind in the state. The students are very enthusiastic. Several have stated how appreciative they are of the opportunity to complete a nursing

program while being able to fulfill their daily responsibilities.

The Nursing Education Department is also now offering special continuing education courses for re-licensing credit for local area nurses. This is yet another example of this department responding to specific local needs.

One more accomplishment of this department, and perhaps the most significant of all, is the fact that one hundred per cent (100%) of their students who graduated last spring passed their state nursing registration examination.

In cooperation with the Department of Education of the Navajo Nation the Gallup Branch is developing a special program to prepare students for occupations on the reservation. They, the Navajo Department of Education, are paying the expenses of a program planner, Anna Rondon, and the Gallup Branch is furnishing office space, collaboration and planning assistance. A new degree program for the benefit of the students and a closer bond with Navajo educators will grow from this venture. Peterson Zah, Chairman of the Navajo Nation, on a recent visit to the Gallup Campus stressed this desire. This is being referred to as The Tribal Enterprise Program.

CAMPUS EXPANSION

On September 14, 1982, a special election was conducted to allow the local citizens to determine if they

wanted to tax themselves to support the expansion plan of the Gallup Campus. The question was, "Should general obligation bonds be issued in the amount of four million dollars ($4,000,000)." Gallup Campus personnel expended their maximum efforts in promoting the bond issue. Every member of the faculty and staff voluntarily performed many extra activities. This was an exhilarating experience in teamwork. The result of this coordinated effort was that the bond issue passed with nearly a four to one margin. Even more satisfying was the fact that it passed in each and every precinct. It is gratifying to know that we have the support of the majority in all areas.

A request was presented by the Gallup Branch administration to the State Legislature for two and a half million dollars ($2,500,000) to complete the expansion plan. Through the support of the Gallup area legislators, the efforts of the University of New Mexico leaders, the lobbying activities of the Gallup Campus Director and most prominent, the hard work of many Gallup citizens. success was obtained. Special thanks is due the Gallup Branch Building Advisory Committee. The members of this committee are: Wayne Lewis, Paul McCollum, Edward DePauli, Barbara Stanley, Jack Chapman, Betty Stafford, Walter Wolf, Chuck Giles, Jimmie Miller, Frank Colianni, Dr. John Phillips, Dr. H. de Bruin, Dave Eisenberg and Boyce Russell.

Although the Gallup Campus of the University of New Mexico is a public institution, two local citizens, Mr. and Mrs. Zollinger, donated fifty thousand dollars ($50,000) to-

ward the advancement of the Gallup Campus. They stated that they were so pleased with the direction the college was taking and the growth and advancement of the campus that they wanted to have a part in it.

The architectual firm of CCIC of Albuquerque has been selected as project architects. They expect to have plans and specifications ready for contractors to examine soon. The contractors will prepare construction bids to be submitted in October.

PERSONNEL

Mr. James Ruppert has returned from a one year Fullbright lecture tour in Germany. The entire faculty and staff is pleased to have him back.

Mr. Nick Evangelista who has been supervising the Adult Basic Education Center has been put in charge of the College Learning Center. Under his leadership the center is being staffed by full time personnel. Carol Perez has been appointed Learning Center Manager.

Mr. Thomas Ray, who has been Financial Aid Officer, has become the Gallup Campus Registrar. His many years of experience with the UNM student registration system has qualified him for this position. His many years of loyal service to UNM prove he is a fine choice for this job.

Due to the continuing growth of the Gallup Campus, three new instructors have been engaged. These are Mrs. Amy Mower and Mrs. Helen Griffith, both in the Department

of Business Technology; and Ms. Helen Fitton in the Department of Education.

Mrs. Christina Nye has been hired to serve as Financial Aid Officer. She is alert and anxious to be of service to students.

Mr. Merlin Norman has been engaged as Automotive Technology instructor. He replaces Rick Anderson who moved out of the Gallup area.

CONCLUSION

The Gallup Campus has enjoyed a very successful year. The campus expansion plan, enrollments and curriculum development have all advanced significantly. With the fine local support we enjoy, the energetic faculty and the support of our main campus, the future of the Gallup Campus will continue to be exciting and professionally rewarding for everyone involved.

Community organizations and individuals continue to express their pleasure and pride at having a Branch of The University of New Mexico in Gallup. This in turn is the Gallup Branch's most valued asset.

THE REPORT OF THE
DIVISION OF CONTINUING EDUCATION
AND
COMMUNITY SERVICES

JULY 1, 1982 - JUNE 30, 1983

Dr. Rupert A. Trujillo, Dean

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DIVISION STAFF

Division personnel as of July 1, 1982, consists of the following individuals:

Rupert A. Trujillo	Dean
Robert Barela	Conference Coordinator
Mary Bullock	Registrar
Victoria Burke	Clerical Specialist V
Eva Cianchetti	Clerical Specialist IV
Sherri Garcia	Staff Assistant
Laurie Kastelic	Staff Assistant
Carmen Maestas	Clerical Specialist V
Anthony Oliver	Director, Credit Programs
Patricia Probst	Clerical Specialist IV
Joyce Robbins	Clerical Specialist V
Ronald Shibata	Director, Business Office
Roland Tovar	Director, Conferences and Institutes
Cynthia Turowksy	Staff Assistant
Sandra Valdez	Administrative Secretary

Terminations--Transfers--Resignations

*Nathaniel Archuleta, Director of HSST/CDA, July 31, 1982

**Diana Benitez, Clerical Specialist V, February 11, 1983

*Christine Calcutt, Clerical Specialist V, July 31, 1983

Deborah Corrao, Clerical Specialist IV, June 1, 1983

Terry Double, Conference Coordinator, July 16, 1982

**Mary Evilsizer, Staff Assistant, January 14, 1983

**Emily Gomez, Clerical Specialist II, February 11, 1983

**Mary Sanchez, Clerical Specialist V, February 11, 1983

*Mary Sedillo, Clerical Specialist V, October 12, 1982

**Paul Suozzi, Special Project, July 16, 1982

Rita Tsosie, Clerical Specialist V, October 15, 1982

**Joel White, Director, Community College, July 1, 1982

* Funding for projects ended

** Positions abolished due to budget cutbacks.

COMMUNITY EDUCATION COMMITTEE CHARGE

"Community Education Committee: The Community Education Committee has responsibility for formulating and maintaining the general policies regarding branch campuses and undergraduate resident centers, and Continuing Education programs throughout the state, the Non-Degree Program, the Independent Study Program, and the Community College. The Committee is specifically charged with the study of proper objectives of junior college level academic programs which are or may in the future be conducted by the University of New Mexico, and the kinds of academic curricula needed to achieve these objectives. The Committee shall also be concerned with the policy and scope of the community education/service programs of the University, as well as the operational policies of the University properties associated with the continuing education and community education/services programs, and other matters worthy of attention. The Committee evaluates budgetary policy and operation of the Division of Continuing Education and Commuity Services and advises the Associate Provost for Commuity Education on these matters. It is also a function of the Committee to advise the Associate Provost for Community Education in regard to any new appointment of a Dean of the Division of Continuing Education and Community Services.

Nine faculty members, one branch faculty member, including chairperson, nominated by the Community Education Committee members; also two student members; also four community representatives recommended by the Associate Provost for Community Education and approved by the Faculty Senate; also the Associate Provost for Community Education, the Dean and Associate Dean of the Division of Continuing Education and Community Services, the Dean of Library Services, the Dean of Admissions and Records, the Branch College Directors, ex officio."

Standing Committee membership for the 1982-1983 fiscal year consisted of the following:

Chairpersons

Robin Meize-Grochowski, Nursing
Susan Roehrig, Physical Therapy

Faculty Representatives

Peggy Blackwell, Education Foundations
Breda Bova, SATE
Pat Duphorne, Nursing
Howard Finston, Management
Nancy Pistorius, Fine Arts Library
Janice Schuetz, Speech Communications
Joseph Zavadil, English
Jan Corzine, General College
Shirley Rawls, UNM Valencia Branch

Student Representative

Mary Ann Cutter

Community Representatives

Peter Chestnut, Chamber of Commerce
Leo Maes, Office of Community & Economic Development
Abel McBride, Albuquerque Public Schools
Dr. Cortez Williams, UNM Adjunct Faculty, Private Business & Consultant

Ex-Officio Representatives

Alex Sanchez, Associate Provost for Community Education
Rupert Trujillo, Dean, Division of Continuing Education

Herb Lyon, Director, Los Alamos Campus

John Phillips, Director, Gallup Campus

Omero Suarez, Director, Valencia Campus

Paul Vassallo, Dean, Library Services

Robert Weaver, Dean, Admissions and Records

Jim Acosta, Admissions and Records

Alice Clark, Library Services

Susan Lynch, Office of the Associate Provost
For Community Education

DEAN'S OFFICE REPORT

The nineteen eighty-two/eighty-three year proved to be most challenging. The economy clearly impacted this Division. While head count remained high, it was obvious that people simply were not spending as much money on education as they had during previous semesters. The fall semester proved to be one of light revenues. This prompted further lay-offs in an effort to bring the budget into balance.

The Head Start Training grant which had been administered by this Division for some six years was lost to another bidder. Not being able to respond to the Gerontology certificate program in an effective and efficient manner by attaching UNM credit to it left no option but to place the entire program on ice. As usual the Division continues to experience many problems and difficulties regarding facilities and space. On the other hand, classroom space outside UNM campus has become more accesible/available.

The Southwest Indian Polytechnic Institute inivted UNM to support its efforts by offering UNM Division of Continuing Education and Community Services classes on SIPI Campus. The time frame in which this effort had to be launched left a lot to be desired.

The effort put forth did not generate the kinds of enrollments which had been anticipated. During the month of June, SIPI was informed that normal functions at SIPI could continue. Thus, this Division will continue to work with that school during 1983/1984.

Antoher off-campus effort on the part of UNM's Division of Continuing Education and Community Services was to launch a satellite of UNM's Community College in Bernalillo. Here again results were disappointing; however, just like at SIPI, this Division will continue to work with that community during this coming fall semester.

Finally, after all these years, the Division enjoyed a bit of automation by virtue of a main-frame terminal being installed (even if it isn't fully operable). Several micro-computers were purchased and paid off during this academic year. The public response to this Division's micro-computer courses has been outstanding.

Finally, this year ended on a good note, fiscally speaking. In spite of lay-offs, the remaining staff held steady and in some cases even doubled up so as to bring the Division through its dark hour. To all staff

who worked for Continuing Education during 1982-1983; I say mil gracias; without you it couldn't have been done.

THE BUREAU OF CONFERENCES & INSTITUTES

The Bureau of Conferences, Institutes and Short Courses has experienced an exceptionally sound fiscal year. The previous year's large deficit was completely redeemed through monies generated during fiscal year 1982-1983. These were further applied toward carefully assessed expansion into areas that have consistently met increased community needs.

Fiscal year 1981-1982 had begun its year with a complex plan to invest in its substantial growth based on the experience of the three previous years. The economic recession that resulted during the same period caused a serious enrollment decline in all Bureau activities while during the beginning months considerable monies had already been committed to Bureau expansion. The immediate result was a double negative in terms of fiscal losses.

Fiscal year 1982-1983 has benefited from the increased efficiency of job consolidations that were necessary as a result of the personnel layoffs of the difficult year. It further benefited from the central administration's audit of its policies and procedures in that a few small adjustments in key

areas by Division administration resulted in a greatly strengthened system.

The fiscal status of the Bureau is sound and it has made possible the purchase of an additional ten micro-computer systems including peripheral hardware and software required for a second "micro" lab. In fact, this will scarcely meet the currently growing demand for "micro" short courses. Current waiting lists indicate an ongoing backlog of over four hundred community enrollees with over one hundred and fifty UNM faculty and staff. Additional courses within various specialties and identified needs are regularly being developed for micro-computer students.

Needs assessments have indicated strong needs for challenging and exciting offerings that are being currently developed in formats that assure the fiscal soundness of the Bureau while serving the community. Many exciting days of guarded expansion and further recovery are certain to be ahead for the Bureau.

CONFERENCES, INSTITUTES AND SHORT COURSES

DATE	TITLE	PARTICIPANTS
July 10	Habit Control 1	
July 10 & 17	Drawing II	10
July 12 & 19	Oil Painting II 1	
July 16 - 18	Women in the Wilderness 2.0 CEU's	8
July 15 - 20	Computers: Getting to Know Them 1	
July 24 & 31	Watercolor II	6
July 24 - 25	Parenting 1.5 CEU's	10
July 26 - 31	Campus Specialties 3	
July 28 - 30	Grantsmanship 1	
July 29 - August 1	Computers: Getting to Know Them 1	
July 29 - 30	Structured System Analysis 1	
July 31	Dental Radiography	21
August 5 - 7	Grantsmanship 1.6 CEU's	6
August 6	Stress Reduction 1	
August 14	Dental Radiography	20
August 12 - 14	Personal Lines-Society of Certified Insurance Counselors	60
August 14	Career Planning for Teens	24
August 27 - 29	Video Workshop 2.2 CEU's	10
Sept. 3	Men & Women: Dynamics of Self-esteem 1	
Sept. 3 & 11	Solar Waterheater Workshop 2	
Sept. 4 & 11	Drawing I	14
Sept. 6	Jewelry Making 3.2 CEU's	8
Sept. 7 & 8	Mail Order Business .65 CEU's	40
Sept. 8	Budgeting Time & Resources .7 CEU's	20
Sept. 11	Altered States .7 CEU's	13
Sept. 11	Installation of a Water Well System .7 CEU's	16

DATE	TITLE		PARTICIPANTS
Sept. 11	Planning Your Career or Career Change	.75 CEU's	9
Sept. 12	Parenting Can Be Fun	.7 CEU's	9
Sept. 14 - 15	Relaxation on the Job 1		
Sept. 17 - 18	Progress Performance 1		
Sept. 18	Samurai I 1		
Sept. 18 & 25	Watercolor I		19
Sept. 24	Supervising the Marginal Employee	.65 CEU's	15
Sept. 25	Dental Radiography		22
Sept. 24 - 25	Effective Supervision thru T.A. 1		
Sept. 25	Handling Conflict 1		
Sept. 29	Time Management	.7 CEU's	5
Sept. 29	Support Network		17
Oct. 2	Dental Hygiene		
Oct. 2 & 9	Landscape I		7
Oct. 4	Fitness & Grooming 1		
Oct. 4	Beauty on the Go 1		
Oct. 6	Beauty on the Go 1		
Oct. 5 - 6	How to Survive & Thrive in Your Relationship 1		
Oct. 7,9,12	Computers 1200 B-I	1.2 CEU's	16
Oct. 8 - 9	Human Resource 1		
Oct. 9	Riding the See-Saw 1		
Oct. 8 & 16	Solar 2		
Oct. 11	Classy & Perfect 1		
Oct. 11	Masculinity 1		
Oct. 13 - 15	Fault-Tree		11
Oct. 13	Classy & Perfect 1		
Oct. 13	Life Management 1		
Oct. 16 & 23	Oil Painting I		7

DATE	TITLE		PARTICIPANTS
Oct. 14,16,18,	Computers 1200B-II	1.2 CEU's	18
Oct. 16	Self-Hypnosis	.7 CEU's	56
Oct. 16	Assertiveness in the Health Care Setting		26
Oct. 16	Dental Radiography		20
Oct. 18	Fashion Formula I 1		
Oct. 18	Fashion Formula II 1		
Oct. 20	Fashion Formula III 1		
Oct. 21,23,25	Computers: BASIC I	1.2 CEU's	15
Oct. 22	Creative Conflict 1		
Oct. 22 - 23	How to Set-up Your Own Business	1.4 CEU's	15
Oct. 25	Update Your Social Skills 1		
Oct. 25	Update Your Social Skills II 1		
Oct. 26 - 28	Water Contaminants		14
Oct. 26,28,30	Computers: 1200B-III	1.2 CEU's	16
Oct. 27 - 30	National Collegiate Honors Council		435
Oct. 27 - 28	Removing Psychological Barriers to Sexual Expression	.65 CEU's	8
Oct. 29	Managing Stress Effectively	.7 CEU's	7
Oct. 30 & Nov. 6	Drawing II 1		
Oct. 30	Surviving the Singles Scene	.7 CEU's	20
Nov. 1	Fitness & Grooming 1		
Nov. 1	Beauty on the Go 1		
Nov. 3	Beauty on the Go II 1		
Nov. 4,6,8	Computers: BASIC II	1.2 CEU's	10
Nov. 5 - 6	Dreams		24
Nov. 5	Leadership Skills for Managers & Executives	.7 CEU's	9
Nov. 6	Stress Reduction	.7 CEU's	
Nov. 6	Art Appreciation		10

DATE	TITLE		PARTICIPANTS
Nov. 6	Confusion: A Holistic Approach to Assessment & Care of the Elderly		32
Nov. 8	Masculinity on the Go 1		
Nov. 9,10,11	Computers: Whats Going on In There 1		
Nov. 9 - 10	The Process of Selection 1		
Nov. 9 - 10	Peak Performance For Personal Success 1		
Nov. 10	Make-up 1		
Nov. 12	Memos for Managers & Supervisors	.7 CEU's	5
Nov. 12 & 20	Solar Water Heater Workshop 1		
Nov. 13	3rd Annual Nursing Conference		50
Nov. 13 & 20	Watercolor II 1		
Nov. 13	Change Your Shirt 1		
Nov. 13	Life Planning 1		
Nov. 16,18,20	Computers: 1200IV	1.2 CEU's	16
Nov. 16 - 17	Japanese Management Circles	1.2 CEU's	6
Nov. 18 - 20	Grantsmanship	1.7 CEU's	17
	Flair Courses 2		
Nov. 30 - Dec. 1,2	Computers 1204-B	1.2 CEU's	15
Nov. - Dec.	R.N. Refresher Course		16
Dec. 1	Polished & Sure 1		
Dec. 4 & 11	Landscape II 1		
Dec. 9,11,13	Computers: 1203B	1.2 CEU's	15
Dec. 10 - 11	3rd New Mexico Mental Health Counselors	1.0 CEU's	74
Jan. 8 & 15	Oil Painting II 1		
Jan. 12,13,15	Computers: Introduction 1200-I	1.2 CEU's	15
Jan. 13 - 15	Society of Certified Insurance Counselors		70
Jan. 19,20,22	Computers: Introduction 1200-VI	1.2 CEU's	17
Jan. 26	The Process of Selection 1		
Jan. 27 - 28	Mail Order Business	.65 CEU's	35

DATE	TITLE		PARTICIPANTS
Jan. 28 - 29	Management Thru T.A. 1		
Jan. 25,27,29	Computers: BASIC 1201-I	1.2 CEU's	9
Jan. 31 - Feb. 2,5	Computers: Intro 1200 IX	1.2 CEU's	16
Feb. 2 - 3	Management by Objectives 1		
Feb. 5 & 12	Drawing I		21
Feb. 9,10,12	Computers: Intro. 1200 III	1.2 CEU's	15
Feb. 12,19,23	Still Photographer		6
Feb. 11 & 19	Solar 1		
Feb. 14,16,19	Computers: Intro. 1200 X	1.2 CEU's	14
Feb. 15 & 17	Computers: Intro. 1200 VII	I.2 CEU's	14
Feb. 12	Coping with Pressures 1		
Feb. 16	Profiles in Personal Interaction 1		
Feb. 17 - 18	How to Set-up Your Own Business	1.4 CEU's	19
Feb. 18	Managing Stress 1		
Feb. 19 & 26	Watercolor I		17
Feb. 21 - Mar. 14	Computers Bernalillo: Intro (900A)	1.2 CEU's	20
Feb. 22 - Mar. 15	Computers Bernalillo: Intro (900B)	1.2 CEU's	18
Feb. 26 - Mar. 19	Computers Bernalillo: Intro (900C)Kids		11
Feb. 26	Self-Hypnosis	.7 CEU's	21
Mar. 4	Effective Confrontation Techniques 1		
Mar. 5	Successfully Single	.7 CEU's	21
Mar. 5 & 12	Drawing II		9
Mar. 9 - 11	Fault-Tree		9
Mar. 8, 10, 12	Computers: Intro (1200-III)	1.2 CEU's	15
Mar. 8 & 10	Computers: Intro (1200XII)	1.2 CEU's	15
Mar. 11 - 12	Dreams I		15
Mar. 12	Enhancing Your Relationships 1		
Mar. 12	Wine Tasting		8

DATE	TITLE		PARTICIPANTS
Mar. 12,16,19	Advertising: The Still Photographer 1		
Mar. 12	Womens Networking 1		
Mar. 12	Installation of Water Wells I	.7 CEU's	7
Mar. 14,16,19	Computers: Intro. (1200-XI)	1.2 CEU's	16
Mar. 15 & 17	Computers: Intro. (1200VIII)	1.2 CEU's	16
Mar. 19 & 26	Solar 2		
Mar. 19	Installation of Water Wells II	.7 CEU's	4
Mar. 19 & 26	Watercolor II		7
Mar. 21 & 23	Computers: Intro (1200 XIII)	1.2 CEU's	15
Mar. 26	Peak Performance 1		
Mar. 28 & 30	Computers: Intro. (1200XIV)	1.2 CEU's	14
Mar. 29	Budgeting the Commodity of Caring 1		
Mar. 30	Time Management 1		
Mar. 31 - April 1	Work Performance Appraisal 1		
April 5,7,9	Computers: Intro. (1200 IV)	1.2 CEU's	15
April 6, 7	Japanese Management Circles 1		
April 8 - 9	Dreams II 1		
April 9	Removing Psychological Barriers 1		
April 9	Anorexia Nervosa	.65 CEU's	64
April 9 & 16	Oil Painting I		7
April 12	Support Network 1		
April 12,14,16	Computers: BASIC I (1201-IV)	1.2 CEU's	11
April 15 & 23	Solar 2		
April 16,20,23	Advertising Photographer 1		
April 16	Sewage Systems 3		
April 19,21,23	Computers: Intro (1200-V)	1.2 CEU's	17
April 23	Altered States 1		
April 23	Career Planning For Teens 1		

DATE	TITLE		PARTICIPANTS
April 26	Assertiveness in the Health Care Setting		9
April 26,28,30	Computers: BASIC I (1201-V)	1.2 CEU's	13
April 30 & May 7	Oil Painting II		6
May 3	Stress Reduction 1		
May 3,5,7	Computers: Pascal	1.2 CEU's	11
May 11 - 12	Life Management Skills 1		
May 10,12,14	Computers: Intro For Kids		9
May 17,19,21	Computers: BASIC II	1.2 CEU's	10
May 24,26,28	Computers: Graphics 2		
May 31 - June 2,4	Computers: Intro. (1200-I)	1.2 CEU's	
May 31	Women in the Wilderness		13
June 4	Don't become a Failure Statistic 1		
June 1,2,4	Intro to BASIC for VIC-20 1		
June 7,9,11	Intro to BASIC for VIC-20 1		
June 7,9,11	Computers: Intro (1200-II)	1.2 CEU's	14
June 9 - 11	Grantsmanship 1		
June 11	Financing the Small Business 1		
June 11 & 18	Landscape 1		
June 13,15,21,23	Computers: Intro (1200 III A)	1.2 CEU's	16
	Intro (1200 III B)	1.2 CEU's	16
June 14,16,18	Computers: BASIC I (1201-I)	1.2 CEU's	11
June 5 - 10	Summer camp I		35
Juen 12 - 17	Summer camp II		30
June 19 - 24	Summer camp III		34
June 26 - July 1	Summer camp IV		29
June 4	Successfully Single I	.7 CEU's	19
June 11	Successfully Single II	.7 CEU's	7
June 11	Memory Techniques 1		
June 18	Self-Assessment Techniques 1		

DATE	TITLE		PARTICIPANTS
June 18	Dynamics Male-Female: Females Only 1		
June 21,23,25	Computers: Intro (1200IV)	1.2 CEU's	12
June 20 & 22	Computers: BASIC (1201-II) 1		
June 27 - July 2	Drawing I 1		
June 28,30 - July 5,7	Computers: BASIC I (1201-III)	1.2 CEU's	17
June 28,30-July 5,7	Computers: Intro. (1200)	1.2 CEU's	14
June 25	Dynamics Male-Female: Male only 1		

1 - insufficient enrollment
2 - cancelled by UNM Bureaus
3 - cancelled by co-sponsor & UNM Bureau

OTHER UNM APPROVED CEU ACTIVITIES

LOG NO.	DATE	TITLE	CEU's OFFERED
4069	July 20	Basic Power Plant Practices	2.0
4073	July 19 - 22	Accounting & Financial Essentials for Admin. Assistants & Executive Secretaries	1.5
4074	August 2 - 4	Developing Greater Personal Effectiveness Within Your Organization	1.5
4076	Oct. 7 - 9	The 5th Annual Symposium on Women & Chemical Dependency	2.0
4083	August 16-18	Japanese Management Quality Circles & Other U.S. Applications	2.1
4084	Sept. 2-Dec. 16	Basic Management Program	4.5
4085	July 20	Productivity & Managing Change	0.7
4086	August 11	Computer & Data Processing Fundamentals	0.7
4087	August 12	Design, Development & Evaluation	0.7
4088	August 18	Managing People & Conflict Effectively Within the Not-For-Profit Organization	0.7
4089	August 19	Personal Practices & Procedures	0.7
4090	August 20	Women In Management	1.5
4091	Sept. 22	Managing Your Business	0.7
4092	Sept. 13	Time Management	0.7
4093	Sept. 14 - 15	Principles of Budgeting	1.4
4095	Oct. 12 - 14	Accounting & Financial Essentialf for Non-Financial Managers	2.0
4096	Oct. 4 - 7	Assertiveness Skills for Supervisors & Managers	1.5
4100	August 18 - 19	Techniques to Promote Effective Teaching	0.6

LOG NO.	DATE	TITLE	CEU's OFFERED
4101	Oct. 18 - 21	Workshop for Executive Secretaries & Admin. Asst.	1.5
4102	Oct. 26 - 28	Computer & Data Processing Essentials for Managers	2.1
4103	August 16 - 17	Health History & Assessment Skills Seminar for APS School Nurses	1.0
4104	August 11 - 13	1982 Symposium on the Neglected & Abused Child	1.8
4106	Sept. 16-Dec. 10	Boiler Operation & Maintenance	4.0
4107	August 31-Sept 2	Administrative Training at the 1982 State Conference on Aging	1.2
4108	August 31-Sept 2	Senior Ctr. Training Track of the 1982 Conference on Aging	.75
4109	August 31-Sept. 2	Senior Coalition Training Track 1982 Conference	.9
4110	August 31-Sept 2	Long Term Care Training 1982 Conference	.75
4111	August 31-Sept 2	Action/Volunteer & Minorities Track 1982 Conference	.9
4112	August 31-Sept 2	The Nutrition Training 1982 Conference	.75
4116	Sept. 15-Dec. 31	Diesel Truck Driver Training	12.0
4117	Nov. 2 - 3	Stress Management	1.4
4118	Dec. 8	Creative Problem Solving Techniques	.7
4125	Sept. 24 - 26	French Teaching Methodology	2.0
4126	Sept. 24 - 26	French Teaching Methodology	1.0
4130	August 24 - 25	Computer & Data Processing Fundamentals for Admin. Asst. and Office Staff	1.4
4131	Nov. 3	Utilizing Effective Communication Strategies to Manage Self & Others	0.7
4132	Nov. 4	Developing Credibility	0.7
4133	Nov. 5	Sales Skills for Non-Sales Personnel	0.7

LOG NO.	DATE	TITLE	CEU's OFFERED
4134	Nov. 6	Managing the Sales Function	.35
4136	Oct. 16 - 23	Effective Techniques for Working with Resistant, Apathetic & Troubled Students	1.6
4137	Jan. 3-May 27	Motorcycle Riding Course	2.0
4145	Oct. 28 - 29	Housekeeping Management Seminar	2.0
4152	Sept. 28-Nov.30	Death & Dying	1.6
4153	Jan. 11 - 12	Data Processing & Computers for Secretaries, Admin. Asst. & Office Staff	1.4
4155	Jan. 18 - 19	Performance Appraisal	1.4
4156	Jan. 17-May 5	Basic Management Process	4.5
4157	Feb. 1 - 3	Management Skills for Women	1.5
4158	Feb. 16 - 18	Organizing for Quality & Productivity	2.1
4159	Feb. 8 - 10	Team Building	2.1
4166	Sept. 28-Nov.23	Spanish Americna Clinical Study	3.5
4168	August 23-Dec. 17	Supervision of Student Teachers	1.6
4169	Sept. 27 - 28	Multi-Cultural Teaching Strategies	1.7
4171	Dec. 7 - 9	Peoria 0-3 Outreach project	1.7
4172	Feb. 22-Apr.28	Phlebotomy Training	4.0
4173	Jan. 13 - 14	Using Human Resource More Effectively	1.4
4174	Feb. 19	Inform 83: A Symposium about Infertility	.7
4180	Feb. 28-Oct. 9	Kenyan-American Clinical Study	3.5
4181	Mar. 12-Nov. 11	Sino-American Clinical Study	3.5

LOG NO.	DATE	TITLE	CEU's OFFERED
4182	Mar. 15-Nov.10	Soviet-American Clinical Study	3.5
4183	Mar. 20-Oct. 2	Soviet-American Clinical Study	3.5
4184	Mar. 29-Nov.15	Spanish-American Clinical Study	3.5
4185	June 5-Sept. 11	Soviet-American Clinical Study	3.5
4186	Jan. 29 - 31	Recruitment & Selection	.65
4187	Mar. 31/83-86	Team Building	.75
4188	Mar. 1	Planning	.75
4189	Mar. 31/83-86	Communicating	1.4
4190	Mar. 2 - 4	Strategic Planning	2.1
4191	Mar. 7 - 9	Assertiveness Skills	1.5
4192	Mar. 15 - 16	Managing People	1.4
4193	Mar. 17 - 19	Improving Performance Through Quality Circles	1.4
4194	Mar. 22	Managing Applications	0.7
4195	Mar. 28 - 29	Fundamentals of Modern Personnel Management	1.4
4196	April 4	Leadership Styles & Skills	0.7
4197	April 19	Time Management for Executive Secretaries	0.7
4200	Feb. 16-Mar. 19	Profiles IH Personal Interaction	1.6
4203	Mar. 30	New Directions for Reality Therapy	0.6
4204		Management by Responsibility	3.5
4205	Mar. 14 - 18	The American Indian Training	3.0
4206	May 10	Six Steps to Successful Writing	.7

LOG NO.	DATE	TITLE	CEU's OFFERED
4207	May 16 - 19	Computer & Data Processing for Executive Secretaries	1.3
4208	May 23 - 25	New Ideas in Office Administration	1.05
4209	June 2	Motivation Skills for Greater Employee Performance	0.7
4210	June 3	Managing & Resolving Conflict	0.7
4211	June 7	Forecasting Techniques	0.7
4212	May 3 - 5	Workshop for Executive Secretaries & Admin. Asst.	1.5
4213	April 21	Managing	
4214	April 11	Predictor	2.4
4215	June 24	Verbal Judo	1.0
4216	Feb. 28	Improving Productivity in Higher Education	6.4
4217	Sept. 27 - 28	Multi-Cultural Teaching Strategies	1.6
4218	June 8 - 11	A Basic Week in Reality Therapy	2.5

BUSINESS OFFICE

For the past two years, the Business Office was merged with the Operations Section of Continuing Education. During the later half of the current fiscal year, the decision was made to reassign the supervision function of Operations and return supervision of Registration Personnel to the program (Credit or Non-Credit) that the individuals served. Once again, the Business Office is a separate Department within Continuing Education. However, with the changeover and the reductions in Division staffing necessitated by budgetary circumstances at the University, the Business Office assumed the responsibility for maintaining the Division's supplies inventory and reserving cabins for staff, faculty, and alumni at the D.H. Lawrence Ranch in Taos, New Mexico.

With the change in mission as noted above, came a physical move of the Business Office from the second floor of Continuing Education, where it had been located for several years, to the first floor. With the addition of more office space, staff will be able to work in a more comfortable atmosphere and have all necessary records available for immediate access. The Division's supplies have also been located within the Business

Office area as a result of the change in facilities. Also, the Business Office will become more involved with the inner workings of each program. This will serve to provide up-to-the-minute fiscal data to program persons for more effective and efficient decision making.

THE COMMUNITY COLLEGE

Fiscal year 1982/1983 has substantially proven the solid stability and consistent potential of the UNM Community College. Enrollments remained stable in light of the large increase that was experienced during the prior fiscal year. Substantial reductions were made in the number of course offerings for Spring 1983, that had previously experienced only marginal enrollments and had, therefore, resulted in a fiscal net loss. Exceptions were made in all instances where a clear overriding community interest was visible.

Course fees were not increased and a concerted effort was made toward serving specific community populations. Staff changes and consolidations of job duties and functions greatly increased efficiency. Coruse costs were reduced toward arriving at lower required minimum enrollments.

The concept of cooperative efforts toward joint offerings with other University departments and community entities within the Albuquerque Metro Area has grown and improved to the mutual benefit of all entitites concerned. Every co-sponsoring department

or entity has renewed past offerings and initiated various new ones.

Division marketing efforts have been assumed completely by Community College staff and impressive overall budget reductions have been realized as a result. Promotions of educational activities have been enhanced while increasing community exposure to accessible program offerings. The challenges that lie ahead for the College and the Division can be eagerly met in the context of the thoroughly improved efficiency of the current operations of non-credit programs.

COMMUNITY COLLEGE--ENROLLMENT STATISTICS--FY 1977 - FY 1983

FISCAL YEAR	TOTAL REGISTRATION	SEMESTERS	AVG. NUMBER OF STUDENTS PER CLASS
1977	6675	Fall--3341	24
		Spring-3334	24
1978	7697	Fall--3800	25
		Spring-3897	27
1979	7897	Fall--3846	24
		Spring-4051	22
1980	8803	Fall--4353	23
		Spring-4450	22
1981	9222	Fall--4052	21
		Spring-4720	21
1982	9919	Fall--4727	21
		Spring-5192	21
1983	9623	Fall--4716	19
		Spring-4907	22

COMMUNITY COLLEGE
CLASS STATISTICS--FY 1977 - FY 1983

FISCAL YEAR	# CLASSES OFFERED	# CLASSES CANCELLED	# CLASSES ACTUAL	# CLASSES CLOSED	AVERAGE TUITION FEE
1977	FALL-148	12	136	N/A	N/A
	Spring-151	15	136	---	---
1978	Fall-170	20	150	49	$36
	Spring 172	30	142	49	$36
1979	Fall-208	46	162	46	$30
	Spring-218	32	186	38	$36
1980	Fall-212	23	189	47	$35
	Spring-230	25	205	49	$35
1981	Fall-282	65	217	43	$37
	Spring-273	46	227	40	$37
1982	Fall-311	72	239	47	$41
	Spring-301	51	250	44	$41
1983	Fall-387	136	251	68	$38
	Spring-270	46	224	32	$41

CREDIT CLASSES

Any course listed in the University of New Mexico Bulletin, catalog issue, may, subject to appropriate approval, be offered for credit through the Division. The Division obtains approval from departmental chairpersons for all courses to be offered for credit. Approval of teaching faculty is obtained by the Division from the departmental chairperson, and if necessary, from the Dean. However, obtaining approval from the Graduate School for a person to teach at the graduate level is a departmental responsibility.

The need for a credit course may be identified in several ways: an employer may desire to have employees take a certain course; an instructor may wish to teach a certain course off-campus; or Division personnel may identify a need. Course requests may be directed to the appropriate academic department, the appropriate college, or to the Division of Continuing Education and Community Services. Regardless of the initial contact, the Division is notified of the request and all coordination is accomplished by the Division.

Starting with the Summer Session of 1977, an effort was made to have credit courses offered through the

Division in Bernalillo County considered resident credit.

Division personnel coordinate registration for Resident Extension/Extension classes. Registration may occur on-site or through the Division office and in some cases through normal registration channels. Registration forms and admissions applications are sent to the UNM Registrar and fees are sent to the UNM cashier. The students are then treated as regularly enrolled students with grades reported in the normal manner. The Division has encountered some problems in adapting to the regid requirements of the total system, however, many of the problems have been minimized by close cooperation with other campus offices. Substantial progress has been made in refining this mechanism.

Those credit courses offered outside of Bernalillo County are still considered to be extension credit and all registration, fee collections, and grade reporting are accomplished by the Division.

The general policy this Division has followed is that credit courses will be established anywhere that sufficient demand warrants. The figures listed in Table I indicate number of classes each term and number

of student credit hours produced each term during the Summer Session of 1982 through the Spring term of 1983. Enrollments are broken into resident and Extension categories.

It should be noted that for the time period of this report, two major events affected the credit planning process and course delivery. (1) After receiving a tentative go ahead for planning a resident credit program for Summer 1982, budgetary considerations at the University level dictated that all planned Continuing Education Summer courses be conducted on an extension budgeting basis. This change which was directed in May 1982, necessitated additional effort on the part of our office in regard to the conversion of courses and student records to a different format. (2) In the two week period prior to the beginning of Fall semester 1982, an excess of students were admitted to UNM who lacked basic skills. At that point in the registration process all basic skills courses were full. Without these courses being available, students would have been able to register for other courses. Working with the General College and cognizant departments, Continuing Education set up 34 courses to accommodate the excess enrollment in basic skills. These courses were

eventually transfered to General College to more appropriately reflect activities where they belong. This also restored the resident extension budget for Spring 1982. By assuring this leadership position to meet the needs of this situation, the Division assumed the corresponding workload increased courses by servicing approximately 1,000 additional students and their individual and course records.

As compared to previous years, enrollments continue high in the resident category which reflects a major effort by the Division to make this the top credit priority. Through resident credit classes at the Division, 3,935 students were enrolled during this reporting period.

The Division continues to conduct at least two telecourses each regular semester. Costs associated with the program continue to exceed tuition received even though it was raised to $40 per credit hour during this period. Because we cannot currently count the course for resident credit, enrollments have been low.

Fall 1982

Sociology 101, Intro. to Sociology	11 students
SATE 493, Interaction in the Classroom	12 students

Spring 1983

Educ. Fdn.493, Philosophical Applications for Professionals	30 students
Spec. Educ. 493, Gifted Educ. Program models for Schools	21 students

However, to get a true picture of the total number of individuals served in credit courses by the Division and off-campus, one must take into account all activities of others who offer courses off-campus. Prior to the establishment of the branch colleges, all credit work performed off-campus was by extension. All lower division work in the branch area is now performed by the branches with upper division work by extension. Several years ago, 1974-75, Teacher Education Centers were established at various locations for upper division (and lower division, in some cases) resident credit work off-campus. Many of the students who were enrolled in Teacher Education Centers were, in part, enrolled as extension students. Also, in 1975-1976, Graduate Resident Centers were established in Santa Fe and Los Alamos. Many of the students enrolled in the Graduate Centers were previously extension class students.

Therefore, when all aspects of the Division's activities and others in credit activities are considered,

it is readily apparent that the service of the off-campus community continues at a significant level.

TABLE I

	Number of Classes	Number Students	Student Credit Hours
Summer 1982			
Extension Courses	23	523	1,328
Resident Courses[1]	71[1]	1,167[1]	2,716[1]
Fall 1982			
Extension Courses	24	454	908
Resident Courses (Res. course to Gen. College)	56 (34)	1760 (1038)	3623 (3340)
Spring 1983			
Extension Courses	59	920	1,865
Resident Courses	68	1,175	2,675
1982-83 Extension (Sub Total)	177	3,064	6,817
1982-83 Resident (Sub Total)	224	3,935	6,398
1982-83 Total	401	6,999	13,215
1981-82 Extension (Sub total)	139	1,623	4,412
1981-82 Resident (Sub total)	284	4,639	10,813
1981-82 Total	423	6,262	14,595

[1] Courses were actually counted as Extension courses for budgetary purposes.

THE REPORT OF THE HARWOOD FOUNDATION

OF THE UNIVERSITY OF NEW MEXICO, TAOS, N.M.

July 1, 1982 to June 30, 1983

David Caffey, Director

I. 1982-83 IN REVIEW

A. ADMINISTRATION

James Levy retired as Director of the Harwood Foundation effective June 30, 1982. He was replaced by David Caffey, who was selected from among 23 applicants by the Advisory Board search committee.

A major task for the year was to begin the process of transferring the public library responsibility from the University to Taos local governments, and to determine the future of other Harwood functions. To this end, two planning groups were created. A University of New Mexico Committee chaired by Dr. Alex Sanchez studied UNM's Taos County properties, with a view to recommending changes that would cause those properties to cease drawing on the UNM General Fund for annual operating support. A Taos Library Planning Committee appointed by Mayor Phil Lovato made plans for local acceptance of the library. Commitments of increased financial support were received from the Town of Taos and Taos County, and at year's end (June, 1983), those units were planning to enter into a Joint Powers Agreement for administration

of the library, to take effect July 1, 1984.

The Harwood Advisory Board voted at its April meeting to begin an endowment fund campaign, in order to provide for continuing support of the museum, maintenance, and administration functions. Submission of an application to the National Endowment for the Humanities for a $250,000 Challenge Grant in May, 1983, was the first major step in this effort.

The Friends of the Harwood reorganization was completed, with a new board operating under by-laws drawn up in Spring, 1982. The new board made several improvements in the Friends' annual giving campaign, and indications were that 1983 would see a significant increase in contributions.

B. HARWOOD MUSEUM

The Harwood Museum was the recipient of a $15,000 general operating support grant from the national Insitute of Museum Services. The grant enabled us to employ a part-time Assistant Curator and exhibit preparator, and to make a beginning on badly needed improvements in the area of interpretation of exhibits. The grant funded construction of needed improvements to the display area and financed an additional project of printing and cataloging a sizable historic photo collection.

As usual, the museum provided the touring public a representative exhibit of works of the major artists of the Taos

colony. In addition, there were special shows of:

(1) Wood sculptures of Patrocinio Barela

(2) New acquisitions

(3) "Faces of Taos" - Portrait photographs of legendary Taos personalities

(4) Textiles by Los Ancianos de Taos

(5) Contemporary Art from the Harwood collection

In Spring, 1983, the museum sponsored an Intern, who worked twenty hours per week, completed several projects, and received graduate credit through UNM's Art Education program.

New Acquisitions

"Untitled"	sculpture	Patrocinio Barela
"Untitled"	sculpture	Patrocinio Barela
"Rock Series"	oil	Louise Ganthiers
"Concepts in Color"	oil	Louise Ganthiers
"Spacious Earth"	oil	Louise Ganthiers
7 prints	lithograph	Barbara Harmon
"Untitled # 50	drawing	Carol Starr-Rubins
"Untitled"	watercolor	Issac Udell
"Untitled"	watercolor	Issac Udell
"Neil's Italian Hat"	oil	Bill Bomar
"Untitled"	photograph	John Collier
86 portraits	photographs	Mildred Tolbert
575 News Subjects	photographs	Taos News

159 photos on Barela & his work	prints & negatives	Mildred Tolbert
"Iglesia de Arroyo Hondo"	photograph	Harold Joe Waldrum
"Iglesia de Arroyo Hondo"	multiple	Harold Joe Waldrum
"Flores Immortales"	photograph	Bob Saltzman
"Spirals of the Sea"	photograph	Justin Locke

Historic photographs and documents were added to the Archives.

C. HARWOOD LIBRARY

Shelf space was increased through the construction of new space-effective shelving units. In addition, all fine arts-related materials were consolidated in the Art Room, with an unneeded display case removed and additional shelving built.

The volunteer program grew to include 17 Library volunteers, each serving one or two half-days per week. Together the volunteers provided some 2,500 hours service during the year. They were honored in May with a luncheon sponsored by the Friends of the Harwood.

D. CULTURAL/EDUCATIONAL ACTIVITIES

During calendar year 1982, the Harwood auditorium hosted some 69 events, including concerts, lectures, plays, and films. Classrooms and meeting rooms were also used on the average about four times each week. Some twenty community organizations took advantage of these spaces for their meetings.

1982-83 Totals

Classes	208
Meetings	79
Readings	2
Performances	16
Lectures	19
Films	

II. GENERAL INFORMATION

A. SIGNIFICANT ACHIEVEMENTS

1. A good working relationship was established among Harwood and UNM personnel, the Town of Taos, and Taos County.

2. A vital transition year appropriation from the State legislature was received for 1983-84.

3. Funding for 1983-84 was secured, with several entities and private sources cooperating to provide needed funds.

4. The Friends of the Harwood organization was restructured, with a new and active Board elected and an improved membership campaign organized.

5. Two special exhibits, Patrocinio Barela Wood Sculptures and "Faces of Taos" drew very favorable attention to the Harwood museum.

6. A capital funds campaign was initiated by the Harwood Advisory Board with the intent of building an endowment in support of Harwood museum and maintenance activities.

7. Public opinion and news media coverage continued to be highly supportive and favorable. Political relationships improved significantly with the election of new Taos County commissioners.

8. Much progress was made in meeting fire code and safety standards. Visits by inspectors from the State fire Marshal's Office and Risk Management Division identified numerous deficiencies, most of which have now been corrected.

9. Access to the Harwood Foundation was somewhat improved by the repairing of Ledoux Street, complete with curbs, gutters and a sidewalk.

B. PLANS AND RECOMMENDATIONS

1. Taos local governments appear ready to accept full responsibility for public library operations beginning July, 1984.

2. Through fund-raising efforts in 1983-84, we will attempt, with the support of the Harwood Advisory Board, to provide the means for long-term support of other traditional Harwood functions to remain under UNM administration. The level of future programming will depend on the success of these efforts.

3. Taos local governments should consider acquiring property across Ledoux St. from the Harwood Foundation for a parking plaza. This would greatly enhance the usefulness of

the whole complex. Development of the area could likely be at least partially financed by federal funds.

4. Once UNM's fund-raising project is complete, the University might consider contracting with Taos local governments for administration of the museum and educational spaces. This might relieve the university of an unwieldy administrative responsibility while providing for a unified and presumably more efficient and harmonious Harwood administration. Obviously this would require that the University satisfy itself that local administration of the art collection would be solid in terms of security and conservation measures.

C. APPOINTMENTS TO STAFF

Joyce Padilla, Library Clerk, 1/83

Juanita Jaramillo-Lavadie, Assistant Curator, 12/82.
Temporary position funded by a grant from the Institute of Museum Services

David Caffey, Director, 7/82

D. SEPARATIONS FROM STAFF

John Flexner, Head Librarian, 11/82

Maria Macias, Librarian, 3/83

Carlos Rendon, Repairman, 5/83

E. SPONSORED AWARDS

(a) The National Endowment for the Arts, for art conservation. $6,000 requested. Not funded.

(b) The New Mexico State Library, for library materials and staff development. Funded at $2,467 for 1982-83. $2,555 approved for 1983-84.

(c) The Institute of Museum Services for general operating support. Funded at $15,000 for federal FY 1983. $16,900 requested for federal FY 1984. Pending.

(d) The National Endowment for the Humanities for a capital fundraising project to endow Harwood museum and maintenance activities. $250,000 requested. Pending.

III. HARWOOD STAFF AND AUXILLARY ORGANIZATIONS

A. HARWOOD PERSONNEL (June, 1982)

David Caffey, Director

Betsy Wolf, Administrative Secretary

Cathy Logue, Bookkeeper/Relief Children's Librarian

Carmen Medina, Head Librarian

Tracy McCallum, Acquisitions Librarian

Joyce Padilla, Library Clerk

Victoria Duran, Relief Librarian

Vacant, one library position

Gilbert Lujan, Custodian

Vacant, one maintenance position

John Comstock, Caretaker

David Witt, Curator

Juanita Jaramillo-Lavadie, Assistant Curator

Kathy Rael, Children's Librarian

B. THE HARWOOD ADVISORY BOARD (June, 1983)

Wallace Bacon

Gabriel V. Chavez

Janice Daigh

John C. Flexner

Beatriz Gonzales

Michael Knight

Mary B. Olguin

Robert D. Ray (President)

Rick Romancito

Rena Rosequist

Bob Saltzman

Gary Schrodt

Rupert A. Trujillo

Paul Vassallo

C. BOARD OF THE FRIENDS OF THE HARWOOD, INC. (June, 1983)

Judy Anderson

Wallace Bacon

Mildred Buchanan

Louise Dice (President)

Lyn Hebert (Treasurer)

Carmen D. Medina

Pat Ripley

Paul Sears

Patricia A. Nobel, M.D.

Anna Lujan

Gene Zamora

INDEPENDENT STUDY COURSES

Independent Study course enrollment for 1982-83, declined approximately 2% from the past year. Course revisions due to text edition changes remain a problem. Listed below are the 1982-83 course revisions, adds and drops.

Independent Study Courses Revised During 1982-83

Economics 200C
Economics 201C
Economics 315C
Engineering 203C
English 100C
English 101C
English 102C
English 220C
Elementary Education 331C
Geology 101C
Health Education 171C
History 161C
Math 102C
Math 111C
Math 121C
Math 150C
Nursing 225C
Nursing 239C
Nursing 240C
Political Science 110C
Political Science 200C
Psychology 332C
Psychology 371C
Sociology 101C
Sociology 351

Independent Study Courses Added 1982-1983

Math 215C

The number of students actually enrolled in courses during 1982-1983, including new enrollments, carry-overs, withdrawals, and completions was 1,043. Five Hundred Seventy-four students were enrolled in all courses during 1982-1983 as compared to 590 in 1981-1982. The enrollment by month is depicted in the following chart.

Enrollments During July 1982-1983

July	36
August	78
September	58
October	30
November	27
December	33
January	73
February	52
March	34
April	36
May	61
June	56
TOTAL	574

COMPARISON OF INDEPENDENT STUDY STATISTICS FOR LAST EIGHT YEARS

Year	# of Courses Offered	Enrollments Men	Women	Total	% of Increase or Decrease	States	New Mexico Counties	Countries
74-75	85	164	192	356	D-21.9	32	26	6
75-76	87	178	222	400	I-12.	27	24	5
76-77	94	251	393	644	I-63.	30	27	7
77-78	91	278	471	749	I-16.3	32	26	3
78-79	89	137	259	396	D-40	24	27	2
79-80	91	230	443	673	I-58	27	26	11
80-81	69	270	403	673	0	36	23	9
81-82	85	238	348	586	D-12	31	23	1
82-83	70	190	384	574	D-2	29	23	5

NON-DEGREE STATUS

All students classified in Non-Degree status are under the jurisdiction of the Dean of the Division of Continuing Education and Community Services. Students who make application to attend the University of New Mexico just prior to the beginning of the semester and who have missed the deadline to enroll in regular status are accommodated by enrolling in Non-Degree status. The following page enrollment figures are reported for the past seven years.

The Division prepares and maintains personal folders for all students in Non-Degree status. Through these folders up-to-date academic records on approximately 11,479 students enrolled in Non-Degree status were kept during the past academic year. (This figure includes students enrolled for the Summer Session of 1982.)

Furthermore, the Division has responsibility for the probation and suspension of Non-Degree students who fail to maintain the University's academic standards of a two-point average. During the 1982-83 year, 135 Non-Degree students were suspended; 1,738 students were placed on probation; and 604 students were continued on probation.

COMPARISION OF STUDENTS REGISTERED IN
NON-DEGREE STATUS FOR THE PAST SEVEN YEARS
(Regular Semester only)

Year	Semester	Students	% Increase/Decrease over Corresponding Periods	Total for Year
1976-77	1st	3950	11.33% Increase	7667
	2nd	3717	2.76% Increase	
1977-78	1st	4538	14.89% Increase	7645
	2nd	3107	19.63% Decrease	
1978-79	1st	3049	32.81% Decrease	6212
	2nd	3163	1.83% Increase	
1978-80	1st	3441	11.4% Increase	7283
	2nd	3842	21.1% Increase	
1980-81	1st	3876	11.2% Increase	7797
	2nd	3921	2.0% Increase	
1981-82	1st	4047	4.4% Increase	10,705
	2nd	4379	11.6% Increase	
	Sum	2279		
1982-83	1st	4417	9.0% Increase	11,479
	2nd	4575	4.0% Increase	
	Sum	2487		

NON-DEGREE PROBATION AND SUSPENSION FIGURES

	Placed on Probation	Continued on Probation	Suspended
1976-77	895	246	82
1977-78	963	316	72
1978-79	1001	287	67
1979-80	1055	314	67
1980-81	1178	351	108
1981-82	1392	414	124
1982-83	1738	604	135

Many of the students in Non-Degree status are in great need of advice and counseling. Since the Division receives no support for this activity, the Division serves as an administrative unit for these students.

Additionally, assistance is provided by the Division Registrar, Director of Credit Programs, the Dean and clerical staff to the extent possible. College asvisement centers continue to provide advisement to Non-Degree students who seek assistance. In cooperation with the College Advisement Centers, the Division has produced a Non-Degree asvisement guide to assist all students enrolled in Non-Degree status.

It is felt that Advisement efforts are still only stop gaps for Non-Degree students. At some point, the need for a Non-Degree advisor must be addressed.

OPERATIONS

The Operations section of Continuing Education is responsible for the registration and maintenance of records for the following Division programs:

Community College

Summer Programs

Nursing Programs

Extension

Resident Extension

Independent Study

Bureau of Conferences and Institutes

For the major part of the year, D. H. Lawrence Rental, and rental of UNM Facilities was a part of the Operations function. Opeations also provides the necessary record keeping support for the University's Non-Degree Program.

Changes Made 1982-1983

Due to budgetary cut backs in the Division, the registration function for Continuing Education's Bureau of Conferences and Institutes was again housed within the Operations section. This change resulted in all of Non-Credit registration being housed under one registration clerk. The registration procedure for

Conferences and Institutes was redesigned; as a result registration procedures are now more consistent with Community College registration.

The addition of a computer link-up with the main campus main-frame computer made possible the revamping of the manner in which Non-credit course registration cards are printed. With the assistance of staff from the Computer Center, a program was developed to enable the computer to generate all class cards for both Community College and the Bureau of Conferences and Institutes. In the past, staff had to rely on a 1950's Vintage Addressograph machine to prepare the class cards. The old process required considerable manual effort to maintain the system as well as requiring the non-credit registration clerk to be away from her desk for long periods of time.

Long time Community College registration clerk, Cynthia Turowsky, was reassigned and reclassified to Staff Assistant. Her responsibilities now involve her in the programming and planning process for the Community College and Summer Programs.

During the past year, Visa/MasterCard required the Division to verify every charge which the Division received either by mail or, by phone. Charge card

business is a significant portion of the Division's total registration business since people can now call in and register by telephone. In the past, registration staff had to talk with an Operator at Visa/MasterCard to obtain charge card authorization numbers. During the past year, telephone lines were installed to enable direct link-up with the Visa/MasterCard Computer via touch-tone telephone to obtain the necessary authorization numbers. During the next fiscal year, the system will be updated even more with the addition of a terminal to connect the Division with the Visa/MasterCard Computer. With the addition of the new system to verify charge card transactions, time necessary to deal with each transaction has been reduced. In addition, errors which would cause a charge to be returned by the bank have been virtually eliminted.

Drastic and unprecedented budgetary cutbacks at UNM during the current year forced the Division as a whole to reduce its staffing. This action necessitated a reassignment of individuals in Opertions. The Facilities Rental/Contracts Clerk was reassigned to the Dean's Office in order to provide relief to the Dean's secretary and help cover the downstairs reception area. The Lawrence Ranch Cabin Rental duties as well as the

responsibility for ordering office supplies for the entire Division were assigned to the Division's Business Office due to staff reducations.

The Operations section still relys heavily on the use of temporary help to get through peak registration periods. In light of the current budgetary situation University wide, this practice will be continued indenfinitely. The Operations Section relies exclusively on UNM's Temporary help pool to provide temporary staff. For the past two years, this practice has proved very successful.

For the past two years, Operations and the Division's Business Office have been combined into one department under the Business Manager/Director of Operations. Prior to this time, Operations and the Business Office had been two distinct departments within the Division. During the latter part of this current year, the decision was made to reassign the Operations Section and concentrate on the registration functions under the respective programs which they support. Thus, registration for all Credit courses is now under the Director of Credit Programs. Registration for all Non-Credit activities is now under the Director of Non-Credit Programs. The Business Office is again a separate

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Department of the Division.

TELECOMMUNICATIONS ACTIVITIES SERVICE CENTER

JULY 1, 1982-JUNE 30, 1983

Alex A. Sanchez, Director

Amy L. Atkins, Co-Director

INTRODUCTION

One of the steps taken to address financial and service pressures on our universities in New Mexico is the creation of an educational telecommunications network. The current year's workscope is being supported by monies from The University of New Mexico and the Fund for the Improvement of Postsecondary Education.

The planning, development and installation of a telecommunication network for New Mexico is an innovative project. The University of New Mexico, through the Office of the Associate Provost for Community Education and the Department of Educational Foundations, is acting as the coordinating and administrative unit in conducting the project. Our work effort has been endorsed by the State Department of Education, a large number of public school districts, several deans of professional schools, a number of legislators, the Board of Educational Finance, the Governor's Commission on Public Broadcasting, the three PBS facilities in New Mexico, other universities, professional, commercial and industrial organizations.

Progress

The project has been in operation for two years. During this time, we have moved steadily toward our goal: a telecommunication network which will serve the educational needs of the citizens of New Mexico. Among the many beneficiaries will be the rural populations without access to postsecondary educational opportunities. The progress toward meeting this goal is summarized in the following paragraphs.

Year Two (1982-83)

Activity within this project was organized into four strands. Of these, three strands pertained directly to the primary mission of the project--creating a foundation for a statewide telecommunication network--and one dealt with project development. The goal for each strand is stated, with a strategy for achieving each objective within the strand, a summary of the evaluation approach (outcome of the activity), and a date for completion of the activity, if appropriate.

Strand 1. The Telecommunication Network

Goal: To formalize permanent relationships between various institutions in order to maintain the established educational telecommunication network.

Strategies: Our principal strategy will be to link existing aggregated users and providers into a telecommunication

association.

Distance Learning

The concept of distance learning was examined and defined for the purpose of integrating it into the academic community in New Mexico. Extensive inquiries were conducted as to how other postsecondary institutions throughout the country handle distance learning. It was learned that nearly all institutions award distance learning courses identical FTE status in their state funding formulas. In addition, many states already had policy guidelines regarding telemediated courses such as telecourses. Guidelines often corresponded with the state's creation of a higher education consortium on telemediated education. In particular, such is the case for West Virginia and Louisiana. This research was used in the several Distance Learning Conferences which were held in May and September, 1982, between members of various New Mexico postsecondary institutions and Project TASC Directors.

Faculty Senate Committee on Telecommunications

At The University of New Mexico, the Faculty Senate has an Ad hoc Committee on Telecommunications, charged with establishing policy on distance learning. Such policies will become models for Faculty Senates at other universities in the state. TASC's Director, Dr. Alex Sanchez, co-chairs the committee, of

which Dr. Atkins is a member. At the January, 1983 meeting, Project TASC presented the results of a faculty survey requested by the committee. TASC staff interviewed about 20 UNM faculty on concerns for delivering education by telecommunications, then collated the responses into conceptual categories such as legal issues, financial, selection criteria, and educational concerns. Each issue raised by the faculty was researched to find precedents from other universities for resolving that concern. The results were compiled into chart form, and will be the basis for drafting telecommunication policies within this faculty committee.

Strand 2: Evaluation

Goal: To develop evaluation procedures for operation, delivery and products.

Strategies: The primary strategy for this strand will be to provide technical assistance from UNM faculty and the National Diffusion Network, to insure that education by telecommunications is effective, efficient and of high quality.

Strand 3: Training and Workshops

Goal: To provide appropriate training to insure that the network is used, and used effectively and efficiently.

Strategies: Our principal strategy will be to network with groups such as Quote...Unquote, Instructional Media Services, Educational Foundations (Library Media Program), and the Division of Continuing Education and Community Services. These groups have developed courses in media available and ready to be offered.

Strand 4: TASC

Goal: To continue coordination and developmental services through Project TASC.

4.1: Internal Procedures--All activities in this strand are on-going activities. The management and accountability procedures of this project include a planning process, a staff time management process, a process for relating achievement to resources, a fiscal management process, and a process for collecting evaluation data (see Appendix E).

The purpose of the management and accountability procedures are:

* to maintain both long-term and short-term project plans
* to keep TASC commitments to New Mexico educators and others
* to relate achievements to costs
* to monitor and project expenditures
* to maintain formative evaluation procedures

* to collect and report evidence of achievements

4.2: Project Management--TASC staff will maintain mailing lists of all parties involved in the planning efforts, call appropriate meetings of the Advisory Council, make arrangements for site visits, and keep participants informed of proceedings.

Outcome: An ongoing Telemedia Activities Service Center

Comment on Status: TASC has been operating for two years now. Plans are being made to integrate the Center's activities into the structure of The University of New Mexico. It will continue to operate and facilitate the development of instructional telecommunications in the state.

THE REPORT OF THE COLLEGE OF ARTS AND SCIENCES

July 1, 1982 - June 30, 1983

F. Chris Garcia, Dean

COLLEGE OF ARTS AND SCIENCES

Annual Report, July 1, 1982 - June 30, 1983

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I. ADMINISTRATION

There were no changes in staffing among the associate or assistant deans in the college office. Elinore Barrett (Department of Geography), Richard Metzler (Department of Mathematics and Statistics) and Julian "Bob" White (Department of Modern and Classical Languages) continued in their associate academic deans positions. Lynette Wilson continued to serve as assistant dean.

Jeremy Sabloff decided not to continue as chairperson of the Department of Anthropology. Linda Cordell was appointed for a one year term. Stanley Morain became chairperson of the Department of Geography succeeding Rodman Snead. In Geology, Rodney Ewing was on sabbatical semester I, and Wolfgang Elston served as acting chairperson for that term. Tom Kyner finished his three year term as chairperson of the Department of Mathematics and Statistics. David Sanchez was selected to be the next chairperson. Our Department of Sociology welcomed its new chairperson from the State University of New York at Buffalo, H. Laurence Ross. The Sociology Department served under two acting chairs, Patrick McNamara first semester and George Huaco second semester. Table 1 lists the chairpersons and program directors in the College of Arts and Sciences for 1982-83.

The Arts and Sciences Graduate Committee continued to develop and guide the procedures and responsibilities of the graduate program of the college. The annual report of the A&S Graduate Committee is appended below. The following A&S committees also functioned during the academic year (Table 2): Latin American Studies Advisory Committee; American Studies Committee; Academic Policy and Curriculum Committee; Committee on Southwestern Studies; Teaching Resources Committee; Student Advisory

Committee; Tenure Committee; Promotion Committees in the Humanities, Natural Sciences and Mathematics, and Social Sciences; Human Subjects Committee; Task Force on Liberal Arts Core Curriculum.

Dean Garcia chaired the search committee for the dean of the Anderson School of Management.

II. ACADEMIC STANDARDS AND PROGRAMS

A&S Faculty Action During the Year 1982-83

The Arts and Sciences faculty took the following actions: (1) Approved a dual master's degree in community and regional planning and Latin American studies. (2) Approved a dual master's degree in nursing and Latin American studies. (3) Approved a revision of the present bachelor's degree in Latin American studies. (4) Approved a master's and doctoral level program in applied and public history for the Department of History. (5) Approved a proposal by the Department of Chemistry for a five-year combined BS/MS program. (6) Approved a bachelor's degree in criminal justice studies which would be housed in the Department of Sociology. An advisory committee is responsible for course changes in the program. (7) Approved allowing a religious studies prefix to be used for religious studies courses. (8) Approved allowing up to four credit hours for physical education activity courses. (9) Disapproved a proposal to allow up to seven credit hours for content courses in the Department of Health, Physical Education and Recreation.

The Task Force on the Liberal Arts Core Curriculum was established in order to study current college policies regarding general liberal arts education and make proposals for its improvement. The task force spent the year studying liberal arts/general education programs in other colleges as well as eliciting input from various units and individuals on

campus. The task force prepared a preliminary proposal involving a pilot project for a college core curriculum program but decided to continue formulating the program and working with appropriate units including the College Committee on Academic Programs and Curriculum during the 1983-84 year.

A college newlsetter, the A&S Record, was initiated and five issues were produced and distributed to all faculty.

Other Related Activities

The college continued its involvement in the cooperative education program. Associate Dean Elinore Barrett was assigned the special responsibility for coordinating student involvement and participation in the program.

For the second year the college participated in Legislator's Day. Several state legislators visited and were given tours by several of our departments.

The college continued to participate heavily in the University Skills Program offering courses in natural sciences, social science, English and mathematics.

III. RESEARCH AND SCHOLARLY ACTIVITY

Although faced with a shortage and further diminution of monies available for sponsored research, the faculty of the College of Arts and Sciences continued its high levels of research and scholarly investigation. The research and publication record of the faculty for 1982-83 is given in detail in the appended departmental reports. New research and training grants for 1982-83 plus funded renewals numbered a total of 139 grants (Please see Table 14.); 74 faculty members were involved as

principal investigators of these grants. These grants totaled $3,862,568 and brought in $801,707 in overhead. The college's leading departments in descending order of research monies were:

Department	X $1,000
Biology	$948
Geology	755
Physics and Astronomy	554
Office of Contract Archeology	426
Chemistry	334

Fifteen of our 20 departments, plus most of our other operating divisions and offices secured outside research monies.

One of the most important benefits of outside funding is the support given to graduate students plus the acquisition of research equipment and supplies. Table 15 shows the distribution of GAs and TAs among departments as well as graduate trainees, research assistants and project assistants supported by outside funds.

The list of continuing or new A&S related periodicals includes the Journal of Anthropological Research, Philip Bock, Editor; The New Mexico Historical Review, Richard Etulain, Editor; The Blake Newsletter, Morris Eaves, Editor; The Historian, A Journal of History, Gerald Nash, Editor; Latin American Research Review, Gilbert Merkx, Editor; Hispanic American Research Review, John Johnson, Editor; Southwestern Review of Management and Economics, Roger Norton, Co-editor; and New America, Charles Biebel, Editor.

In addition, college faculty were closely involved with the operations of two research institutes under the direction of the Office of the Provost. The Latin American Institute (LAI) involved a great many Arts and Sciences faculty. Executive director of the institute is Professor Gilbert Merkx of the Department of Sociology. The associate director and

academic coordinator was Jon Tolman of the Department of Modern and Classical Languages. The academic coordinator also serves as chairperson of the combined A&S Dean's Advisory Committee on Latin American Studies and the Interdisciplinary Committee on Latin American Studies. Arts and Sciences faculty, staff and students were also closely involved with the Southwest Hispanic Research Institute (SHRI).

IV. HIGHLIGHTS FROM STATISTICAL TABLES

Table 5 reveals that, contrary to popular impression and the experience of many other colleges of Arts and Sciences, the number of students enrolling as liberal arts majors continues to increase. The number of A&S majors increased by 9.3% in semester I over the previous year and 12.2% in semester II. The number of student credit hours generated by the College of Arts and Sciences increased by 8,255, a 2.9% increase over the previous year. The college generates well over half (54.2%) of the total student credit hours of the University of New Mexico. Growth continues differentially among the departments in the College of Arts and Sciences. In 1982-83, the departments of Chemistry, Mathematics and Statistics and Journalism showed increases in the number of student credit hours generated.

V. CONTINUING PROBLEMS AND PROSPECTS

Unfortunately, many of the problems and prospects reported in these two annual reports continue to hinder the quality of our performance in teaching, research and service.

(1) Faculty and Staff Shortages.

Based on data provided by our departments, our college continues to be very short of faculty and staff. This past year requests were

submitted for an additional 22.67 faculty FTEs, 24.25 graduate assistants and 15.05 staff/clerical positions. This is a minimum number needed. There also continues to be a shortage of full-time faculty in our growing departments. Several of our departments continue to be critically short of secretarial/clerical/technical assistance. This condition imposes serious difficulties on the production and management of instructional and research materials. Paradoxically, even though we continue to secure additional automated and computerized research and office equipment such as mini-computers and word processors, this has compounded the need for additional staff support.

Many more graduate and research teaching assistantships are needed in the college. No additional TAs have been allocated to the College of Arts and Sciences for over a decade.

(2) Equipment Maintenance Funds.

Equipment maintenance funds continue to be practically nonexistent. Several expensive and necessary pieces of instructional and research equipment have been obtained over the past few years, largely through the efforts of our faculty scholars, the assistance and consideration of the associate provost for research and state funding agencies. Yet very little money has been available for the maintenance of this equipment. Because of the inevitable deterioration of mechanical and electronic equipment, some of it either has been rendered useless due to lack of maintenance, or wherever possible, faculty have been taken away from their instructional and research duties to function as maintenance service personnel.

(3) Supplies and Equipment.

Financial resources available for purchasing supplies and equipment

are critically and increasingly inadequate. Our departments typically run out of money for long distance telephone usage, copying, office supplies and equipment before the school year is over. This situation has been growing progressively worse every year.

(4) Travel Monies.

Money for travel to professional conferences continues to be embarrassingly inadequate. Our faculty members are expected to be aware of the latest developments in their profession and to present their latest research findings to their colleagues. This is particularly important at an emerging but somewhat geographically isolated university such as UNM. Yet, travel support to professional conferences is minimal.

(5) Salaries.

We are continuing to have weakened our competitive position on salaries. Beginning salaries remain roughly competitive, but the gap between the salaries we can offer continuing faculty and those available from outside institutions, both in the private and academic sectors, is becoming critically large. The past year we lost faculty in Geology, Psychology and Speech Communication because we were unable to offer competitive salaries. The salary problem is particularly acute among our senior professors, especially in the sciences. The "market compression" of salaries almost has reached the point of being intolerable, as some senior faculty find their salaries close to those offered to new faculty members.

Graduate assistant stipends also remain below those of comparable institutions causing considerable difficulty in attracting the best graduate students. The salaries of our nonfaculty staff are also generally below levels for comparable work off this campus.

A chronic problem is the lack of adequate pay for chairpersons who need to perform administrative duties during the summer. Most other institutions, including our sister institutions in this state, pay administrative stipends of an additional 1/9 or 2/9 annual salary to chairpersons who administer their departments during the summer. A substantial amount of work, especially in our large departments, necessarily must be carried out by chairs at the end of the academic year as well as prior to the new academic year. Prior to 1981 most chairs were not paid at all for the administrative activities performed during the summer. In the 1980-81 year, a start was made toward remedying this inequity; this practice continued into the past year with chairs being paid a very small and inadequate amount ranging from 2% to 8% for their summer administrative duties. As our enrollments continue to expand we must make every effort to garner resources for at least one month's administrative pay for chairpersons.

(6) Affirmative Action.

The college continues to be committed to the principles of affirmative action. Although in general we remain considerably below our goals in hiring women and ethnic minority faculty, some minimal progress has been made, as a few ethnic minority and women faculty members were hired this past year. Continued efforts in this direction will be made.

(7) Physical Plant Space.

We continue to be short of space. Additional office spaces for instructional staff as well as for our teaching and research laboratories are badly needed. Our science departments must be provided with additional laboratory and office space to meet the increased demands upon them. Some of our social science facilities such as those in Economics

and Political Science are also inadequate. The lack of space for the Department of Mathematics is critical.

(8) Summer Session.

Due to the budget cuts the College of Arts and Sciences was forced to reduce course offerings by approximately one-third for the 1983 summer session. Although the number of courses was reduced by 30%, preliminary enrollment reports revealed a reduction of some 15% in the number of students enrolled in our classes. The difference was accounted for by the extraordinary efforts of faculty who taught very large classes without much, if any, assistance and took it upon themselves to offer many students independent study and directed readings and problems courses.

(9) Centers of Technical Excellence.

Several departments in our college will be greatly affected by the supplemental appropriations being made available for the development of "centers of technical excellence." Most involved in the Center for Material Sciences will be our Department of Physics and its Institute of Modern Optics in addition to our departments of Chemistry, Geology and Mathematics and Statistics. An ad hoc planning committee headed by Chairman Marc Price of our Department of Physics provided the initial input from our college into the developing organization of the centers at UNM. Dean Garcia serves as a member of the Center's steering committee which will have the prime responsibility for supervising our centers of technical excellence at this university.

(10) Reorganization of the College.

Our departments of science and mathematics have proposed a reorganization of the college, which includes the formation of a separate college of science and mathematics. The subject has received some initial

consideration, and materials on this subject are being gathered from various sources. Discussion is expected to continue during the coming academic year.

VI. DEPARTMENTAL REPORTS

The reports of our 20 departments and the several divisions and offices of our college (appended) deal with matters of curriculum review and change, space problems, the scholarly activities of members of the faculty, service in professional societies, scholarly meetings held or to be held at UNM, special instructional programs, special research activities, visiting scholars and lectures, activities designed for the general public and the successes and frustrations uppermost in departmental consciousness. These reports are an integral part of the A&S annual report (but they are not reproduced because of their bulk). Interested readers are invited to borrow a copy of any departmental report from the A&S office, the Secretary of the University or the department itself.

ANNUAL REPORT OF THE A&S GRADUATE COMMITTEE
Richard C. Metzler

According to the statement of Policies and Procedures of the Arts and Sciences Graduate Committee, the A&SGC is required to "present an annual report to the A&S faculty summarizing actions taken within the area of its authority." This report follows. Faculty desiring more detailed information are invited to consult the minutes of the A&SGC which are transmitted to the departmental representatives on the A&SGC. Additionally, a file of minutes is maintained in the office of Associate Dean R.C. Metzler, A&SGC chairman.

The A&SGC met eight times during the 1982-83 academic year and some of the standing subcommittees met during the year. The A&SGC elects two representatives to the Senate Graduate Committee each year. Our representatives were Professor Barbour from English and Professor Morrow from Chemistry.

Following are summarized minutes of the A&SGC meetings for 1982-83.

Fall Semester

1. September 10, 1982. Dick Metzler was re-elected chairman of the committee. The committee approved a new program in Applied and Public History.

2. October 1, 1982. A CR-NC grading system in Economics 495 was approved. A proposal for a University-wide language requirement was discussed. The concensus was that such a requirement was inappropriate at this time.

3. October 15, 1982. A combined five-year master's and bachelor's program in Chemistry was approved. The committee discussed a draft proposal for approval of graduate faculty.

4. October 29, 1982. The committee voted to support the existing A&S Graduate Committee policy on approval of graduate faculty in preference to the draft proposal from the Senate Graduate Committee.

5. November 19, 1982. The committee voted to recommend to the A&S faculty that the exchange representative from the College of Education Graduate Committee be a voting member of the A&SGC. (Recommendation was later rejected by the A&S faculty.)

6. February 3, 1983. A request for CR-NC grading in French 440 was approved. The revised rule on appointment of the fifth member of the dissertation committee was discussed.

7. February 24, 1983. The committee approved a revised master's program in Speech Communication.

8. April 14, 1983. An appeal by the Department of Physics of an adverse subcommittee decision was heard. The committee voted to reverse the subcommittee's decision and allow the Physics master's candidate to graduate. A statement on the 'fifth member' of the dissertation committee was approved.

Subcommittee Activities

The subcommittee on students dealt with several student complaints and selected recipients for two small grants from Mountain Bell. The subcommittee on faculty served as the dean's advisory committee on sabbatical leave requests.

ANNUAL REPORT ON SUMMER SESSION
Richard C. Metzler

In November 1982, the departments submitted their summer budget requests to the College of Arts and Sciences. These came to a total of $538,316 as calculated in terms of 1982 salaries. In February, the provost's office informed the college office that cuts should be made in planned offerings to reduce the budget to 96% of the previous summer's budget.

In April, after the legislature reduced total University funding to 96% of the formula, the college was told that a 4.7% reduction in total budget was necessary. To save this amount it was decided to cut the summer budget drastically. With excellent cooperation and help from the department chairs, the unpleasant choices were made and 59 courses were eliminated, a 33% reduction from the 178 courses offered by Arts and Sciences last year. Expenditures fell to 71% of last year's total or $370,733. Enrollment, however, was down only 16% from 6,305 students to 5,358 students since high-enrollment courses were spared.

The International Programs in Mexico and Spain enrolled 20 and 19 students respectively. The German summer language program in Taos had 65 students plus teaching assistants taking upper-level and graduate courses; the French school had 40 students at junior level and above.

ANNUAL REPORT ON TRAVEL
Richard C. Metzler

The travel budget for 1982-83 was $35,000 which represented a decrease of 16% from the previous budget. We continued the policy of supporting one trip only and reduced the level of support to 50% of the "lowest fare with no restrictions on time of flight or time of travel." It appears that our effort to stretch the available funds by reducing the level of support from 60% to 50% had the unfortunate effect of making travel prohibitively costly for a large number of faculty. Unlike previous years, our funds were never fully committed.

The 4% budget reduction for this fiscal year resulted in total elimination of the travel budget. No funds are available from A&S to support faculty travel. This elimination, together with the reduced support last year, means that faculty members without grant travel funds have been effectively isolated from their colleagues. Damage has been done which will take years to repair.

ANNUAL REPORT OF THE A&S ADVISEMENT CENTER
Julian E. White, Jr.

Personnel

Tom Parker (.50) resigned in June and Al McFarland (.50) has been working the additional hours.

An additional position was added in June to bring the center back up to full staffing (4.0) after the loss of a position, a bit at a time, over the past lustrum. This position was filled by Pierrette-Monique Denzler. Monique is a native of Switzerland, fluent in German, French, English, and Spanish. She received her undergraduate degree from the University of Albuquerque, her MA in French from UNM and is currently ABD for the Ph.D. in Romance Languages.

Diane Rawls was awarded the Ph.D. in Romance Languages in May 1983.

Student Contacts

From July 1, 1982 to June 30, 1983, the advisement center had personal contact with 9,100 students seeking advisement. This total is a bit lower than last year because our advisement at Kirtland Air Force Base was transferred to Admissions and Records. Not included in the above figure is advisement by telephone, of which we keep no formal records. A reasonably accurate estimate is an average of 30 phone advisements a day, about 7,500 per annum.

Other Activities

Questionnaires were sent to numerous professional schools, both in our region and to others with national reputations and/or which UNM graduates historically attend, in order to update our pre-professional advisement and handouts. These included dental, chiropractic, occupational

therapy, forestry, veterinary medicine, and optometry schools this year. This is part of a continuous updating of our pre-professional advisement information.

Diane Rawls and Associate Dean White attended a Western Interstate Commission on Higher Education (WICHE) conference on dental manpower. The conference was held in Santa Fe and was primarily concerned with dental school enrollments in the WICHE participating schools and the question of New Mexico's contract arrangement with non-WICHE dental schools.

All advisors participated in UNM Senior Day, sponsored by the Office of School Relations. High school students from throughout New Mexico visited UNM for information on programs offered in various colleges and departments. Much information was also given out by our advisors on the requirements of various professional schools.

Advisors met with representatives from the Washington University (St. Louis) Dental School and the University of Missouri (Kansas City) Dental School in their recruitment efforts and application procedures.

Diane and Polly Keightley participated in the Spring Career Fair, jointly sponsored by Arts and Sciences, Career Planning and Placement, and Anderson School of Management.

Diane served on the Adult Re-Entry Committee as the advisement center representative. This committee organized and implemented an extended hours program at UNM to serve better the non-traditional adult returning student population. Diane was also a member of the PACE grant subcommittee to select recipients of funds from a new grant directed to non-traditional students.

Adviser for a Day program at the branch colleges continued this year. Diane went to the Gallup and Valencia branches; Polly went to the Los Alamos branch.

Diane and Polly participated in the Academic Mart, acquainting students with A&S programs and departments.

Polly has been working with Associate Dean Elinore Barrett on a questionnaire for A&S graduates from 1973 and 1981. The purpose of this questionnaire is to determine students' opinions about the value of their degree in terms of personal satisfaction, employment, and preparation for graduate school. They are asked to describe specific aspects of their educational experience which have been either valuable or not valuable, and to inform us what careers they are currently pursuing. About 300 questionnaires have been returned and Polly is presently coding the responses and preparing a statistical analysis.

Diane and Polly attended the Pre-Med Day program at the UNM Medical School. The experience was valuable to the Health Sciences Advisory Committee because of a better understanding of admissions procedures and the opportunity to interact with other pre-medical advisers in New Mexico universities.

Polly and Diane attended the two-day ACT Conference at the Sheraton Old Town. The main topic was recruitment and retention procedures which have been proven successful on various campuses. Advisors, faculty, and admissions personnel from throughout New Mexico were in attendance.

Polly, along with a group from Career Planning and Placement, attended the Myers-Briggs Conference/Workshop on the Myers-Briggs Type Indicator. The workshop aided in understanding certain personality factors and their effects on academic and career choices. This was a

preliminary exposure to this test and we feel that, while the concepts have been useful in helping counsel students, we are not yet sufficiently trained in its interpretation to be able to use it in our advisement. Our main testing vehicle continues to be the Strong-Campbell Interest Inventory.

During the report period 77 Strong-Campbell Interest Inventories were authorized and intrepreted.

Health Sciences Advisory Committee

The work of this committee is included here because pre-health sciences advisement is a function of the A&S Advisement Center and because advisement center personnel, under the chairmanship of Associate Dean White, serve as interviewers for medical school and dental school applicants who want or are required to have a HSAC recommendation. As evaluators of applications, the HSAC is served by members Paul Kerkof (Biology) and Ulrich Hollstein (Chemistry).

For the 1983 medical schools entering class, the HSAC interviewed 32 applicants, mostly to the UNM School of Medicine. Of these 32, 18 were accepted at a medical school and three were placed on the UNM alternate list. Two of these alternates was accepted. In addition to UNM, interviewees were accepted at Albert Einstein (Yeshiva University), Tulane, Oklahoma, George Washington. There may be others who have been accepted but have not informed the committee. The committee also devised a questionnaire sent to all applicants to determine if they were accepted and to learn their opinions of the interview and recommendation process--what was beneficial and how the procedure might be improved. Responses to this questionnaire have been nearly unanimously favorable. We estimate that each interview takes about 7-10 man hours, depending on whether there

are three or four interviewers: one hour+ for the interview, one-half+ hours of study of the dossier before the interview, and one-half+ hours to write up the individual evaluations. To this must be added the time spent in evaluation and writing their recommendations by Professors Hollstein and Kerkof and the compilation of evaluations and writing of the final letter of recommendation by the HSAC chairman.

TABLE 1

CHAIRPERSONS AND PROGRAM DIRECTORS, 1982-83

Departments

AMERICAN STUDIES
Samuel B. Girgus

ANTHROPOLOGY
Jeremy A. Sabloff

BIOLOGY
Donald W. Duszynski

CHEMISTRY
Riley O. Schaeffer

COMMUNICATIVE DISORDERS
Lloyd E. Lamb

ECONOMICS
Alfred L. Parker

ENGLISH
Hamlin Hill

GEOGRAPHY
Rodman E. Snead

GEOLOGY
Rodney C. Ewing (Sabb. Sem. I)
Wolfgang E. Elston, Acting (Sem. I)

HISTORY
Janet Roebuck

JOURNALISM
Robert H. Lawrence

LINGUISTICS
Alan J. Hudson-Edwards

MATHEMATICS AND STATISTICS
W. Tom Kyner

MODERN AND CLASSICAL LANGUAGES
Tamara Holzapfel

PHILOSOPHY
Fred G. Sturm

PHYSICS AND ASTRONOMY
R. Marcus Price

POLITICAL SCIENCE
James L. Ray

PSYCHOLOGY
Henry C. Ellis

SOCIOLOGY
Patrick H. McNamara, Acting (Sem. I)
George A. Huaco, Acting (Sem. II)

SPEECH COMMUNICATION
Kenneth D. Frandsen

Programs

ASIAN STUDIES
Jonathan Porter

COMPARATIVE LITERATURE
Joseph Zavadil

EUROPEAN STUDIES
Steven P. Kramer (Co-director)
M. Jane Slaughter (Co-director)

FRESHMAN ENGLISH
Michael J. Hogan

IBERO-AMERICAN STUDIES
Jon M. Tolman (Acting)

INSTITUTE OF METEORITICS
Klaus Keil

INSTITUTE OF MODERN OPTICS
Marian O. Scully

LATIN AMERICAN STUDIES
Jon M. Tolman

MAXWELL MUSEUM
J.J. Brody

OFFICE OF CONTRACT ARCHEOLOGY
Joseph C. Winter

PALEOECOLOGY
Roger Y. Anderson

RUSSIAN STUDIES
Natasha Kolchevska

TABLE 2

STANDING AND SPECIAL COMMITTEES,
COLLEGE OF ARTS AND SCIENCES, 1982-83

A&S Tenure Committee

Lewis R. Binford, Anthropology, Chairman
Roger Y. Anderson, Geology
Colston Chandler, Physics
Barry J. Gaines, English
Samuel Roll, Psychology
Hugh H. Witemeyer, English
Gerald J. Boyle, Economics

A&S Promotion Committees

Humanities:

Hugh Witemeyer, English, Chairman
Charles K. Coates, Journalism
Gerald D. Nash, History
Alfred Rodriguez, Modern and Classical Languages
Howard Tuttle, Philosophy

Natural Sciences and Mathematics:

Roger Y. Anderson, Geology, Chairman
Fritz S. Allen, Chemistry
James R. Gosz, Biology
Colston Chandler, Physics
Douglas P. Ferraro, Psychology
Art Steger, Mathematics and Statistics

Social Sciences:

Gerald J. Boyle, Economics, Chairman
Linda Cordell, Anthropology
George A. Huaco, Sociology
Janice Schuetz, Speech Communication

A&S Human Subjects Committee

Henry C. Harpending, Anthropology, Chairman
Harold D. Delaney, Psychology
Allen Lichtenstein, Speech Communication
Jay Sorenson, Political Science
Paul D. Steele, Sociology
Priscilla N. Thompson, Community Representative

TABLE 2 (contd.)

A&S Academic Policy and Curriculum Committee

Clifford S. Crawford, Biology, Chairman
Elinore M. Barrett, Geography
Paul B. Davis, English
Peter A. Lupsha, Political Science
Alexander P. Stone, Mathematics and Statistics
George F. Schueler, Philosophy
Ferenc M. Szasz, History

A&S Committee on Southwestern Studies

Samuel B. Girgus, American Studies, Chairman
Richard Ellis, History
Tobias Duran, Chicano Studies
Charles Biebel, American Studies
Ted Jojola, Native American Studies
Marta Weigle, Anthropology
Susan Alvarado, Anthropology

A&S Teaching Resources Committee

Jean M. Civikly, Speech Communication, Chairperson
Charles K. Coates, Journalism
William M. Dabney, History
David E. Kidd, Biology
Barry Kues, Geology
George F. Schueler, Philosophy
Michael Zeilik, Physics

A&S Student Advisory Committee

Richard Bustamante, American Studies
Billie Concha, American Studies
Ann E. Lilienthal, Anthropology
David Legare, Anthropology
Danette Galatas, Biology
John Martin, Biology
Carole Gervais, Chemistry
Scott Johnson, Chemistry
Karen Mitchell, Communicative Disorders
Keith Burris, Economics
Peter Goss, English
Patricia O'Connor, English
Doug D. Rizor, Geography
Dave Madsen, Geology
Jennifer Swedberg, History
Kelley Gibbs, Journalism
Judy Nakamura, Journalism
Karen Villesvik, Linguistics
Timothy Kraus, Mathematics and Statistics

TABLE 2 (contd.)

A&S Student Advisory Committee (contd.)

Ruth E. Gross, Modern and Classical Languages
Donald P. Branch, Philosophy
Richard Elston, Physics
Traci Wolf, Political Science
Conrad Rocha, Political Science
Michael W. Otto, Psychology
Anthony K. Contreras, Sociology
Ross M. Ostic, Sociology
Geraldine Rivera, Speech Communication
Mona Schiff, Speech Communication

A&S Graduate Committee

Richard C. Metzler, Chairman (Associate Dean, Arts and Sciences)
Samuel B. Girgus, American Studies
Richard Barrett, Anthropology
John Wiens, Biology
Cary Morrow, Chemistry
Linda Riensche, Communicative Disorders
Sanford Cohen, Economics
James Barbour, English
Bradley Cullen, Geography
Barry Kues, Geology
Jonathan Porter, History
John Oller, Linguistics
Richard Allen, Mathematics and Statistics
Alfred Rodriguez, Modern and Classical Languages
Fred Schueler, Philosophy (Sem. II)
Russell Goodman, Philosophy (Sem. I)
Charles Beckel, Physics
Peter Lupsha, Political Science
John Rhodes, Psychology
Philip May, Sociology
Kenneth D. Frandsen, Speech Communication
Dennis Heineman, Graduate Student Association
Nancy L. Mandell, Graduate Student Association

A&S Latin American Studies Advisory Committee

Dick C. Gerdes, Modern and Classical Languages, Chairman (Sabb. Yr.)
Jon L. Tolman, Modern and Classical Languages, Acting Chairman
Peter Bakewell, History
Peter Gregory, Economics
Robert Lenberg, Anderson Schools of Management
Erlinda Gonzales-Berry, Modern and Classical Languages
Karen L. Remmer, Political Science
Jeremy Sabloff, Anthropology
Susan Tiano, Sociology
Martin Needler, Political Science
Karl Schwerin, Anthropology

A&S TASK FORCE ON THE LIBERAL ARTS CORE CURRICULUM

Donald Skabelund, History
Robert Holzapfel, Modern and Classical Languages
Richard Barrett, Anthropology
David Hamilton, Economics
Paul Davis, English
Richard Holder, Chemistry
Clifford Crawford, Biology

A&S AMERICAN STUDIES COMMITTEE

Samuel B. Girgus, American Studies, Chairman
Ernest Baughman, English
Charles Biebel, American Studies
George Arms (Emeritus), English
Sanford Cohen, Economics
David King Dunaway, English
Robert Fleming, English
Douglas George, Art
Hamlin Hill, English
Ira S. Jaffe, Theatre Arts
Peter Lupsha, Political Science
Vera Norwood, Office of the Provost
Howard Rabinowitz, History
Harold Rhodes, Political Science
Daniel Slate, Anderson Schools of Management
M. Jane Slaughter, History
Anne Taylor, Art Education
M. Marta Weigle, Anthropology and English
Peter L. White, English

TABLE 3

FACULTY PROMOTIONS, RETIREMENTS, SEPARATIONS, AND APPOINTMENTS, TENURE AND THIRD-YEAR TERM DECISIONS, 1982-83

Promotions

To Full Professor:

Richard J. Harris	Psychology
Robert T. Paine	Chemistry
Stanley Steinberg	Mathematics and Statistics
Garland D. Bills	Linguistics/Modern and Classical Languages
Ferenc M. Szasz	History
Mary Marta Weigle	Anthropology/English
Paul L. Hain	Political Science
Peter Lupsha	Political Science

To Associate Professor:

Howard D. Fegan	Mathematics and Statistics
Stephen P. Huestis	Geology
Eligio R. Padilla	Psychology
Kathryn G. Vogel	Biology
Andrew J. Burgess	Philosophy
Erlinda Gonzales-Berry	Modern and Classical Languages
Peter White	English
Joseph Winter	Anthropology
Gary D. LaFree	Sociology
Arthur St. George	Sociology
Caroline Bledsoe	Anthropology

Separations

E. Scott Rushforth	Anthropology
Richard E. Murphy	Geography
Stuart H. White	Geography
Carroll J. Schwartz	Geography
William T. Holser	Geology
Kenneth Kettenring	Geology
William R. Roberts	History
F.D. McCann, Jr.	History
Jack E. Tomlins	Modern and Classical Languages
Sam L. Guyler	Modern and Classical Languages
Curtiss A. Barefoot	Mathematics
Peter Gilkey	Mathematics
Hanna Buczynska Garewicz	Philosophy
James G. Small	Physics
Kevin E. O'Grady	Psychology
Ernest Kilker	Sociology
Barbara A. Kohl	Sociology

TABLE 3 (contd.)

Separations (contd.)

Ralph L. Blankenship	Sociology
Allen Lichtenstein	Speech Communication

Retirements

Lise Hoshour	Modern and Classical Languages
David Benedetti	Psychology

New Appointments

Anthropology:

Chad R. McDaniel	Visiting Assistant Professor
Erik Trinkaus	Assistant Professor

Biology:

Robert Chiovetti, Jr.	Assistant Professor
Donald O. Natvig	Assistant Professor

Chemistry:

Peter R. Ogilby	Assistant Professor
Joseph Vincent Ortiz	Assistant Professor

Geology:

Robyn Wright	Assistant Professor

History:

John L. Kessell	Associate Professor

Mathematics and Statistics:

Robert D. Russell	Professor

Physics and Astronomy:

James C. Harvey	Associate Professor

Psychology:

Timothy E. Goldsmith	Assistant Professor

Sociology:

Gwynn Nettler	Visiting Professor
Richard McCleary	Associate Professor

TABLE 3 (contd.)

Third-Year Term Decisions

James S. Chisholm	Anthropology
Jon R. Maple	Chemistry
Bradley T. Cullen	Geography
Jeffrey A. Grambling	Geology
Crayton J. Yapp	Geology
Steven L. Strauss	Linguistics
Natasha Kolchevska	Modern and Classical Languages
Jack O. Burns	Physics
Richard Fralin	Political Science
Michael J. Dougher	Psychology
Jean E. Newman	Psychology
Kevin E. O'Grady	Psychology
Allen Lichtenstein	Speech Communication

Tenure Decision Date, June 30, 1983

Caroline H. Bledsoe	Anthropology
Evelyn P. Ewing	Biology
Kathryn G. Vogel	Biology
Antonio Marquez	English
Peter L. White	English
Stephen P. Huestis	Geology
Carla Wofsy	Mathematics and Statistics
Howard D. Fegan	Mathematics and Statistics
June C.D. Carter	Modern and Classical Languages
Eligio R. Padilla	Psychology

TABLE 4

FTE BUDGETED FACULTY, 1982-83

Department	Returning Faculty	New Faculty	Part-Time Instruction	GAs/TAs
American Studies	3.94	1.00	--	0.50
Anthropology	20.99	0.50	0.57	3.50
Biology	27.67	1.33	--	20.27
Chemistry	19.58	2.00	0.95	15.00
Communicative Disorders	6.87	1.00	0.39	1.00
Economics	18.30	1.00	0.42	3.50
English	37.92	--	5.85	24.25
Geography	8.00	--	--	1.50
Geology	14.83	1.00	0.36	6.50
History	26.17	--	--	7.50
Journalism	7.00	--	0.49	--
Linguistics	3.33	--	--	0.50
Mathematics & Statistics	37.52	1.83	2.53	11.00
Modern & Classical Languages	32.25	2.00	0.66	16.00
Philosophy	10.33	1.00	--	2.75
Physics & Astronomy	19.44	0.40	1.08	10.00
Political Science	14.18	0.50	1.33	2.00
Psychology	22.10	2.67	--	6.00
Sociology	14.37	1.00	--	2.50
Speech Communication	8.00	3.00	--	2.00
A&S Contingency	--	--	12.74	--
TOTAL	352.79	20.23	27.37	136.27

TABLE 5

NUMBER OF STUDENTS ENROLLED
COLLEGE OF ARTS AND SCIENCES

Year	Sem. I	% Inc. Over Prev. Year	Sem. II	% Inc. Over Prev. Year
1972-73	2,644	3.2	2,837	13.9
1973-74	2,857	8.0	2,797	- 1.4
1974-75	2,724	- 4.7	2,746	- 1.8
1975-76	2,684	- 1.5	2,756	0.4
1976-77	2,663	- 0.8	2,737	- 0.7
1977-78	2,582	- 3.0	2,602	- 4.9
1978-79	2,397	- 7.2	2,322	-10.8
1979-80	2,267	- 5.4	2,205	- 5.0
1980-81	2,099	- 7.4	2,350	6.6
1981-82	2,492	18.7	2,580	9.8
1982-83	2,725	9.3	2,896	12.2

TABLE 6

STUDENT CREDIT HOURS TAUGHT, UNM AND A&S

Year	Student Credit Hours UNM	Student Credit Hours A&S	A&S Percent of Total
1972-73	425,302	278,577	65.5
1973-74	420,311	256,979	61.1
1974-75	517,455	300,821	58.0
1975-76	461,641	285,551	61.9
1976-77	487,208	279,810	57.4
1977-78	476,229	267,786	56.2
1978-79	473,266	272,829	57.6
1979-80	495,039	279,666	56.5
1980-81	508,267	282,239	55.5
1981-82	516,956	280,455	54.3
1982-83	532,196	288,710	54.2
Change 1982-83 Over 1981-82	15,240 2.9%	8,255 2.9%	
Increase 1982-83 Over 1972-73	106,894 25.1%	10,133 3.6%	

TABLE 7

STUDENT CREDIT HOURS BY DEPARTMENT

Department	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	% Difference 1982-83
American Studies	3,002	3,158	2,302	2,077	1,923	2,063	2,196	1,875	-14.62
Anthropology	15,489	12,225	10,861	9,758	9,611	8,674	8,304	8,129	- 2.11
Biology	24,565	23,278	21,863	20,458	20,690	20,783	19,841	19,355	- 2.45
Chemistry	18,249	19,397	18,143	18,203	18,414	17,988	17,781	18,311	+ 2.98
Comm. Disorders	2,758	2,928	2,601	3,096	2,949	2,876	3,009	2,649	-11.96
Economics	13,045	12,168	13,899	15,369	17,346	18,136	16,784	15,744	- 6.20
English	30,478	31,370	29,128	30,109	32,813	33,117	34,175	33,980	- 0.57
Geography	6,008	5,545	5,410	6,001	6,296	5,664	5,390	4,972	- 7.76
Geology	8,728	8,797	8,154	9,023	10,211	10,212	9,555	8,637	- 9.61
History	21,740	19,745	19,960	21,192	19,598	17,924	17,344	15,674	- 9.63
Journalism	3,584	3,425	3,016	3,045	2,846	2,840	3,108	3,123	+ 0.48
Linguistics	1,986	1,615	1,304	1,319	1,042	3,176*	1,269	1,235	- 2.68
Math & Statistics	32,043	35,167	35,346	38,414	43,405	46,252	50,344	50,789	+ 0.88
Mod. & Clas. Lang.	23,985	21,491	19,648	19,178	18,901	19,063	17,593	15,583	-11.42
Philosophy	9,631	7,926	5,922	4,825	5,933	5,648	5,685	5,498	- 3.29
Physics & Astr.	12,847	11,842	11,731	12,278	12,998	14,009	14,812	14,742	- 0.47
Political Science	10,876	10,391	10,621	9,675	9,606	9,450	9,582	9,451	- 1.37
Psychology	24,832	24,422	24,273	25,358	22,080	20,607	22,447	21,601	- 3.77
Sociology	11,182	13,778	15,155	14,327	14,483	15,052	14,112	12,995	- 7.92
Speech Comm.	10,523	11,142	8,328	9,124	8,521	8,705	8,222	8,215	- 0.09
TOTAL	285,531	279,810	267,665	272,829	279,666	282,239	281,553	272,558	- 3.19

*Unusual figure due to 1980 Linguistics Institute.

TABLE 8

DEGREES AWARDED
COLLEGE OF ARTS AND SCIENCES

Year	Bachelor's Degrees		Advanced Degrees					
			Master's (a)		Doctor's		Total	
	No. of Degrees	% Inc. Over Previous Yr.	No.	% Inc.	No.	% Inc.	No.	% Inc.
1973	622	43.0	189	45.4	84	80.9	273	54.8
1974	734	18.0	154	-18.5	88	4.7	242	-11.3
1975	816	10.0	128	-16.8	64	-27.2	192	-20.6
1976	707	-13.3	128	0.0	74	15.6	202	4.2
1977	611	-13.6	159	24.2	69	- 6.8	228	12.9
1978	662	8.3	167	5.0	68	- 1.4	235	3.1
1979	577	-12.8	143	-14.4	55	-19.1	198	-15.7
1980	627	8.7	123	-14.0	58	5.5	181	- 8.6
1981	500	-20.3	121	- 1.6	73	25.9	194	- 7.1
1982	453	- 9.4	165	36.4	51	30.1	216	11.3
1983	523	15.5	153	- 7.3	55	7.8	208	- 3.7
10-Year Change	-99	-15.9	-36	-19.0	-29	-34.5	-65	-23.8

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

TABLE 9

DEGREES AWARDED, A&S AND UNM, 1973 AND 1983

College	Bachelor's Degrees			Advanced Degrees		
	1973	1983	% Inc.	1973	1983	% Inc.
Arts and Sciences	624	523	-16.2	285	208	-27.0
B.U.S.	396	236	-40.4	--	--	--
Other Colleges*	966	1,090	12.8	552	675	22.3
UNM TOTAL	1,986	1,849	- 6.9	837	883	5.5

*Excludes Law and Medicine.

TABLE 10

DEGREES AWARDED, BY DEPARTMENT[1]

Department	Bachelor's				Master's				Doctoral			
	1980	1981	1982	1983	1980	1981	1982	1983	1980	1981	1982	1983
American St.	0	0	4	1	--	1	3	1	5	8	4	8
Anthropology	33	27	19	24	9	12	10	18	6	4	5	5
Art[2]	8	6	4	2	--	--	31	15	--	--	--	--
Biology	74	77	55	82	12	7	5	8	10	6	6	5
Chemistry	19	11	15	19	9	11	6	6	--	9	6	8
Comm. Disorders	12	13	13	12	16	14	19	25	--	--	--	--
Comp. Lit.	1	1	1	1	--	3	--	--	--	--	--	--
Creative Wrtg.	--	--	7	4	--	--	--	--	--	--	--	--
Economics	40	45	42	59	3	6	5	4	3	3	1	3
English	44	28	27	30	5	3	7	8	5	2	7	7
English-Phil.	4	2	2	2	--	--	--	--	--	--	--	--
Geography	6	6	9	16	--	2	2	7	--	--	--	--
Geology	23	17	22	22	10	14	10	8	9	3	--	2
History	51	31	24	27	11	3	3	6	4	4	3	7
Home Economics[2]	4	--	1	--	--	--	5	2	--	--	--	--
Ibero-Amer. St.[3]	--	--	--	--	--	--	--	--	1	--	--	1
Journalism	30	22	21	27	--	--	--	--	--	--	--	--
Linguistics	--	1	1	3	1	5	1	--	--	--	--	--
Lat. Amer. St.	9	6	5	11	6	5	5	6	--	--	--	--
Math & Stat.	20	14	15	17	5	7	10	8	3	7	2	1
M&CL	33	30	16	32	4	2	12	10	3	10	3	3
Philosophy	3	5	1	4	2	--	2	3	1	--	1	--
Physics & Astr.	9	7	8	7	5	6	4	4	--	5	1	3
Pol. Science	65	34	43	46	4	1	4	1	2	--	--	1
Psychology	91	72	60	66	8	5	5	7	6	12	11	1
Religious St.	--	1	--	4	--	--	--	--	--	--	--	--
Russian St.	1	1	1	--	--	--	--	--	--	--	--	--
Sociology	21	21	23	29	--	--	2	1	--	--	1	--
Speech Comm.	24	22	19	22	11	14	14	5	--	--	--	--
TOTAL	627	500	458[4]	569	123	121	165	153	58	73	51	55

[1] Includes summer, fall and spring graduates.
[2] Not department of the College of Arts and Sciences, but major or minor is allowed.
[3] Interdisciplinary program at the doctoral level.
[4] Degrees granted with double majors are counted once in each major department, so this total will not agree with Table 9.

TABLE 13

DEGREES GRANTED WITH HONORS*

Honors in General Studies	
Summa Cum Laude	1
Magna Cum Laude	2
Cum Laude	3
Departmental Honors	
Chemistry	4
Economics	2
Physics and Astronomy	1
Political Science	4
Psychology	8
Initiated into Phi Beta Kappa	25
Initiated into Phi Kappa Phi	17

*Requirements completed Semester II, 1981-82; Summer 1982; Semester I, 1982-83.

TABLE 11

ACADEMIC PROBATIONS, SUSPENSIONS, AND RELEASES
COLLEGE OF ARTS AND SCIENCES

	1978-1979		1979-1980		1980-1981		1981-1982		1982-1983	
	No.	%	No.	%	No.	%	No.	%	No.	%
Semester I										
On Probation	258	10.8	216	9.5	186	8.9	249	10.0*	465	17.1
Suspended	46	1.9	106	4.7	77	3.7	126	5.1	107	3.9
Released	48	2.0	40	1.8	30	1.4	47	1.9	74	2.7
Semester II										
On Probation	207	8.9	335	15.9	191	8.1	244	9.5*	505	17.4
Suspended	51	2.2	107	4.9	112	4.8	91	3.5	119	4.1
Released	57	2.5	61	2.6	64	2.7	85	3.3	76	2.6

Number of Students Enrolled in Arts and Sciences:

Semester I, 1982-83	2,725
Semester II, 1982-83	2,896

*These figures do not include students admitted on probation.

TABLE 12

DEAN'S LIST, COLLEGE OF ARTS AND SCIENCES
NUMBER OF STUDENTS WITH GPA OF 3.00 AND ABOVE
FOR WORK OF 15 HOURS OR MORE TAKEN IN THE SEMESTER WITH GRADE

Grade Point Average	1979-80				1980-81			
	Sem. I		Sem. II		Sem. I		Sem. II	
	No.	%	No.	%	No.	%	No.	%
4.00	43	1.9	38	1.7	48	2.3	44	1.9
3.50-3.99	109	4.8	118	5.4	103	4.9	130	5.5
3.00-3.49	172	7.6	147	6.7	152	7.2	192	8.2
TOTAL	324	14.3	303	13.7	303	14.4	366	15.6
	1981-82				1982-83			
4.00	39	1.6	44	1.7	51	1.9	47	1.6
3.50-3.99	132	5.3	147	5.7	134	4.9	137	5.0
3.00-3.49	182	7.3	194	7.5	190	7.0	224	7.7
TOTAL	353	14.2	385	14.9	375	13.8	408	14.1

NOTE: % represents the percentage of the total Arts and Sciences enrollment for the semester indicated.

TABLE 14

NEW RESEARCH AND TRAINING GRANTS, 1982-83

Department	Dollars	Number of Faculty	Number of Grants
American Studies	7,972	2	2
Anthropology	269,197	6	8
Biology	947,599	16	22
Chemistry	334,217	8	12
Communicative Disorders	116,145	1	2
Economics	67,296	4	5
English	13,500	1	1
Geography	810	1	1
Geology	754,771*	7	15
History	48,372	2	4
Mathematics and Statistics	206,350	4	5
Physics and Astronomy	554,175	11	15
Psychology	49,524	2	2
Sociology	36,533	2	2
Contract Archeology	426,609	2	37
Maxwell Museum	29,488	5	6
TOTAL	3,862,558	74	139

*$535,726 for Meteoritics included.

TABLE 15

BUDGETED GAs/TAs, RESEARCH AND
PROJECT ASSISTANTS AND TRAINING GRANTEES

Department	GAs & TAs	RAs, PAs, & Trainees
American Studies	0.50	—
Anthropology	3.50	1.00
Biology	20.27	2.50
Chemistry	15.00	7.00
Communicative Disorders	1.00	—
Economics	3.50	3.00
English	24.25	—
Geography	1.50	—
Geology	6.50	4.00
History	7.50	0.50
Journalism	—	—
Linguistics	0.50	—
Mathematics and Statistics	11.00	0.50
Modern & Classical Languages	16.00	1.00
Philosophy	2.75	—
Physics and Astronomy	10.00	5.00
Political Science	2.00	—
Psychology	6.00	0.50
Sociology	2.50	0.50
Speech Communication	2.00	—
TOTAL	136.27	25.50

TABLE 16

SUMMER SESSION DATA, 1982 AND 1983

Department	Final 1982 Figures Allocation	%	Final 1983 Figures Allocation	%
American Studies	$ 5,615	1.07	$ 5,947	1.61
Anthropology	21,328	4.06	19,212	5.21
Biology	32,770	6.24	17,438	4.73
Chemistry	28,325	5.39	16,375	4.44
Communicative Disorders	4,565	0.87	2,850	0.77
Economics	22,077	4.20	17,130	4.65
English	71,109	13.54	36,573	9.93
Geography	9,889	1.88	6,935	1.88
Geology	11,924	2.27	10,244	2.78
History	30,319	5.77	19,182	5.21
Journalism	13,522	2.58	7,834	2.12
Linguistics	8,290	1.58	4,955	1.34
Mathematics and Statistics	63,155	12.03	53,898	14.63
Modern & Classical Languages	82,855	15.78	69,341	18.82
Philosophy	8,556	1.63	5,131	1.39
Physics and Astronomy	20,280	3.86	13,228	3.59
Political Science	15,757	3.00	7,544	2.05
Psychology	22,865	4.35	15,845	4.30
Sociology	15,941	3.04	10,291	2.79
Speech Communication	16,588	3.16	10,966	2.98
Foreign Programs	15,710	2.99	17,496	4.75
Research Stipends	3,600	0.68	—	—
Contingency	—	—	—	—
TOTAL	$525,040	100.00	$368,415	100.00

TABLE 17

A&S TRAVEL DISBURSEMENTS

Department	Paper Presentation		Officer Participation		Miscellaneous Attendance	
	No. of Trips	Amount	No. of Trips	Amount	No. of Trips	Amount
American St.	2	$ 368.00	—	—	—	—
Anthropology	9	2,020.00	—	—	2	$ 220.00
Biology	12	2,290.50	—	—	1	136.20
Chemistry	6	1,216.00	—	—	1	321.00
Comm. Disorders	—	—	—	—	—	—
Economics	2	449.00	1	$ 221.00	2	320.00
English	7	1,340.00	—	—	6	1,081.50
Geography	1	112.00	—	—	3	179.50
Geology	2	271.00	—	—	—	—
History	8	1,497.00	1	240.00	4	606.00
Journalism	—	—	—	—	—	—
Linguistics	1	99.00	—	—	1	315.00
Math & Stat.	5	1,155.00	—	—	2	293.00
M&CL	8	1,235.67	—	—	10	1,521.64
Philosophy	2	380.00	1	218.50	2	449.00
Physics	4	856.50	—	—	2	370.75
Pol. Science	6	1,304.27	—	—	4	610.30
Psychology	11	2,144.50	2	442.00	2	490.00
Sociology	7	1,297.50	—	—	1	150.70
Speech Comm.	3	401.50	—	—	5	859.10
TOTAL	96	$18,437.44	5	$1,121.50	48	$7,923.69

The Report of the Department of American Studies
July 1, 1982 -- June 30, 1983
Sam B. Girgus, Chair

GENERAL INFORMATION

This year the American Studies Department implemented a reorganization of the core faculty, which included the introduction of new faculty members. The appointments of Professors Marta Weigle, Peter White and Peter Lupsha to the department and the new appointments of Professors Jane Caputi and Vera Norwood reflected the new development of areas and concentrations within American Studies, the most important of which are Southwest Studies and regionalism, American folklore, media and popular culture, sexuality and the family and women in America. Together with the work of faculty already appointed in American Studies, the new faculty members contributed greatly to the department's strengths, depth and range in each of these areas. This restructuring has enhanced the overall mission of the American Studies program and all the new members have helped fulfill our primary focus on American life and thought. Graduate students will be able to get their master's and doctoral degrees in American Studies in each of the areas of interest.

The department has also worked to reorganize and revitalize long-standing interest in and leadership of the area of Southwest Studies. This effort was done in coordination with the work of the Committee on Southwest Studies, which is chaired by Sam Girgus. However, the department members most concerned with this area of study assumed the burden

of responsibility for its development. These were Charles Biebel and Vera Norwood. Professor Biebel plans to assume overall leadership of the project next year. The department has moved to identify core courses in Southwest Studies offered not only in American Studies, Native American Studies and Chicano Studies, but in other colleges and departments throughout the university. Professor Biebel is preparing new literature and promotional materials to use internally and across the country to advertise resources for studying about the Southwest at UNM. This year the department formalized a set of courses within the American Studies Department dealing with the Southwest. These include:

Am. St. 221 - Introduction to Southwest Studies
Am. St. 241 - The Chicano Experience in the U.S.
Am. St. 286 - Southwest Indian Communities
Am. St. 321 - The Indian in Multi-Cultural Society
Am. St. 322 - Five Civilized Tribes
Am. St. 341 - History of Conflict in New Mexico
Am. St. 360 - Albuquerque in a Cultural Context
Am. St. 361 - Made in the Southwest

Also planned is a new graduate seminar entitled Introduction to Southwest Studies, to be offered in the spring of 1984.

FACULTY

Perhaps the most visible addition to the department in terms of faculty and area concentration can be found in the work and contribution of Jane Caputi. With Professor Caputi on the faculty it has become possible for us to do truly meaningful research and teaching in the area of popular

culture and the mass media within the department. She has taught courses on popular film, rituals in American life, and a general introduction to popular culture studies. Her course on popular film was most successful, attracting about fifty students, and it will be repeated in the fall semester. She will also be designing and teaching classes in television studies, mass media criticism, and popular literature.

The department has acquired a video-cassette recorder and portable radio/tape player for Professor Caputi's use. She has been able to integrate video and audio resources into her lectures and class materials. Such equipment not only enriches current classes, but will be used to enable her to teach in other areas that specifically require these media--television, popular music, and film.

Professor Caputi has also written an article entitled "One Size Does Not Fit All: Stereotypes of Beauty and Thinness in American Culture," for the book The Popular Culture Reader. She attended the joint Popular Culture/American Culture Association convention in Wichita, Kansas this spring, where she presented a paper on this topic. She is now working on a book, The Age of Sex Crime, an analysis of sexual murder in the 20th century, which should be ready for publication in 1984. Professor Caputi has also given a number of public lectures--both on the campus and to the American Association of University Women in Gallup--and

has been interviewed on both KUNM radio and local television on the functions of sterotyping in the mass media and advertising.

Associate Professor Charles Biebel is again this year a consultant to the Museum of Albuquerque on the Planning Research Institute's project, "Albuquerque 2000" and on the new permanent history exhibit. He is continuing his research and publishing in American educational history and Southwest culture studies. He has prepared a major National Endowment for the Humanities grant proposal for the development of an inter-disciplinary, multi-cultural curriculum development project for the UNM General College, and in conjunction with Barbara Strelke of the College he is preparing a reader to be used this fall in the 100 level Social Sciences courses. Professor Biebel is helping to coordinate the Los Ranchos Oral History Project, a newly devised project to chronicle the history of Albuquerque's North Valley.

Professor Vera Norwood has emphasized a feminist approach to regional studies. Her work in this area received important official recognition through her awards from the Rockefeller Foundation and the New Mexico State Humanities Council to do a book on creative women in the Southwest. The research will produce a book which is a study of a century of American Indian, Hispanic, and Anglo women writers' and artists'

responses, across genres, to the landscape of the Southwest. The research will help revise conceptualizations of regional and national character and culture. Professor Norwood is co-director of the grant with Dr. Janice Monk of the University of Arizona. Other proposals have also been submitted to the NEH and the State Humanities Council, and Professor Norwood continues to publish extensively in this area.

Professor Sam Girgus' book, The American Self: Myth, Ideology and Popular Culture was reissued in a paperback edition with a new introduction. The book has been reviewed as an example of the department's national leadership in the field of American Studies. Professor Girgus also was invited to become a member of the Publications Committee of the national American Studies Association, and to publish in Prospects, the leading organizational annual journal. He has been awarded a Senior Fulbright Lectureship to Heidelberg for the summer of 1984, and has been asked to contribute to a new collection of works on W. D. Howells which is being edited by Edwin H. Cady. His forthcoming book, The New Covenant: Jews and the American Idea, will be out in the spring. In terms of teaching and research in the past year, Professor Girgus has developed two new courses focusing on Freudian interpretations of the relationship between sexuality and ideology and on the relationship involving language, symbols, and the unconscious--"The Semantics of Desire."

These courses relate to the department's interest in sexuality, women and the family in America.

Professor Hamlin Hill of the English Department was the University's Annual Research Lecturer for 1982. He was a guest professor at the University of Würzburg in the early summer. In April he spoke to the WHIM conference at Arizona State University; he is an editorial consultant to American Literature. His recent publications include: Mark Twain's Collected Letters, Vol. 2 (with Frederick Anderson); "Roughing It: The End of The American Dream," American Renaissance and The American West; "Mark Twain," Dictionary of Literary Biography, Vol. 12; "The Great American Novel," Critical Essays on Philip Roth; "Archy and Uncle Remus," The Georgia Review in Twentieth-Century Literary Criticism.

Professor Peter White was tenured and promoted to Associate Professor of English and American Studies. With Professor Lee Bartlett, he is co-editing a new journal called American Poetry, which will publish any aspects of American poetry from the Puritans to the present. He is currently doing the final editing on his anthology to be published by Penn State Press, Puritan Poets and Poetics, a collection of twenty-five essays on the practice and theory of poetry in seventeenth-century New England. In addition, this year he and Professor Marta Weigle received

a contract from the University of New Mexico Press to do a book on the folklore and folklife of New Mexico.

Professor Marta Weigle was promoted to full Professor of Anthropology, English and American Studies. She is the president and editor of Ancient City Press, in Santa Fe; a member of the University Press Committee; director of the Spanish Colonial Arts Society; a board member of the New Mexico Folklife Center and series editor for publications of the American Folklore Society. This spring she lectured at Colorado State University and at the annual meeting of the Historical Society of New Mexico in Santa Fe. Her recent writings include Spiders and Spinsters: Women and Mythology (UNM Press, 1982); Santa Fe and Taos: The Writer's Era, 1916-1941 (with Kyle Fiore); New Mexico Artists and Writers: A Celebration, 1940 (with Kyle Fiore); several articles for New America, the journal produced within the American Studies Department; Final Report, June 28, 1982, for National Endowment for the Humanities grant "Governmental Support for the Arts in New Mexico, 1933-1943" (with William Wroth).

Professor Peter Lupsha was this year promoted to full Professor of both Political Science and American Studies. His interest in the study of crime and violence in America was acknowledged through his leadership of conferences held throughout the country, and he was continued to publish

extensively in this area.

NEW AMERICA

New America, the journal produced within the American Studies Department, is celebrating ten years of publication this year. The journal has been strengthened with the appointment by Dean Garcia of a new inter-college Editorial Board responsible for general editorial policy and review development. New America has made a joint agreement with the University of New Mexico Press for promotion, distribution, and future reprinting of out-of-print back issues. Also, the journal this year received special financial support from Associate Provost Scaletti and from the Dean's Office of the College of Arts and Sciences; other special funding included grants from the New Mexico Arts Division and the National Coordinating Council of Literary Magazines. At this time a special issue entitled The Child in Contemporary America is in press and Cuentos Chicanos, a collection of short stories by contemporary Chicano writers, is in preparation for its second edition.

STUDENTS

In 1982-83 there were forty-five students enrolled for graduate courses in the fall semester and forty-one enrolled for the spring semester. Students successfully completing their dissertations in American Studies during the past year were:

Agnesa Lufkin, Domestic Architecture of Northern New Mexico Since the Railroad Era and its Significance as a Symbol of a Regional Lifestyle

Winona M. Garmhausen, The Institute of American Indian Arts 1962 to 1978: With Historical Background 1890 to 1962

Adrian Herminio Bustamante, Los Hispanos: Ethnicity and Social Change in New Mexico

Kyle Fiore, The Theory and Practice of Oral History

Dianne Rhea Layden, The Duty to Bargain in Good Faith In Private and Public Sector Labor Negotiations

Nancy M. Theriot, Sexual Ideology and Physical Life: The Evolution of American Feminine Ideals in the Nineteenth Century

Shelley S. Armitage, John Held, Jr.: Life and Work

Kate H. Parker, a PhD graduate student in American Studies, has received a grant from the New Mexico Humanities Council to direct a conference on New Mexico Family and Community History July 14th, 15th, and 16th at Menaul School in Albuquerque. This conference has solicited papers from scholars who have done extensive research in the social history of New Mexico. Among those sharing their research with the public are Lillian Schlissel, Professor of American Studies at City University New York, Joan Jensen, Chairperson of History at New Mexico State University, Rudolfo Anaya, writer and English Professor at UNM, and Stan Hordes, the State Historian. These are only a few of the more than thirty participants.

Two students received their Master's degrees in American Studies this year. They were Gerard Kammer and Santiko Budi.

The Report of the Department of Anthropology

July 1, 1982 - June 30, 1983

Jeffery W. Froehlich, Assistant and Summer Chairperson

I. General Departmental Information

A. Significant Achievements During the Academic Year, 1982-83.

In a year of drastic financial constraint, the Department of Anthropology continued to prosper and receive credit for its accomplishments. Both the departing and incoming University Presidents cited the anthropology program as one of the most important on campus. This sense of intrinsic worth at U.N.M. was corroborated by national recognition in the January publication of a report by the National Academy Press. In a survey of 639 doctoral programs in seven social and behavioral sciences, the U.N.M. Anthropology Department was ranked in the top twelve by its peers across the country. Moreover, our program was ranked fourth in the category of improvement during the past five years. These rankings and the outstanding success of our graduate program, up by 10% over the previous year (see Table 1), support our belief that we have the strongest academic program at U.N.M.

The growth of our program was most notable in the two new appointments made to our staff for Fall, 1983. An outstanding and versatile linguist with extensive teaching experience, Dr. Chad McDaniel, will replace Dr. Rushforth. Although Dr. McDaniel's

appointment is temporary for 1983-84, it is exceedingly important that this guaranteed line be made permanent next year so that we can retain the great benefits of his expertise.

More significantly, we will add to our program one of the world's experts on Neandertals, Dr. Eric Trinkaus, after he has spent eight years at Harvard University. In a year when nearly forty teaching positions were left vacant at U.N.M., this growth supports The National Academy ratings and strongly suggests that the U.N.M. Anthropology Department will move well into the top ten during the next five years.

Support for our program by the U.N.M. administration was more mixed in other areas, especially finance. On the positive side, the Anthropology Annex was opened in November of 1982, after a rennovation cost of more than $400,000. Housing the Office of Contract Archaeology with most of the archeology faculty and graduate students this space expansion will integrate the strongest graduate subfield in our program.

The primary remaining space requirement for the Department is lab and specialized teaching space for biological anthropology. In keeping with the appointment of Dr. Trinkaus, we assume that the Department will receive comparable renovation expenses for these essential space needs. We have been assured by Carroll Lee that the teaching space presently occupied by the Geography Department in our building will be allocated to us for this purpose.

Equipment to fill archaeology and biological anthropology lab space, however, has been only moderately provided. For all of the equipment needs of the Department, only $10,000 was allocated in 1982-83 from the education equipment bond, and $20,000 from the science and engineering equipment bond, meeting by less than half our minimal request. Of particular importance, the Department still needs field vehicles and state-of-the-art equipment for its field school and research programs in New Mexico. Lab equipment, such as a scanning electron microscope, is also needed in order to keep pace with current standards in the fields of biological anthropology and archaeology, not to mention continuing expenses for fossil cast materials currently being discovered, and other teaching or research necessities. Years ago in rejection of a teaching development grant application to the N.S.F., we were told that most of our needs were items which should be provided by the local institutions. The severity of our plight is perhaps most noteworthy in the ludicrous fact that only 1% of the Department's annual budget is allocated to supplies and expenses, from which such items must be purchased. Postage, telephone, and copy expenses alone will exhaust this fund before the year is out.

Equally grim is the failure of the U.N.M. budget to support our graduate students. With only 6 graduate assistantships, and no other institutional support, we fail to assist the very students who give us our national reputation; and many gifted students are unable to come after we accept them (see applicant records

in Table 1). In 1983-84, we plan to further improve our undergraduate curriculum by offering discussion sections and further laboratory classes. Implicit in this proposal is the addition of numerous new graduate teaching assistantships and the space to house these activities.

An interesting and informative fact reflecting on U.N.M.'s failure to support the anthropology program financially is the markedly contrasting support given by N.M.S.U. to its fledgling graduate program in anthropology. They have had hundreds of thousands of dollars for equipment and teaching supplies in recent years. Their fossil cast collection is superior to ours, excpt for non-commercial casts for which we have traded copies of our own scientific collections from New Mexico. In the archaeology summer field school of 1983, equipment such as magnetometers and laser transits from N.M.S.U.'s Anthropology Department is being used by U.N.M. professors and students. Ironically, state-of-the-art equipment from N.M.S.U., which we have been totally unable to acquire, is being used with U.N.M. expertise on projects primarily of concern to U.N.M.'s archeology professors.

This cooperation between the two schools is the highlight of the 1983 summer field program. Despite drastic cutbacks in the U.N.M. summer school budget, the anthropology field program was only reduced for faculty salaries (essentially resulting in quarter pay), and a new field program in paleontology was very successfully

launched. In archaeology, the exceedingly important research on the unknown interface between mountainous Mogollon 'cultures' and the plateau Anasazi was continued from the successful 1982 field school with the gracious cooperation of the Ladder Ranch. At the same time, and amounting essentially to a total of three field schools, Dr. Cordell reopened extensive work on a large pueblo at Rowe, near Pecos National Monument. The summer field program, already one of the most important and long-standing teaching activities of the Department, is burgeoning in new, more extensive directions in 1983. We anticipate a need for far greater funding in 1984.

Other notable activities and accomplishments by the Department this year include the award of a McArthur Foundation grant of over $200,000 to Dr. Alphonso Ortiz for a five year period of intensive research, and the deserved award of an Honorary Degree to Dr. Lewis Binford by the University of Southampton. In 1983, Professor Binford also published two books. Tenure and promotion was granted to Dr. Carolyn Bledsoe, and Dr. Marta Weigle deservedly was promoted to full professor. Over $200,000 in funded research was conducted by the fauculty in 1982-83. Profs. Bledsoe, Ortiz, and Straus were on leave conducting some of these scientific investigations. An extensive array of scholars visited the Department for guest lectures (see Table 2). Of particular note was the week-long visit by Dr. David Pilbeam, world-famous paleoanthropologist, as a Harvey Lecturer. Sadly, this was the last such lecture after many years and over 40

such scholarly visits. The Department is working on the raising of funds for the continuance of such activities. Finally, 1983 saw the beginning of a new chairpersonship with Dr. Linda Cordell, after an exceedingly successful 3-year term with Dr. Jeremy Sabloff.

Separate reports from the Maxwell Museum, Office of Contract Archaeology, and The Chaco Center follow.

TABLE 1

GRADUATE PROGRAM INFORMATION
1982-83

Registration Data

	Registration	Female	Male
Fall 1982	110	56	54
Spring 1983	109	59	50

Degrees Awarded

	Ethnology	Archaeology	Linguistics	Biological
Fall 1982	3 MA 2 Ph.D.	4 MA 1 Ph.D.		1 MA 1 Ph.D.
Spring 1983	3 MA 1 Ph.D.	4 MA		1 MA

Graduate Students in each Sub-discipline

	Ethnology	Archaeology	Linguistics	Biological
Fall 1982	31	60	2	17
Spring 1983	30	62	2	15

Applicants

	Applicants	Accepted by Us	Enrolled
Fall 1982	59	39	13
Spring 1983	14	10	8

Financial Aid

Graduate Assistantships: 1 Full; 16 Half
Work Study: 14
NSF Fellowship:
OCA or Chaco: 4
HEW Grant: 1

Freida Butler Fellowship: 1
Steven Hamann Fellowship: 1

TABLE 2

Anthropology Colloquia, Guest Lectures, and Harvey Lectures
1982-83

Colloquia

Ms. Dana Anderson	Through the Looking Glass: or Does Site Structure Accurately Reflect Behavior and Organization?
Dr. Spencer Lucas	Politics and Paleontology of Peking Man Cave
Dr. David Pilbeam	Hominid Origins
Ms. Lisa Sattenspiel	Modeling Disease in Human Populations
Dr. Yigal Zan	Functional Versus Syntactical Approaches to Narrative Structure
Dr. Erik Trinkaus	Neanderthal Reproduction and Human Behavioral Evolution in the Upper Pleistocene
Dr. Rita Denny	Structural Forms and Formal Structure of Turn-Taking Systems
Dr. Bruce Mannheim	Textual and Cultural Syncretism in 17th Century Peru
Dr. Chad McDaniel	Shifting Focus from Structure to Strategies: Language as an Adaptive System

Special Visiting Lecturer

Dr. Javier G. Chamorro	Sites and Excavation Problems in Chalcolithic and Bronze Age Andalusia

Special Harvey Lectures

Dr. Katherine M. Trinkaus	The Partho-Sassanian Northeast Frontier: Archaeological Boundaries and the Evolution of Socio-Political Complexity
Dr. Dominic Powlesland	Recent Work on the Evolution of Ancient Landscapes in Yorkshire
Dr. Goran Burenhult	The Carromore Excavations-- A Case Study of Early Megolithic Economy
Dr. James F. O'Connell	
Dr. Michael Kinney	

Harvey Lectures

Dr. David Pilbeam	Becoming Human: reflections from the Plio-Pleistocene

The Report of the Journal of Anthropological Research

July 1, 1982 - June 30, 1983

Philip K. Bock, Editor

General: In the year since Professor Bock became editor, the Journal of Anthropological Research has published four issues totaling 418 pages. It continues to appear on schedule. The flow of manuscripts has increased somewhat with 102 submissions being received in the past 12 months. Quality has also improved, though the rejection rate remains at about 75%.

Personnel: On August 16, 1982 Ms. Margaret Colclough replaced Ms. Nancy Moran who resigned from the position of Subscriptions Manager on August 20, 1982 for reasons of health. Ms. Colclough has done an outstanding job of clearing up subscriptions problems and establishing a new office system.

An Editorial Board was appointed to advise the editor; it consists of Professors H. Basehart, J. Spuhler, J. Sabloff, and K. Schwerin. Since most refereeing of manuscripts and reviewing of books is still done within the University of New Mexico Anthropology Department, it was decided to ask a number of distinguished anthropologists at other institutions to serve as Associate Editors. They will solicit good papers for the Journal and referee some specialized manuscripts. The following persons have agreed to serve in this capacity: Professors Louise

Lamphere (Brown), Dennis Tedlock (Boston Univ.), Stephen Tyler (Rice), Paula Rubel (Barnard), Harumi Befu (Stanford), E. W. Andrews V (Tulane), and Walter Goldschmidt (UCLA).

Financial: On paper, the Journal had the best year ever. Income from sales and royalties amounted to $27,333.60, substantially reducing the University subsidy. Much of this income was produced by the new Subscriptions Manager who carefully searched the files to eliminate any duplicates or mailing errors, and who diligently billed and re-billed subscribers and agencies whose payments had fallen behind. With the permission of the Associate Provost for Research, some of this income will next year be used for travel and advertising with the goal of increasing subscriptions. At the present, due to the elimination of errors and non-paying subscribers, the number of subscriptions has fallen from an apparent 2200 to just over 1800. Although this involves a saving in printing and mailing costs, it is essential that the number of subscriptions be increased to a genuine 2000.

To this end, over 300 letters have been sent to Anthropology Departments in the U.S. and Canada, plus several dozen letters to institutional libraries. The Editorial Board has also voted to raise the price of the Journal to $20 for individuals and $30 for institutions, effective in 1984. At the same time, we will publish a Special Fortieth Anniversary Issue.

containing articles solicited from eminent regular contributors including Gordon Willey (Harvard), Michael Verdon (Cambridge), Elizabeth Colson (UC-B), and Marvin Harris (Florida).

Prospects: The future of the Journal seems secure. If we continue to receive good articles, remain on schedule, and if we can gain 200-300 new subscribers over the next two to three years at the new price, the Journal of Anthropological Research should be able to maintain its academic and financial position. The work of the Editorial Board, the Associate Editors, and the many University of New Mexico referees is gratefully acknowledged, as is the continuing support of the University Adminstration for this important scholarly endeavor.

Report of the Maxwell Museum of Anthropology

July 1, 1982 - June 30, 1981

J. J. Brody, Director

1. Significant developments during 1982-83:

Perhaps the single most significant event of the year was also the most visible: the opening of the Chaco Phenomenon exhibition to a crowd of 1500 or more people on June 12, 1983. The attendance was the largest in the history of the museum and included about 75-100 archaeologists who had worked at Chaco Canyon (many as UNM students there during the period 1929-49). Five years in the making, the exhibition will travel throughout the United States for two years beginning in June, 1984, at the Denver Museum of Natural History. It is also booked at the American Museum of Natural History, New York. Its production was supported by grants from the National Endowment for the Humanities, the UNM Foundation, Inc., the Maxwell Museum Association, and Santa Fe Industries. It was organized by the Maxwell Museum in close collaboration with the UNM-based Division of Cultural Research (Chaco Center) of the National Park Service. It has received extensive local and national publicity and we anticipate that as many as 100,000 visitors may come to this campus to see it.

Less visible perhaps but of long-term importance were the skills developed and learned by the museum staff during preparation of this exhibit. Our very small staff has now mastered a variety of sophisticated skills in management, administration, graphic design, label writing and editing, publicity, and exhibition design and production. We were good and have improved. Of particular importance was the continuation of other museum programs without serious disruption during the preparation and installation of the Chaco exhibit. The massive Hatfield collection (acquired in 1981-82) was cleaned and largely

integrated into the museum collections. Other conservation work on the collections included dispossession of nesting flickers from the totem pole in the museum ethnobotanic garden and weatherproofing of the pole. Important (and inexpensive) renovations took place in the collection storage areas and north of the museum garden where an Anthropology Department/Museum Conference Room was created (Anthropology 171). The osteology collection grew to where it now numbers 3200 specimens. About 300 researchers used the museum collections during the year as did many UNM classes. Sixteen thousand people were taught in the museum or by museum docents in the public schools.

Twenty-nine lectures and other public programs at the museum drew an attendance of about 2500 students, faculty, and townspeople. Six other exhibitions were installed at the museum during the year, one was installed at the State Fair as the UNM exhibition, the Fiestas of San Juan Nuevo traveling exhibition was delivered to the Museum of New Mexico for distribution throughout the Southwest, and several long-term museum exhibitions were renovated.

2. Significant plans and recommendations for the near future:

Planning began for extensive renovation of long-term exhibitions and for review and revision of the total exhibition/education/public program activities of the museum. The plan, spearheaded by Dr. Salvador, is targeted for completion in 1984-85 and for installation beginning in 1986-87. The primary goal is to integrate our instructional program more closely with that of the department while maintaining our role as interpretor to the public of anthropology at UNM.

Acquisition of a word-processor to help cope with the flood of verbiage

that will be a by-product of the planning process is a high priority. Even greater is need for a new warehouse and for space to replace the slum that now houses the osteological collections and laboratories. President Perovich has agreed to help find new warehouse space so that we can relocate the Park Service collections now stored below the Chaco Center. The Department, the National Park Service, and the Administration all agree that the space below Chaco will be renovated to become the new osteology storage area.

Grant proposals submitted by the museum and pending funding are:

Institute of Museum Services	General Operating Support	$35,600
Natl. Endowment for the Humanities	Permanent Exhibition Planning	$14,980
New Mex. Humanities Council	Archaeoastronomy Symposium Support	$3,000

3. Appointments to staff:

Sophie Collaros	Gift Shop Manager	3/7/83
Janet Fragua	Collections Assistant	9/8/82
Guy Herrington	Preparator	2/11/83
Jennifer Martinez	Associate Curator of Education	6/6/83

4. Separations from staff:

Margaret Jumonville	Associate Curator of Education	5/27/83
Sally Nusbaum	Gift Shop Manager	2/28/83
David Ryan	Preparator	12/31/82

5. Publications:

Maxwell Museum publications

-The Chaco Phenomenon, J. J. Brody, 1983
-The Cliff Phase of the Mimbres Valley, New Mexico: Remains of a Frontier Salado Occupation. Steven LeBlanc and Ben A. Nelson (in press).
"Facial Reproduction: Tables of Tissue Thicknesses of American Caucasoids." J. Stanley Rhine and C. Elliott Moore II, 1982.
-Fiestas of San Juan Nuevo, 1983
-The Galaz Ruin: A Prehistoric Mimbres Site in Southwestern New Mexico. Roger Anyon and Steven A. LeBlanc with Paul Minnis, James Lancaster, and M. C. Nelson (in press).
-The Restoration and Conservation of Southwestern Pueblo Indian Ceramics, Sophie Collaros (in press).

5. Publications, cont.:

J. J. Brody, "The Chaco Phenomenon", Archaeology Magazine, July-August 1983.
-"Paintings in the Elkus Collection", California Academy of Sciences, (in press).
-Beatien Yazz: Navajo Artist, (co-author with Sallie Wagner) Northland Press.
-Mimbres Pottery, (co-author with Steven and Catherine LeBlanc) Abrams (in press).

Jennifer Martinez, "Founding Mothers: Contributions by Women to Early American Anthropology", Halikṣa'i: UNM Contributions to Anthropology, Spring 1983.

Stanley Rhine, "Special Techniques", (co-authro with Miles Standish, Homes R. Campbell), a chapter in "Outline of Forensic Chemistry".
-Three chapters in Forensic Anthropology casebook (in press).
-"Ancient Disease: The Elements of Paleopathology" JAR, 1983.
-"Racial Adaptations" JAR, 1983.

Marian Rodee, "Navajo Ceremonial - Pattern Weaving and its Relationship to Drypainting", Navajo Religion and Culture: Selected Views, Museum of New Mexico.

Mari Lyn Salvador, "Food for the Holy Ghost: Reciprocity and Gift Exchange in the Azore Islands", accepted for publication, UC Press.

6. Outside professional activities of staff members:

Linda Bahm Exhibition Development: A Team Approach, April 20-22, 1983 Field Museum, Kellogg Foundation Fellow.
Review of National Monument Visitor Center plans, Pecos, New Mexico, June 30, 1983.

J. J. Brody Consultancies: Acoma Tribal Museum; Zuni Pueblo tribal museum; School of American Research (Indian paintings); Museum of the American Indian (Indian painting); Albuquerque Museum (Mayan exhibition); National Geographic; Board memberships; New Mexico Museum of Natural History; Florence Hawley Ellis Museum of Anthropology; Maxwell Museum Association; Committee for the Denman Collection of American Indian Paintings. National Advisory Committee for Conference of Native American Studies. Board Member, New Mexico Archaeological Society. Reviewed several manuscripts for UNM Press; grant reviews for NSF, NEH, IMS. Nineteen off-campus talks. Bandelier Lecture, New Mexico Archaeological Society, El Paso, TX, May 1, 1983.

Marsha Bol Board of Directors, Alliance of Southwest Museum Educatorsl Secretary-Treasurer, Alliance of Southwest Museum Educators. Nominating Committee, New Mexico Museum Association.
Paper: Symposium "The Role of Native American Women Artists", University of Denver, May 6, 1983.
Kellog Fellowship: Seminar on Exhibit Team Approach, Field Museum of Natural History, Chicago, April 20-22, 1983.

Sophie Collaros Member New Mexico Archaeological Council.
Committee for the Promotion of New Mexico History.

Stanley Rhine Continued as consultant to Office of the Medical Investigator. Consulted on forensic anthropological matters by San Antonio, Kansas City, and Dallas.
Elected Vice-President of American Board of Forensic Anthropology.
Accepted as Fellow in American Academy of Forensic Sciences.
Consulted on skeletal matters by SAR coal project, Ft. Bliss.
Organized 2nd (working on 3rd) annual Cedar City Forensic Conference.

6. Outside professional activities of staff members:

Krisztina Kosse: Gave talk to Brown Bag series on Hungarian prehistory. Presented paper at AAA meeting in Pittsburgh, April 21-24.

Marian Rodee: Participated in roundtable at NMAM meeting in Roswell in April. Taught seminar for Art Department, Spring 1983, Ethnic Weaving of the New World..

Mari Lyn Salvador: Exhibitions: Fiestas Acoreanas shown at Museum of Man, San Diego, Haffenraffer Museum, Brown University, Rhode Island and Maxwell Museum.
Fiestas of San Juan Nuevo, a traveling exhibition based on major exhibit at Maxwell Museum done in cooperation with the Museum of New Mexico.
Kuna Women's Art, traveling exhibition shown at Las Cruces, Roswell and Silver City, New Mexico and Fondo del Sol Art Gallery, Washington, D.C.
Lectures: Vamos aas Toros: The aesthetics of Azorean style bullfighting." Maxwell Museum public lecture series. Kuna Women's Art Art, Haffenreffer Museum. The Aesthetics of Ritual Performance, Brown University. Kuna Women's Art, Fondo del Sol Art Gallery, Washington, D.C.
Consulting: Japanese Family Album Project, NEH consultant. Greek American families, NEH consultant to Grand Rapids Museum, MI. American Americans in Fresno, NEH consultant, Fresno State University.

Vincent Yannie: Exhibition Development: A Team Approach, April 20-22, 1983, Field Museum, Kellogg Foundation Fellow.

7. Outside-sponsored research:

Santa Fe Industries	$1,000	Chaco exhibition	1982-83
University of New Mexico Foundation	$7,500	Chaco exhibition multi-media shows	1982-83
Maxwell Museum Association	$1,000	Chaco exhibition	1982-83
NMA Grant	$5,000	Conservation	Dec. 1982
Rockfeller Roundation	$5,000	Research time and travel money for textbook	1983
Pasold Research Fund Lts.	£ 225	Preparation of article on Navajo weaving	May, 1983
Albuquerque Public Schools	$2,500	Docent Program	1982-83
Maxwell Museum Association	$3,750		1982-83
National Endowment for the Humanities	$90,000	Chaco exhibition	1982-83

Report of The Office of Contract Archeology
July 1, 1982 - May 29, 1983
Joseph C. Winter, Director

I. Overall Review of Activities

During the past 11 months the OCA completed 28 projects and is currently involved in 13. Major completed projects include the excavation of Nuestra Senora de Dolores Pueblo in Bernalillo, the study of the Lemitar Church and Cemetery, the survey of the ARCO pipeline in eastern New Mexico and the excavation/monitoring of 14 sites on the line, the excavation of a cemetery in Colorado on the ARCO line, the excavation of a site on Sandia Reservation, and an overview of Indian concerns along the Texas Eastern pipeline in western New Mexico. Major ongoing projects include the completion of the Los Esteros Reservoir Site 48 mitigation program, the study of Navajo religious and herding sites for Sunbelt's De-Na-Zin mine, the survey report for the Texas Eastern pipeline in western New Mexico, a sample survey for the Salt River Project: Fence Lake mine near Quemado, the survey of the 150 mi long Shell CO_2 line and the excavation of 12 sites on the line for Woodward Clyde, and the completion of the final report for the excavation of 35 sites for Utah International's Navajo Mine. All 1982-83 reports are listed at the end of this report, while the following section describes in detail certain of them.

II. Description of Major Projects

The major research project undertaken by the Office of Contract Archeology in 1982 was the Navajo Mine Archeological Project, with Patrick Hogan as Project Director, Joseph Winter as Principal Investigator, and Fred York as Ethnographer. Fieldwork consisted of testing or excavation of 8 Archaic, 12 Anasazi, and 15 historic Navajo sites in the Cottonwood and Tpotla drainages of the lower Chaco River, and extensive ethnographic research with the local Navajo population. The original focus was on changing patterns of adaptation to a marginal environment, but it would appear from paleo-environmental reconstruction that conditions in the study area throughout the late Archaic and the AD 1050-1130 period were actually more favorable than those of the present. Considerable evidence of limited Navajo agriculture also implies that even in recent times environmental conditions have not been as inimical to human occupation as earlier research suggested.

Archaic populations appear to have used the study area on a seasonal basis, making brief forays into the large sand sheet areas to collect ricegrass, dropseed, and Chenopodium. Ethnobotanical remains indicate that the resources to be collected were specifically targeted for each visit to the area, and the model for Archaic subsistence and land use suggested by the data is one of "serial specialists," who made frequent residential moves over a wide foraging area to take advantage of seasonal availability of various food resources.

In an interesting side light on the Archaic of the northern San Juan Basin, a number of apparently reliable radiocarbon dates from NMAP sites indicate continuing use of the area by groups exhibiting Archaic lithic technology as late as the AD 900s. No dates from sites with Archaic lithic technology overlap the main Anasazi use of the study area (from ca. AD 950-1325), but four dates indicate a movement of hunting and gathering groups back into the area subsequent to the withdrawal of the farming population.

Anasazi use of the area began with a small resident population in the AD 875 to 1000 period. Ceramic evidence implies major ties to the Chuska Valley across the Chaco during this period with some trade ceramics coming in from the San Juan region to the north. During the AD 1000-1125 period there was a major increase in intensity of use, as indicated by an increase in fieldhouses. Again the ceramics are heavily Chuskan but the trade wares show a marked increase in Cibolan pottery from the south. Various lines of evidence indicate that families maintaining winter residences in the Chuska Valley were moving into the NMAP area to farm during the summer. The increase in Cibolan ceramics may be related to the rise of a nearby Chacoan outlier at the mouth of Sanostee Wash. During the AD 1125-1325 period the "land rush" in the NMAP area was over. Although a small resident population remained, the conditions which had attracted outside farmers had apparently disappeared. During this period the trade in ceramics was again oriented toward the San Juan region, and there is limited evidence to suggest possible population movement from the Mesa Verde/San Juan area into the lower Chaco region, although Chuska wares continue to dominate the ceramics until the Anasazi abandonment of the region. In an interesting auxiliary study of the Chuskan ceramics, Dr. Elizabeth Garrett has found that the trachyte temper in sherds from both the NMAP and Chaco Canyon areas is apparently from a single, as yet unidentified,

basalt source in the Chuska Mountains.

The Navajo occupation of the study area began with a heavier than expected use in the late nineteenth and early twentieth century. As noted, there is considerable evidence of Navajo farming in the area, and the traditional economy of mixed herding and farming has proved extremely resilient despite increased opportunities for wage labor since World War II. The main effect of improved transportation and acceptance of wage labor has been changes in the settlement system, not abandonment of the traditional economy.

Joseph Winter (Principal Investigator) and Frank Wozniak (Project Director) carried out a survey of a 150 km pipeline route between the mouth of Largo Canon on the San Juan river and Torreon Mission near the Rio Puerco of the East in northwestern New Mexico. Thirty-eight sites were recorded including three Basketmaker III-Pueblo I, four Gobernador Navajo, sixteen 20th century Navajo (one of which had a BMIII-PI component) and fifteen lithic scatters. The 18th century Navajo sites showed some tendency toward utilization of the sagebrush uplands but they were all associated with Largo and Blanco washes which are well known for sites of this period. The two largest BMIII-PI sites were found in Largo Canyon in circumstances similar to those known from previous work in the area. However, the anomylous BMIII-PI component on one 20th century Navajo site in Alamita canyon had ceramics similar to those of the Rosa-Piedra sites much farther to the north.

As a result of the 150 km survey from the mouth of the Largo to Torreon, 12 significant archeological sites were excavated

which could not be avoided by the pipeline. Joseph Winter served as Principal Investigator, with Mike Marshall the Project Director. The sites included three Rosa Phase Basketmaker III (Pueblo I components, two early Navajo components, and six aceramic lithic components

One Rosa Phase component in the Canyon Blanco and Largo confluence area consisted of a stockade and jacal domicile superimposed over a series of cylindrical and bell pits. Another Rosa Phase site revealed two large ovoid-shaped post lodge structures and a small pitroom. The third Rosa component revealed a single hearth and sherd scatter.

Two sites of early Navajo affinity were also explored in the Blanco Canyon area.

One, a Dinetah Phase occupation consisted of a small rectangular room of vertical post construction in association with a series of hearths. The other Navajo site was a Gobernador Phase settlement which revealed a series of hearths associated with a forkstick hogan.

Three small Archaic components were also excavated. Various hearth and pit structures were encountered in association with chipped and ground stone artifact materials. Analysis of botancial materials obtained from these sites should reveal information regaring Archaic subsistence.

Joseph Winter (Principal Investigator) and Stephen Lent (Project Director) completed a survey of a 380 km pipeline route from the Colorado border near Capulin, New Mexico to the Texas border near Portales. Twenty-six sites were recorded, including the Cimarron Cutoff of the Santa Fe Trail, the Fort Union freight road, several abandoned railroad beds, numerous late 19th/early 20th century homesteads, and a number of lithic scatters, several of which contained ceramics. The lithic/ceramic scatters include apparent PaleoIndian, Archaic, Plains Woodland, Mogollon, possible Pueblo, and Apache components.

A followup project to the 380 km survey in northeastern New Mexico was performed by Joseph Winter (Principal Investigator), John Miller (Project Director), and Dan Scurlock (Project Historian). Fifteen sites which could not be avoided by the pipeline were investigated, along with a previously unrecorded cemetery in southeastern Colorado. The latter resulted in the removal and analysis of the remains of nine children and adults from a mid-19th century Hispanic burial ground near Walsenburg, Colorado. Four lithic sites (two of which had ceramics) were also test excavated. They include a multicomponent Archaic/Plains Woodland/Apache campsite, which yielded a C14 date of AD 1590±80; a large-game kill site with PaleoIndian (Eden), Archaic, Plains Woodland, Mogollon, historic Pueblo, and Apache remains (including a hearth dated by C14 at AD 1690±165); a Mogollon campsite; and a quarry site of unknown age. The project also investigated the Cimarron Cutoff of the Santa Fe Trail, the Fort Union freight road, a railroad bed, and seven homestead sites. Archival research, oral interviews, and monitoring of construction activities to recover engineering data were used for this aspect of the project.

We are presently analyzing materials excavated by the Center for Anthropological Studies at Santa Rosa Lake (formerly Los Esteros Lake). The material is from two sites, a Hispanic settlement and a tipi ring site. The original program of excavations was the scene of considerable controversy; some archeologists maintain that the Spanish Colonial occupation seen by the original investigator does not in fact exist. The present investigations are an attempt to resolve that controversy as well as to deal with the general role of the Santa Rosa Lake area in historic period exchange, military activity, and regional politics.

III. Financial Statement

Between 7/1/82 and 5/27/83, the OCA generated 32 contracts worth $326,218.00 in total awards, and $96,487.00 in overhead. We also generated $17,216.00 in salary credits which were charged to various accounts between July 1, 1982 and May 1, 1983 (see attached breakdown). While this represents a decrease from the 1981-1982 figures (see my memo to Jerry Sabloff of 6/28/82), the amounts are actually closer together since the above contract figures represent 11 months of work and the salary credits represent 10 months of charges, while the 1981-1982 figures were based on a full fiscal year. Also, the slower economy this past year affected our work, as did the changes from a 37% to a 42% overhead rate. We have noticed a marked increase in the number of projects in the past month, which apparently represents a slight upswing in the economy, but we have also noticed that we are receiving fewer small projects, due to the higher overhead rate.

Finally, it should be emphasized that despite the apparent decrease in awards and overhead this past year, we have more than met our operating costs. Since our FY 82-83 operating budget was $89,379.00, and since we generated $96,487.00 in overhead and $17,216.00 in salary credits, the net gain to the University has been $24,304.00, and that does not include the contracts we hope to sign in June and the May and June salary credits.

IV. Other Activities

I taught a course in local cultural resource management, while Dr. Nelson taught one course in field archeology and three problems courses. My course involved the development of a management plan for the West Mesa of Albuquerque Rock Art, which will be edited, presented to the city, and hopefully published. As an outgrowth of this course we also developed a draft ordinance for the

city and county concerning the management of local archeological sites, which will be presented to the Mayor and city/county councils.

I also received a small research grant from San Jose State University for the reanalysis of certain of my Hovenweep data. This fall I plan on developing a larger NSF grant proposal which will involve the excavation of potential calendric sites at Hovenweep, while Dr. Nelson will work with Drs. Cordell, M. Nelson, and Brody on developing a major grant proposal for a long-term management plan for the University-owned Pottery Mound site. I am serving on five graduate student committees, and this past year I served as Chairman of the Department's Board of Archeologists. I also presented a paper at the Anasazi Symposium which will be published, and I wrote a chapter for a book on Ethics In Archeology which will be published. Another paper will be presented at a meeting in June.

Dr. Nelson served on four graduate student committees. He edited a book published by Southern Illinois Press, and another book he edited has been accepted for publication by SIU, while a third was accepted by UNM Press. Dr. Nelson also presented a paper at the Mogollon Conference.

Summary of O.C.A. Activities

7/1/82-5/27/83

Project	Sponsor	Brief Description	Status
185-58a	Timberman Corp.	Excavation of 1 site	Completed
185-120	BLM	Recording Lemitar Church and Cemetery	Completed
185-140	Salt River Project	Survey of 40 drill holes and roads	Completed
185-101b	ARCO	Testing/monitoring of 15 sites	Completed
185-101e	ARCO	Removal of 12 burials	Completed
185-101	ARCO	Survey of 236 miles of pipeline	Completed
185-149	Plains Electric	Survey of 1 mile Power Line	Completed
185-150	Ideal Basic Industries	Survey of 50 acres	Completed
185-153	Mountain Bell	Survey of 3700' of phone line	Completed
185-156a	Plains Electric	Monitoring construction area	Completed
185-157	Associated Geoscientists	Survey of 6 drill holes	Completed
185-159	Commercial Investment	Survey of 880 acres	Completed
185-140c	Salt River Project	Survey of 3 miles of drill holes	Completed
185-160	Alamo School Board	Survey of 3.5 miles of road	Completed
185-162	Sandia Lab	Search for depleted uranium capsule	Completed
185-163	Broce Construction	Survey of 15 acre borrow pit	Completed
185-164	Radio Communications Bureau	Survey of electronic site	Completed
185-142	New Mexico Aggregate	Test Excavation of 1 site	Completed
185-165	Electronic Center	Survey of electronic site	Completed
185-161b	Woodward-Clyde Consultants	Survey of Placitas II site	Completed

Project	Sponsor	Brief Description	Status
185-107j	Texas Eastern Corp.	Overview of Indian Concerns in Pipeline Route	Completed
185-160a	Alamo School Board	Survey of road realignments	Completed
185-173	Trico International	Survey of 16 acres	Completed
185-174	Broce Construction	Survey of 15 acres	Completed
185-175	Robert Witter and Associates	Survey of 14,000' power line	Completed
185-180	Texas Eastern Corp.	Survey of 16 locations in pipeline	Completed
185-181	Federal Highway Administration	Survey of 2 miles of road	Completed
185-182	Texas Eastern Corp.	2nd. opinion on site	Completed
185-183	Broce Construction	Survey of borrow pit	Field work complete
185-147	Sunbelt Mining Co.	Ethnographic study of 11,000 acres	Draft Report under review
185-161	Woodward-Clyde Consultants	Survey of 150 mi pipeline	Final Report in preparation
185-161a/c	Woodward-Clyde Consultants	Excavation of 12 sites	Draft Report in preparation
185-168	U.S. Army Corps of Engineers	Completion of Mitigation Program at Site 48	In progress
185-176	Bureau of Indian Affairs	Survey of 100 acres	Final Report in preparation
185-161d	Woodward-Clyde Consultants	Survey of 36 locations in pipeline	Final Report in preparation
185-177	Salt River Project	10% Survey of 7000 acres	In progress
185-183	Broce Construction Co.	Survey of borrow pit	Final Report in preparation
185-168a	U.S. Army Corps of Engineers	Mapping Site 77	In progress
185-107c	Texas Eastern Transmission Corp.	Survey of 162 miles of pipeline	Draft Report in preparation
185-123	U.S. Army, Fort Bliss	Monitoring Fort Bliss' Historic Preservation Prog.	In progress
185-94	UII	Mitigation Program for 35 sites	Final Report in press

Contracts Generated
7/1/82-5/27/83

Proposal Date	Proposal #	Award Amount
7/27/82	185-153	$ 875.00
8/9/82	185-156a	523.00
8/17/82	185-157	697.00
9/14/82	185-140c	1,862.00
9/20/82	185-160	864.00
10/11/82	185-162	2,000.00
10/26/82	185-163	769.00
10/20/82	185-164	734.00
10/26/82	185-165	734.00
11/9/82	185-107j	3,987.00
12/13/82	185-168	95,518.00
7/1/82	185-147a	14,637.00
8/25/82	185-159	6,051.00
10/6/82	185-161	31,425.00
10/15/82	185-161a	64,369.00
11/5/82	185-161b	1,649.00
11/5/82	185-161c	34,773.00
11/11/82	185-107g	18,694.00
12/13/82	185-169	5,535.00
7/27/82	185-107d	875.00
1/3/83	185-160a	611.00
1/17/83	185-161d	13,534.00
2/9/83	185-173	750.00
2/21/83	185-174	871.00
3/14/83	185-175	892.00
3/22/83	185-170	1,109.00
5/6/83	185-177a	13,538.00
5/20/83	185-177b	855.00
4/26/83	185-181	916.00
5/4/83	185-161e	6,281.00
5/13/83	185-183	669.00
5/25/83	185-168a	621.00
Totals	#=32	$326,218.00
	42% overhead on above	$ 96,487.00

Additional Proposals That May Be Awarded

Proposal	Proposal #	Award Amount
5/23/83	185-161j	$ 6,874.00
5/17/83	185-186	19,055.00
5/27/83	185-187	21,182.00
	#3	$47,111.00

Salary Credits For July 1982 Through April 1983

(May and June yet to be charged)

Date	
8/23/82	$ 2,907.00
9/29/82	2,055.00
10/28/82	1,650.00
11/24/82	1,694.00
12/16/82	2,055.00
1/21/83	1,260.00
3/8/83	990.00
3/30/83	840.00
5/2/83	2,130.00
5/20/83	1,635.00
	$17,216.00

Total 033-036-0 Budget:	- $89,399.00
Total Salary Credits:	+17,216.00
Total Overhead Generated:	+96,487.00
Total Difference Between Budget and Overhead/ Salary Credits	$+24,304.00

400

ANNUAL REPORT
Report of the Division of Cultural Research
July 1, 1982 - June 30, 1983

The Division of Cultural Research, a National Park Service supported research facility working in cooperation with the University of New Mexico, began the year with eight permanent and ten temporary employees who continued laboratory analyses and syntheses of material obtained during previous years' excavations and related research in Chaco Canyon.

Fieldwork in Chaco Canyon included excavations at site 29SJ626, a village located in Marcia's Rincon across the Chaco Wash from the Visitors Center. This work was necessary to preserve data that will be destroyed when the Park loop road is paved. Thomas C. Windes, Peter J. McKenna, and Judith Miles participated in this project, along with other NPS personnel from the Regional Office.

A comprehensive survey of the new Park additions, as well as the Archaeological Protection Sites, was begun under the direction of Robert P. Powers, assisted by Peter J. McKenna, H. Wolcott Toll III, and Judith Miles. This will be a three-year project, and it is undertaken in compliance with Public Law 96-550 which provides for the continuation of research and data-gathering activities on the Chaco Culture of the San Juan Basin.

In connection with PL 96-550, Powers participated in the Planning Team that drafted a Joint Management Plan for the Archaeological Protection Sites. Public hearings on this plan were held during March 1983. The General Management Plan for Chaco Culture National Historical Park has been drafted and will be reviewed later in 1983.

The third research project requiring field work in Chaco Canyon was undertaken by Frances Joan Mathien and Thomas C. Windes. They conducted fieldwork at the site of Kin Nahasbas where the great kiva had been excavated by the School of American Research/University of New Mexico field school in 1935. Results of their work will be part of a Historic Structure Report prepared by Mathien for this site.

Use of computerized data on Chaco sites and site information continues. All site data were entered into the ARM files of the Laboratory of Anthropology, the SARG files, and the National Park Service List of Classified Structures. In addition, Regional NPS computer files were updated, and variable data overlays pertaining to Chaco Canyon are now available in our PARKMAN program. This computer program is now being revised so that it can be adapted by other parks in the National Park Service. One new computer project is underway: information gathered on the solstice marker on Fajada Butte will be modeled in a computer graphics program to preserve the data should the site be damaged.

In order to inform the public about recent results of studies on the Chaco Culture, the Division has worked closely with the Harpers Ferry Center of NPS in preparation of new exhibits for CCNHP Visitors Center. A number of staff members have also been working with the Maxwell Museum of Anthropology on the travelling exhibit that opens June 12, 1983, as well as the archaeoastronomy symposium to be held Oct. 12-16, 1983.

The Division continues to cooperate with the teaching and research programs of various faculty, staff and students. Cooperative programs with the University of New Mexico Departments of Anthropology, Astronomy, Biology, Education, Geology, Photo Service, Office of Contract Archaeology,

and Technical Applications Center continued. Dr. Judge and the staff offered both formal and informal training in Southwestern archaeology to University students in various aspects of Chacoan and Chaco-related research. Dr. Judge continues to serve as Chairman or member of several MA and PhD graduate committees and to teach graduate and undergraduate courses in the Department. Stephen H. Lekson was hired as a cooperative graduate student under the NPS-UNM cooperative graduate student agreement. Frances Joan Mathien was appointed Adjunct Assistant Professor in the Department of Anthropology. She also co-chaired the Pecos Conference (August 13-14, 1983) and is co-chairing the Ethnohistory Meetings in Albuquerque (November 3-6, 1983).

Joint programs were also conducted with other NPS divisions, the Interagency Archaeological Committee, the Bureau of Land Management, the Bureau of Indian Affairs, the Archaeological Society of New Mexico, and several private research foundations. In addition, Dr. Judge continued to serve on the Secretary of Interior's Task Force to develop nationwide standards for the conduct of archaeology, the Research Committee of the Center for American Archaeology, as well as Treasurer of the Society for American Archaeology.

As a result of the Division's research, 9 reports or articles were published, and 24 are in press. Several preliminary reports were added to the Division's library, and 9 papers were presented at 5 different professional meetings by various members of the staff. Lists of these publications and reports are attached. The Division is continuing to edit analytic unpublished reports and these will appear in the next several years.

Another National Park Service unit housed on the University of New Mexico campus under a cooperative agreement with the University is the Branch of Remote Sensing. Its activities are directed toward the application of remote sensing methods such aerial photographic interpretation, photogrammetric mapping, digital and optical analyses of space-craft derived data to problems of archaeology, ethnology and management and protection of cultural resources, primarily within the National Park Service.

Presentations:

Lekson, Stephen H.
1982 Settlement Patterns in Middle Palomas Creek of Southern New Mexico. Mogollon Conference, Las Cruces, NM, Oct. 21-23.

1982 Maximum Settlement Size in the Mimbres Mogollon. Mogollon Conference, Las Cruces, NM, Oct. 21-23.

Mathien, Frances Joan
1982 Political, Economic, and Demographic Implications of the Chacoan Road Network. American Anthropological Association Annual Meeting, Washington, D.C., December 5.

Windes, Thomas C.
1982 The Prehistoric Road Network at Pueblo Alto, Chaco Canyon, New Mexico. American Anthropological Association Annual Meeting, Washington, D.C., December 5.

Gillespie, William B., and Robert P. Powers
1983 Regional Settlement Changes and Past Environment in the San Juan Basin. Second Anasazi Symposium, Farmington, NM, Feb. 10-12.

Judge, W. James
1983 Sampling in Regional Archeological Survey.'
Predicitive Modelling in REgional Archeological Analysis. Two papers presented at the Research Seminar in Archeology, National Park Service, Ft. Collins, Colorado, May 22-27.

Judge, W. James, John D. Schelberg, and R. Effland
1983 Organizational variability in selected SARG project areas.

Forty-eighth Annual Meeting of the Society for American Archaeology, Pittsburgh, PA, April 27-30.

Mathien, Frances Joan
1983 External Contact and the Chaco Anasazi. Forty-eight Annual Meeting of the Society for American Archaeology, Pittsburgh, PA, April 27-30.

Schelberg, John D.
1983 Social Complexity and the Chacoan Anasazi. Second Anasazi Symposium, Farmington, NM, Feb. 10-12.

Publications:

Akins, Nancy J.
1982 Faunal Exploitation in Chaco Canyon, New Mexico. New Mexico Archaeological Council Newsletter, Volume 4, Nos. 5, 6.

W. James Judge
1982 Will the Real Archeology Please Stand Up? George Wright Forum, Autumn 1982, pp. 17-34.

Judge, W. James
1983 The Paleo-Indian and Basketmaker Periods: An Overview and Some Research Problems. In F. Plog and W. Wait, eds., "The San Juan Tomorrow," National Park Service, School of American Research, Santa Fe, pp. 5-57.

Lekson, Stephen H.
1982 Labor Organization in Bonito Phase Architecture. New Mexico Archaeological Council Newsletter, Volume 4, Nos. 5, 6.

Mathien, Frances Joan, W. James Judge, and Andrew Drager
1982 Development of a Data Base Management System for Archeological Resource Conservation. New Mexico Archaeological Council Newsletter, Volume 4, No. 5, 6.

Powers, Robert P.
1982 Progress Report on the Draft Joint Management Plan for the Chacoan Archeological Protection Sites. New Mexico Archaeological Council Newsletter, Volume 4, Nos. 5, 6.

Powers, Robert P., William B. Gillespie, and Stephen H. Lekson
1983 The Outlier Survey. A regional View of Settlement in the San Juan Basin. Reports of the Chaco Center, No. 3. Division of Cultural Research, National Park Service, Albuquerque.

Schelberg, John D.
1982 The Development of Social Complexity in Chaco Canyon. New Mexico Archaeological Council Newsletter Newsletter, Volume 4, Nos. 5, 6.

Windes, Thomas C.
19182 The Patterns of Chacoan Trash Disposal. New Mexico Archaeological Council Newsletter, Volume 4, Nos. 5, 6.

In Press:

Brugge, David M.
Tsegai: Archeological Ethnohistory of the Chaco Region. National Park Service, U.S. Government Printing Office, Washington, D.C.

Judge, W. James
Introduction to Research of the Chaco Center: An Interim Report. Kiva Fall 1983.

Lekson, Stephen H.
Chacoan Architecture in a Continental Context. Proceedings of the Anasazi Symposium, Mesa Verde National Park, Oct. 1-3, 1981.

Mathien, Frances Joan
The Mobile Trader and the Chacoan Anasazi. Proceedings of the Anasazi Symposium, Mesa Verde National Park, Oct. 1-3, 1981.

Windes, Thomas C.
A View of the Cibola Whiteware from Chaco Canyon. Arizona State University Press.

Powers, Robert P.
Regional Interaction in the San Juan Basin: The Chacoan Outlier System. Kiva Fall 1983.

Schelberg, John D.
Analogy, Complexity, and Regionally-Based Perspectives. Kiva Fall 1983.

Doyle, David E., Cory D. Breternitz, and Michael P. Marshall
Chacoan Community Structure, Bis sa'ani Pueblo and the Chaco Halo. Kiva Fall 1983.

Lekson, Stephen H.
Standing Architecture at Chaco Canyon and the Interpretation of Local and Regional Organization. Kiva Fall 1983.

Windes, Thomas C.
A New Look at Population in Chaco Canyon. Kiva Fall 1983.

Toll, H. Wolcott III
Trends in Ceramic Import and Distribution in Chaco Canyon. Kiva Fall 1983.

Cameron, Catherine M.
A Regional View of Chipped Stone Raw Material Use in Chaco Canyon, New Mexico. Kiva Fall 1983.

Sappington, Robert and Catherine M. Cameron
Obisidian Procurement at Chaco Canyon, New Mexico, A.D. 500-1200. Kiva Fall 1983.

Mathien, Frances Joan
Jewelry Items of the Chaco Anasazi. Kiva Fall 1983.

Akins, Nancy J. and John D. Schelberg
Evidence of Organizational Complexity as Seen from the Mortuary Practices in Chaco Canyon. Kiva Fall 1983.

Palkovich, Ann M.
Disease and Mortality Patterns in the Burial Rooms of Pueblo Bonito: Preliminary Considerations. Kiva Fall 1983.

Akins, Nancy J.
Temporal Variations in Faunal Assemblages from Chaco Canyon. Kiva Fall 1983.

Clary, Karen Husum
Anasazi Diet and Subsistence as Revealed by Coprolites from Chaco Canyon. Kiva Fall 1983.

Cully, Anne
The Distribution of Corn Pollen at Three Sites in Chaco Canyon, New Mexico. Kiva Fall 1983.

Toll, Mollie S.
Report on macrobotanical evidence. Kiva Fall 1983.

Lagasse, Peter, William B. Gillespie, and Kenneth G. Eggert
Hydraulic Engineering Analysis of Prehistoric Water Control Systems at Chaco Canyon, New Mexico. Kiva Fall 1983.

Cully, Jack F.
Diversity, Stability and the Deer Mouse: Implication for the Vegetative Diversity Model. Kiva Fall 1983.

Lekson, Stephen H. and Peter J. McKenna
The Architecture of Chetro Ketl. Reports of the Chaco Center No. 6.

McKenna, Peter J.
29SJ1360. Reports of the Chaco Center, No. 7.

The Branch of Remote Sensing, located in Bandelier Hall West on the University of New Mexico campus, is also a National Park Service Office working under a cooperative agreement with UNM. The Branch of Remote Sensing began the year with two permanent employees and two part-time cooperative student employees, and has added an additional archaeologist position during the year.

During the year, the Branch of Remote Sensing has participated in many activities directly related to supporting the role of the University of New Mexico and its faculty, staff and students, a primary mission of the office under its cooperative agreement. At least six instructional tours of the Branch's laboratory, archival and research facilities were given by staff, directed toward classes from Anthropology, Geology and Geography Departments. Many academic departments make use of aerial photographs, space imagery, and their analysis, and the Branch of Remote Sensing facilities are available for such tours by classes, or for use by UNM faculty and students in the course of their projects. During the period between July 1, 1982 and June 30, 1983 Branch of Remote Sensing personnel consulted with and aided UNM personnel in projects such as the photogrammetric mapping of archaeological sites in Peru, Mexico and Central America, the interpretation of unknown Chacoan pueblo sites using aerial photography, the mapping and measurement of lava and ash flows at Mt. St. Helens, the mapping of vegetation in Big Bend National Park, the transfer of drawings of ancient palaentological specimens from one graphic medium to another, and the use of computer graphics for the depiction and analysis of

archaeological site locations. In addition to working with UNM Departments of Anthropology, Geology and Geography, such consultation was also undertaken for the benefit of the Biology Department, the Office of Contract Archaeology, and the Maxwell Museum (particularly in reference to their recently-opened "Chacoan Phenomenon" exhibit).

The Branch of Remote Sensing also attracts many academic and professional visitors to the University of New Mexico. During the past year, the Associate Director for Cultural Resource Management of the National Park Service, the chief lobbyist for the National Parks and Conservation Association, and visiting scientists from Spain, China, England, Kenya, and many American universities visited the Branch's offices to discuss developments in archaeological and cultural resources remote sensing. Training sessions in this subject were conducted for archaeologists from the Corps of Engineers and Bandelier National Monument, and a joint workshop was conducted by UNM's Technology Applications Center and Branch of Remote Sensing personnel that attracted archaeologists and cultural resource managers from around the country. A curriculum in cultural resources remote sensing for managers and field personnel was also compiled jointly by the Branch and the Techology Applications Center. Presentations discussing the Branch's work were given at the Denver Museum of Natural History, the New Mexico Archaeological council Meetings at Chaco Canyon, and at a special National Park Service Symposium on cultural resources sampling and predictive modeling at Ft. Collins, CO. James Ebert and Dwight Drager were

requested to participate in a committee convened to advise the Museum of New Mexico on the technical aspects of a project directed at the aerial photography of all major archaeological sites in the State of New Mexico. Ebert and Drager also served on a committee which formulated plans to record and model a solar calendrical petroglyph group in Chaco Canyon National Historical Park as directed by Congress.

Research at the Branch of Remote Sensing is directed toward the development of remote sensing and other methods and techniques for application to archaeological, ethnological, and cultural resource studies. BRS projects carried out this year have included the mapping of human and animal trails and paths to assess potential impacts on cultural resources at Bandelier National Monument, the mapping of geomorphological factors affecting the integrity and visibility of cultural resources at Chaco Canyon National Historical Park, the initiation of a soils study at Pecos National Monument, and experiments in the measurement of archaeologically-relevant environmental diversity using Landsat digital data.

A currently important theme in cultural resources management is the predictive modeling of the distribution of prehistoric and historic cultural sites and their attributes in areas subjected to large-scale survey, and the Branch of Remote Sensing initiated a project this year designed to test applications of remote sensing to such goals. This project is to be undertaken in the area of the Seedskadee National Wildlife Refuge and lands surrounding the Fontenelle Reservoir in southwestern Wyoming, and will involve the prediction and testing of cultural site

locations based on Landsat and aerial photographic data there. A primary emphasis will be the measurement and analysis of geomorphologic(al) surface dynamics and the ways that these affect the deposition of archaeological materials as well as their integrity and visibility after deposition. Extensive archaeological survey is to be carried out for testing purposes during the summer of 1983 and will involve a new technique, the three-dimensional mapping of all artifact and feature locations in large contiguous survey areas using electronic distance measurement (EDM) equipment. A former UNM graduate student, Arthur Ireland, has been hired to assist in this research. A computerized geographic information system has been developed for application to this and other future spatially-based research projects; programs designed by Dwight Drager and Philip Rice allow the digitization and integration of spatial information for correlation analysis. A report on the utility of this system will be delivered at this year's Pecos Conference in Bluff, Utah.

In another research project, Devon Dederich, a graduate student in the Department of Geography and employed at the Branch of Remote Sensing on a cooperative student appointment, has been studying changes in settlement pattern at Zuni Pueblo. These data will form the basis of her M.A. thesis in that department. Interviews, historic aerial photographs, and recent photointerpreted data will be combined to document changes in the placement of dwellings, agricultural fields, and special purpose sites in and around Zuni. During her work at the Branch of Remote Sensing, Dederich took two groups of UNM students into the

field to assist with recording and mapping.

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The Branch of Remote Sensing's publications series, which has grown from Lyons and Avery's 1977 Remote Sensing: A Handbook for Archeologists and Cultural Resource Managers to include seven instructional supplements, will soon be added to with additional supplements on cultural resource remote sensing in the Northern Plains (W. Raymond Wood), and Southwest (E. Camilli and L. Cordell), and Ethnographic Remote Sensing (R. Fanale), all of which were finalized this year. Copies of Branch of Remote Sensing publications which are available can be obtained free of charge by UNM faculty who are interested.

Publications by Branch of Remote Sensing staff which appeared or went to press this year are:

Camilli, Eileen and Linda Cordell
In Press Cultural Resources Remote Sensing in the Southwestern United States, a supplement to Remote Sensing: A Handbook for Archeologists and Cultural Resource Managers. Washington, DC: National Park Service.

DeWindt, Lila
In Preparation Architecture Supplement to Remote Sensing: A Handbook for Archeologists and Cultural Resource Managers. Washington, DC: US Government Printing Office.

Drager, Dwight L., James I. Ebert, and Thomas R. Lyons
1982 Remote Sensing and Non-Destructive Archaeology: Approaches to Cultural Resource Management. In Fred Plog and Water Wait, eds., The San Juan Tomorrow: Planning for the Conservation of Cultural Resources in the San Juan Basin, pp. 219-244. Santa Fe, NM: National Park Service and Museum of New Mexico.

Drager, Dwight L.
1983 Environmental Integration in Archaeology. Paper to be presented as the 56th Pecos Conference, Bluff, Utah.

Drager, Dwight L. and Thomas R. Lyons
1983 A Field Test of Remote Sensing in Archaeology. Final report of excavations at 29 SJ 1010, Chaco Culture National Historical Park. Manuscript on file at Division of Cultural Research, National Park Service, Albuquerque, NM.

Ebert, James I.
1982 Aerial Archaeology and Cultural Resources Remote Sensing: Different Approaches to the Same Goals (Abstract). In International Symposium on Aerial Photography and Archaeology, p. 7. Amsterdam: Universiteit van Amsterdam.

Ebert, James I.
1982 Photogrammetry: Tool for Documentation, Monitoring and Analysis of Cultural Resources. Technical Papers of the American Society of Photogrammetry, ASP-ACSM Convention, March 14-20, 1982, Denver, Colorado, pp. 57-61. Falls Church, VA: American Society of Photogrammetry.

Ebert, James I.
1982 Archaeology and Anthropology Comittee, American Society of Photogrammetry, 1981. Photogrammetric Engineering and Remote Sensing, Vol. XLVIII, No. 7, pp. 1195-96. Falls Church, VA: American Society of Photogrammetry.

Ebert, James I.
1982 American Society of Photogrammetry 1981-1982 Reoprt. Society for Archaeological Sciences Newsletter, Vol. 5, No. 4, pp. 3-4.

Ebert, James I.
1981 (appeared 1982) The Archaeology and Anthropology Committee of the American Soceity of Photogrammetry. Aerial Archaeology, Vol. 6, pp. 3-4. Norfolk, England: The Aerial Archaeology Foundation.

Ebert, James I.
1982 Ellison's Cow. Reprinted in Elvio Angeloni, ed., Anthropology 82/83, pp. 89-92. Guilford, CT: Annual Editions, The Dushkin Publishing Group.

Ebert, James I.
In Press. Remote Sensing Applications in Archaeology. In Schiffer, Michael B., ed., Advances in Archaeological Method and Theory, Volume 7. New York: Academic Press.

Ebert, James I.
In Press. Review of David R. Wilson, Aerial Photointerpretation for Archaeologists. To appear in American Antiquity.

Ebert, James I., Bruce Bevan, Eileen Camilli, Dwight L. Drager, Rosalie Fanale, Nicholas Hartmann, Thomas R. Lyons, and Irwin Scollar
In Press. Archaeology, Anthropology and Cultural Resource Management. Chapter 26, to appear in Manual of Remote Sensing, 2nd Edition. Falls Church, VA: American Society of

Photogrammetry.

Ebert, James I. and Galen N. Brown
1982 Remote Sensing in the NPR-A Cultural Resources Assessment. In Davis, Craig W., Dana C. Linck, Kenneth M. Schoenberg, and Harvey M. Shields, eds., Slogging, Humping and Mucking Through the NPR-A: An Archaeological Interlude (sic), Appendix B. Fairbanks, AK: Anthropology and Historic Preservation Cooperative Park Studies Unit, University of Alaska, Occasional Papers No. 25.

Ebert, James I. and Thomas R. Lyons
In Press. Geology and Archaeology in Cultural Resources Management. In Chapter 31: Applications in Geology, author/ed. Richard S. Williams, Jr. In Colwell, Robert N., David Simonett, John Estes, Fawwaz Ulaby, and Gene Thorley, eds., Manual of Remote Sensing, 2nd Edition. Falls Church, VA: American Society of Photogrammetry.

Hitchcock, Robert K. and James I. Ebert
In Press. Foraging and Food Production Among Kalahari Hunter/Gatherers. To appear in Clark, J. D. and Stephen Brandt, eds., From Hunters to Farmers. Berkeley, CA: University of California Press.

Lyons, Thomas R. and James I. Ebert
1982 Photogrammetric Measurement and Monitoring of Historic and Prehistoric Structures. In Conservation of Historic Stone Buildings, pp. 242-271. Report of the Committee on Conservation of Historic Stone Buildings and Monuments, National Research Council. Washington, DC: National Academy Press.

Lyons, Thomas R. and James I. Ebert
1982 Early Man in the Estancia Basin. In Grambling, Jeffrey A. and Steven G. Wells, eds., Albuquerque Country II: New Mexico Geological Society Thirty-Third Annual Field Conference, November 4-6, 1982, pp. 15-16. Albuquerque, NM: New Mexico Geological Society.

Lyons, T.R., J. I. Ebert, D. Dederich, D. Drager, S. Morain, A. Budge, M. Inglis, and T. Talmon
1982 Cultural Resources Remote Sensing: A Curriculum for Cultural Resource Managers, Planners, and Field Personnel. Prepared by the Remote Sensing Division, National park Service and the Technology Applications Center, University of New Mexico/NASA, for the US Geological Survey EROS Program under Grant #14-08-0001-G-657, 1981.

Wood, Raymond
In Press. North Plains Supplement to Remote Sensing: A Handbook for Archeologists and Cultural Resource Managers. Washington, DC: US Government Publishing Office and National Park Service.

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B. Significant Plans and Recommendations for the Future

See section A.

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C. Appointments to Staff

Office Staff:

Nicola Keptner, Clerk Specialist V, effective 8/25/82
Billie Jean Mesa, Staff Secretary, effective 9/01/82
Maria Ruiz, Clerk Specialist IV, effective 9/08/82
Rita Tsosie, Clerk Specialist V, effective 11/01/82

D. Separations from Staff

Office Staff:

Margaret Colclough, Staff Secretary, 8/16/82

Rita Tsosie, Clerk Specialist, effective 5/20/83

Carrie Wackerbarth, Clerk Specialist V, effective 8/13/82

Faculty:

Scott Rushforth, Assistant Professor, 6/30/83

E. Sponsored Research or Other Projects

Name	Title	Agency	Accepted
Lewis Binford	Site Structure at Combe Grenal	Leakey Foundation	Submitted
Caroline Bledsoe (2 grants)	The Relationship of Fosterage to Child Mortality, Fertility, and Modernization in Sierra Leone	NSF & Ford-Rockefeller	Continuing
John Fritz	The Imperial City: Vijayanagar (the Deccan) Karnataka, India: A Medieval Hindu Case Study	NSF & NEH	Yes
Birute Galdikas		Guggenheim Foundation Fellowship	Yes
Louise Lamphere	Women's Work and Family Strategies in the Context of "Sunbelt" Industrialization	NSF	Continuing
Jeremy Sabloff	A Study of Ancient Maya Settlement Patterns at the Site of Sayil, Puuc Region, Yucatan, Mexico: Initial Reconnaissance	NSF	Yes
Lawrence Straus	Abri Dufaure: Terminal Pleistocene Hunter-Gatherer Adaptations in Pyrenean France	NSF	Continuing
Mari Lyn Salvador & J.J. Brody	Please see the Maxwell Museum portion of the Annual Report for grant proposals submitted by Dr. Salvador and Dr. Brody and members of their staff		
Elizabeth Dressel (Patricia Draper)	The Relationship Between the Living Arrangements of Retirees and the Development of Old Age Identity	NSF	Yes

E. Sponsored Research or Other Projects

Name	Title	Agency	Accepted
Lisa Sattenspiel (Henry Harpending)	A Migration Matrix Approach to Day Care Hepatitus	NSF & Wenner-Gren	Submitted
Dianna Shomaker (Karl Schwerin)	Cross Cultural Comparisons of Aging and the Elderly in the Southwest	HEW	Continuing

Annual Report of the Department of Biology

July 1, 1982 - June 30, 1983

Donald W. Duszynski, Chairman

I. General Information

A. Significant achievements during the academic year. Beginning with the summer session 1982, I replaced James S. Findley as departmental Chairman and William W. Johnson was appointed to the newly created position of Assistant Chairman. During the summer and early fall I met individually with each faculty member for several hours to discuss such things as their expectations for the department, undergraduate and graduate curricula, teaching and research responsibilities, sabbatical leaves, supervision of graduate students, potential for interaction with medical school faculty, dealing with the higher administration, and how salaries would be calculated in the future using a merit formula that awarded points for all teaching, research and service activities. Each faculty member was given a data reporting form and asked to record all of their professional activities on an annual basis. These forms then become part of each faculty member's working file.

Other items of worth to the Department that were negotiated for when I accepted the chairmanship included: (1) a new faculty line in electron microscopy to replace a Lab Tech V (Minion) who had run the transmission electron microscope previously; (2) retention of the faculty position vacated by Douglas Caldwell; and (3) purchase of an Osborne I minicomputer to assist record keeping and inventory in the departmental office.

During FY 1982-83 Assistant Chairman Johnson continued his duties as undergraduate student and transfer student adviser. In addition, he chaired the new Undergraduate Policy Committee (concerned with all aspects related to undergraduate policy and curriculum), handled most administrative duties/problems associated with our undergraduate program in Biology, and advised the Chairman on certain matters of departmental policy. The major achievement of the Undergraduate Policy Committee (Altenbach, Baca, Bourne, Gosz, S. Ligon and W. Johnson, Chrm.) during this time period was the design of an undergraduate advisement program which will be available for all Biology majors beginning Fall Semester 1983. Initially, three faculty members (G. Johnson, Martin, Molles) will serve as departmental advisers for any of the approximately 400+ declared biology majors to assist them in planning their programs to best meet their individual needs. We hope this advisement system will help our majors develop relevant, challenging programs of study that will be of benefit to them upon graduation when they apply for jobs or for admission to professional schools. To this end, a personal letter (p. 2) was sent to all students who have, at one time or another, specified Biology as an intended major.

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THE UNIVERSITY OF NEW MEXICO
ALBUQUERQUE, NEW MEXICO 87131

University records indicate that at some previous registration you specified biology as your intended major. If this is still your intention, the Department of Biology is most anxious to insure that your major program will be a relevant, challenging, and rewarding academic experience. To achieve this goal we will have in operation this coming fall semester a continuing advisement program for undergraduate biology majors. We are optimistic this program will have a strongly positive influence in terms of the benefits you obtain as a biology major.

I wish to personally invite you to explore the services this new advisement program will offer. The faculty members who will serve as departmental advisers will be able to assist you by providing advice on the planning of your biology program and on the selection of courses outside of biology that will best meet your academic needs. Your adviser will have information available on career opportunities in the various areas of applied biology and will also be able to make suggestions regarding which graduate schools offer quality training in particular biological specialties. When necessary, your adviser will direct you to other faculty members when they are better able to answer specific questions you might have about careers or advanced academic work. An additional potential benefit from association with your adviser is that at some future time you may wish to call upon him or her to supply a letter of reference in support of a job application or an application for admission to a professional or graduate school.

All that is required for you to obtain advisement is to call or come to the Departmental Office in Castetter Hall any time after August 15, 1983. You will be given the name, office number, telephone number, and schedule or office hours of an adviser. From then on it is hoped that you will ararnge to have regular meetings with him or her throughout the remainder of your undergraduate career.

Best wishes for a successful semester, and we will look forward to seeing you this fall.

Sincerely,

Donald W. Duszynski
Professor and Chairman

DWD/cls

DEPARTMENT OF BIOLOGY TELEPHONE 505: 277-3411

The emphasis of our Department at the undergraduate level remains teaching biology as a liberal art and providing our students with a broad and high-quality selection of courses that, hopefully, will be meaningful and relevant to them upon completion of their degrees.

At the graduate level the major emphasis of the department has been, and continued to be, in the area of ecology and evolutionary biology. This emphasis has resulted in national and international recognition of our program as one of the best in the United States. The strength of our program has resulted in our being able to nurture and maintain a core of distinguished faculty in this area, in increased research support from state and federal agencies, and in the attraction of a cadre of high quality graduate students to the program. During the past FY a number of our graduate students have distinguished themselves by winning national and local awards, securing grants from prestigous private/federal agencies to support their research efforts, and securing some of the most sought after jobs in this country and elsewhere. These achievements are summarized in Table 1 (pgs. 4, 5).

To further strengthen the graduate curriculum we have approved, and will begin in Fall Semester 1983, a series of three CORE courses which all graduate students in the broad areas of ecology-evolutionary-whole animal biology will be required to take to complete their degree programs. We anticipate that this CORE will form the foundation of graduate training for students in these disciplines. Satisfactory performance, with grades of B or better, in these three courses would replace the current Qualifying Examination as an indicator of the student's ability to do graduate-level work. Ph.D. candidates are required to take all three courses during their first year. Master's candidates may spread the three courses over their two years of graduate study. The courses in this CORE are as follows: (1) Biol. 512 Population Biology (4 h) Taylor, Yates; (2) Biol. 513 Physiological and Behavioral Ecology (5 h) Gosz, Thornhill, Toolson; and (3) Biol. 514 Ecology of Communities and Ecosystems (4 h) Gosz, Wiens.

Significant strides were made during FY 1982-83 to begin to strengthen the other, but no less important, major area of study in our department, that of molecular-cellular biology. I made a comprehensive evaluation (see 6 May 1982 memo to Dean F. Chris Garcia, copy available upon request) and concluded that the courses we offer in this broad area are comprehensive, fundamentally sound, contain current information on most new scientific developments, and are designed to cover basic principles and then build on these principles to attain an understanding of their relevant applications as these applications relate to science, to preparation for professional and graduate schools and to our every day lives. The study clearly pointed out that there is a serious lack of space, modern equipment, and faculty members to offer, at present, a highly competitive graduate program in the molecular-cellular area. A number of steps were taken to begin to alleviate these deficiencies: (1) The first two faculty positions I was able to secure as a new chairman were both in the area of molecular-cellular biology (see Sec. C, Appointments to Staff); (2) I negotiated with Karl Rieckmann, Director of Tropical and Geographical Medicine, to remove the breeding colony of Aotus monkeys from room 7; (3) I have successfully negotiated with the Administration to completely renovate rooms 7, 9 and 11 into a modern three room suite for electron microscopy; work has been progressing well since May and should be completed by 15 August; (4) Further negotiations are

Table 1. Awards and honors received by Department of Biology Graduate students during FY 1982-83.

Student	Degree Program	Major Professor	Award/Honor/Grant/Job
Tom Andrews	Ph.D.	W. Martin	National Audubon Society Expedition Institute grant
Rich Bradley	Ph.D.	J. Wiens	Outstanding Student Paper Award, 63rd Annual Meeting of the Western Society of Naturalists
			Appointed as Lecturer, School of Biological Sciences, Univerity of Sydney, N.S.W., Australia
Larry Chavez	postdoc	D.W. Duszynski	Summer Fellowship, Marine Biological Laboratory, Woods Hole, MA
Joe Cook	M.S.	T.L. Yates	$5,000 grant, Victoria Land and Cattle Company
			$1,200 grant, New Mexico Game and Fish Department
Tom Edwards	M.S.	J.D. Ligon	Outstanding Graduate Student Teaching Award, Department of Biology, Fall 1982 (co-recipient)
Sarah George	Ph.D.	T.L. Yates	$3,500 "Outstanding Scholar" Scholarship Grant, Delta Delta Delta
			$500, American Society of Mammalogy Grant-In-Aid of Research
			$700 Theodore Roosevelt Memorial Award, American Museum of Natural History
Jon Hastings	Ph.D.	E. Toolson	Outstanding Graduate Student Teaching Award, Department of Biology, Fall 1982 (co-recipient)
Dennis Heineman	Ph.D.	J. Wiens	The 1982-83 University of New Mexico Graduate Fellowship
Colin Henderson	Ph.D.	R.G. Cates	Outstanding Graduate Student Teaching Award, Department of Biology, Fall 1982 (co-recipient)
Nancy Joste	M.S.	J.D. Ligon	Second Best Student Research Paper, 53rd Annual Meeting of the Cooper Ornithological Society

Table 1. Continued

Dwight Moore	Ph.D.	T.L. Yates	$300 grant, National Sigma Xi Grant-In-Aid of Research
			$600 Theodore Roosevelt Memorial Award, American Museum of Natural History
Janice Moore	Ph.D.	D.W. Duszynski	Ph.D. Dissertation selected to be published as a feature article in Scientific American
			$35,000 postdoctoral grant from the National Science Foundation to work in parasite ecology at Florida State University
			Appointed as Assistant Professor, Department of Zoology and Entomology, Colorado State University, Ft. Collins, CO (287 applicants!)
Brent Parker	M.S.	D.W. Duszynski	$1,000 grant, New Mexico Game and Fish Department
Robyn Richards	M.S.	P. Kerkof	Outstanding Graduate Student Teaching Award, Department of Biology, Spring 1983
Robert Sullivan	Ph.D.	T.L. Yates	$2,000 grant, New Mexico Game and Fish Department
Bea Van Horne	postdoc	J. Wiens	$40,117 grant from the Pacific Northwest Forest and Range Experiment Station of the U.S. Forest Service
Bruce Woodward	postdoc	R. Thornhill	$22,000 grant from the National Science Foundation
Steve Zack	Ph.D.	J.D. Ligon	Best Student Research Paper, 52nd Annual Meeting of the Cooper Ornithological Society
			Marsha Brady Tucker Travel Award, Best Student Paper Abstract, Annual Meeting of the American Ornithologist's Union

continuing with the Administration to renovate rooms 203, 203-A, 204 and 205, all research labs in the molecular-cellular area, into modern, functional research facilities. Indications at this point are that these renovations may be approved early during FY 1983-84. We'll keep our fingers crossed.

In the Spring 1983 we initiated a graduate student recruitment program in Biology. It seems clear that if we are to achieve and maintain excellence in our graduate program, we must be able to attract the best graduate students in the country to come to UNM. One way to achieve this is to bring the best of the students who apply to our program to Albuquerque for interviews and to show them, first hand, the programs we have to offer. Obviously such a program costs money and funds for this purpose simply are not available from UNM. Three faculty members in Biology, who prefer to remain anonomyous, contributed sums of $1,000, $400 and $200 to help initiate our recruitment program. They did this in a year when they received no salary increase! The first year of our program was successful as we were able to attract a number of potentially excellent students and to recruit two of the four students we interviewed. The results of our recruiting efforts are summarized below (Table 2).

Table 2. Graduate students brought to UNM and interviewed by the Biology Department during Spring 1983.

Students Interviewed	Offered Graduate Stipends by Other Schools	Decided to Attend:
Scott Carroll	Princeton, Utah	Utah
Scott Gardner	Wake Forest, Univ. British Columbia	UNM
Geoffrey Hill	North Carolina, Indiana	UNM
Norm Richardson	Pennsylvania	Pennsylvania

This past year we also began to recognize and reward, again through faculty contributions, the graduate student or students who do the most outstanding job teaching for us each semester. The names of the students honored during FY 1982-83 are listed in Table 1.

Finally, but certainly not least, the dedicated support staff in our main department office has continued to strive for excellence and to perform above and beyond the call of duty. During FY 1982-83 the Personnel Office did a re-evaluation of the work activities of all of our staff and this resulted in step increases/promotions as follows: Mary Alice Root promoted from Administrative Assistant (grade 10) to Academic Support Aid (grade 14); Joanne Tapia promoted from Department Secretary (grade 5) to Office Manager (grade 7); Linda DeVries and Cynthia Schooler both promoted from Clerk IV to Clerk V and Walt Joyce promoted from Storekeeper (grade 5) to Storekeeper II (grade 8).

B. Significant plans and recommendations for the near future. Our plans for the near future are to continue to build and maintain excellence at all levels within our program. To this end we will be working to: (1) modify and strengthen our undergraduate programs to maintain relevancy so

that our students will be competitive in the marketplace (jobs, professional schools, advanced graduate work, etc.) upon completion of their degrees; (2) maintain and continue to support excellence in our ecology-evolutionary biology graduate programs; (3) build and achieve excellence in our molecular-cellular biology graduate programs; (4) increase faculty positions in both areas - no other comparable institution in the southwestern United States has so few biologists; and (5) reorganization and continued upgrading of key office personnel.

C. Appointments to staff.

August. Melinda Bealmear began as bookkeeper in our main office (Clerk V).
August. Martha Buck began as the morning receptionist in our front office (Clerk IV).
October. Dr. Robert Chiovetti was appointed as Assistant Professor. Bob's main duties include teaching and research in the area of electron microscopy and he is also the director of our EM facility.
January. Dr. Donald Natvig was appointed as Assistant Professor. Don's main duties include teaching and research in the area of plant molecular biology. Don also is assigned to teach in our freshman majors program.
February. Sandy Mitchell began as the morning receptionist in our front office (Clerk IV) replacing Martha Buck.
May. Kevin Montoya began as bookkeeper in our main office (Clerk V).

D. Separations from staff.

August. Jim McLain left the department to accept a higher paying position in Contracts and Grants at UNM.
August. Greg Minion left the department when his position as EM technician (Lab Tech V) was cancelled and changed to a faculty line item.
August. David Pitcher left the department to attend Medical School.
January. Martha Buck left the department for personal reasons.
April. Katie Delgado left the department to accept a higher paying position in the Medical School.
June. Joanne Tapia left the department to accept a higher paying position in the Associate Provost's Office.

Three of the people who left our department this year did so to accept grade and salary increases in other departments at UNM because we were unable to adequately reward them for their service and dedication internally. Indications are that we will soon lose two more key staff people for the same reason. This points to a very serious fault in the basic attitude and structure of the Personnel system at UNM which does not encourage and reward dedication and hard work within any particular academic unit. This attitude is counterproductive to corporate efficiency and, in my estimation, needs immediate attention from the UNM Administration.

E. Sponsored research or other projects.

1. Records on grant proposals submitted to outside agencies are kept in this department on an annual basis (i.e., by year). Therefore, the

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Table 3. Active and recently expired research grants, Department of Biology, FY 1982-83.

BSRG AWARDS

Acct. No.	P.I.	$	
X281-140-300	Vogel	2,500	4-1-82 to 4-1-83
281-140-300	Chiovetti	2,997	12-22-82 to 7-1-83

MBRS PROGRAM RESEARCH GRANTS, 9/1/82 through 8/31/83

Acct. No.	P.I.	$
282-613-200	Baca	13,157
282-614-200	Barton	11,930
282-621-200	Daszynski	20,702
282-626-200	Korkof	18,711
282-627-200	Kogoma	11,227
282-640-200	Riedesel	9,045
282-645-200	Trujillo	11,848
282-647-200	Vogel	5,400

ACTIVE RESEARCH GRANTS AS OF 4/1/83

Acct. No.	P.I.	Agency	Project	Dollars	Duration
281-375-000	Kogoma	NEW	DNA Replication	64,888	03/01/83-02/29/84
X281-562-300	Ligon	NSF	Communality in Tropical Birds	108,165	06/01/79-11/30/82
X281-566-100	Thornhill	NSF	Evolution of Behavior	94,279	06/01/77-10/31/82
X281-754-300	Vogel	PHS	Glycosaminoglycans	46,760	03/01/81-02/28/83
281-892-100	Cates	NSF	Plant-Herbivore Community	175,000	05/15/80-09/30/83
X281-912-100	Yates	NSF	Talpidea Genes	56,500	06/15/80-11/30/82
X281-914-230	Cates	USDA	Spruce Budworm	41,760	06/01/81-01/31/83
281-927-100	Baca	NSF	Intracellular Parasites	149,434	09/01/80-02/29/84
281-965-300	Vogel	NEW	Glycosaminoglycans	37,900	01/01/83-12/31/83
281-984-100	Wiens/Cates	NSF	Avian Predators	438,063	01/15/81-06/30/84
X281-001-100	RC/JG/MM	Roc.Mnt.Forest	Recreational Effects	54,376	03/01/81-12/31/82
281-012-200	Gosz	NSF	Atmospheric Inputs	206,980	06/01/81-11/30/83
281-024-100	Taylor	NSF	Diapause Induction	66,816	05/15/81-12/31/83
281-029-100	Potter	Surf.Min.Office	Reclamation Success (Vegetation)	45,413	05/15/81-09/15/83
281-033-100	Stacey/Ligon	NSF	Cooperative Polyandry	88,411	06/01/81-11/30/84
X281-038-100	C. Johnson	Roc.Mnt.Forest	Testing Osmoticums	12,275	05/18/81-12/31/82
281-089-100	Toolson	NSF	Drosophila Pseudoobscura	77,000	11/01/81-04/30/84
281-101-200	Yates	NM Game & Fish	Bobcat Cataloging	9,125	09/15/82-09/15/83
281-110-100	Wiens/VanHorne	Forest Service	Effects of Clearcut Logging on Food	19,238	03/01/82-08/31/83
281-114-100	Gosz	Forest Service	Fire Effects on H_2O Sol. Nutrients	21,000	04/20/82-12/01/83
281-152-100	Woodward	NSF	Toads, Anuran Behabior	22,193	07/01/82-09/30/84
281-154-100	Potter	Nat'l Park Svc.	Yarpa River	37,400	06/07/82-05/01/83
281-158-100	Crawford	NSF	Cellulose Decomposition In Ecosystems	80,000	07/01/82-12/31/84
281-164-100	Taylor	NSF	Theoretical Analysis & Evolution	66,449	08/01/82-01/31/85
281-184-100	Yates/Pete/Sul	NM Game & Fish	Determination of Status of Chipmunk	5,000	07/15/82-03/01/83
281-188-100	Yates/ Findley	NSF	Updating Recent Mammal Collections	100,000	11/01/82-04/30/85
281-193-100	Yates	NM Game & Fish	Genetic & Chromosomal Variation	33,030	09/15/82-09/15-83
281-214-100	Nolles	NM Game & Fish	Isopod Culture System	4,686	02/16-83-12/31/83
281-222-100	Thornhill	NSF	Ecological Determinants	73,766	05/01/83-10/31/86
281-224-100	Cates/VanHorne	Forest Service	Black-tailed Deer	30,482	03/30/83-07/31/84
281-229-100	Cates/Gosz	NSF	Plant Secondary Chemistry (3 yr)	175,059	06/01/83-05/31/84

X Denotes grants in effect after 1 July 1982 but expired before 30 June 1983.

information reported here is for the year 1982. During 1982, 17 of our 29 faculty (58.6%) submitted 29 grant proposals to outside agencies.

2. During 1982, 21 of our 29 faculty (72.4%) received new awards or renewal of previously awarded grants. The outside contracts in force in the department on 30 June 1983 totaled $2,132,358. This information is summarized, by faculty member, in Table 3 (p. 8).

II. Activities of Biology Faculty, 1982.

The 31 faculty members of the Department of Biology comprise a group of unusually dedicated people who are striving to maintain excellence in both undergraduate and graduate education and in their chosen areas of research. Many go out of their way, and use money from their own salaries, to better serve the UNM community and the people of the State. By and large, UNM biologists are hard working people who sacrifice their evenings, weekends, and often their holidays to work with students, conduct field trips, and work on their own research--all activities that ultimately bring credit to this institution and its programs. Certainly our Biology Department is as good as the best in the Southwestern U.S. Unfortunately, our reputation seems better known in Sweden or Japan or California or Washington D.C. than it is in Scholes Hall or Santa Fe. The following two sections provide a brief summary of many of the activities that have occupied the time and energies of our faculty during 1982. Some other activities of equal importance such as excellence in teaching, innovative teaching techniques, new programs and activities that benefit our students, etc., have been mentioned in Section I.

A. Professional Activities of Biology Faculty, 1982.

1. BOOKS AND TEXTBOOKS

None

2 EDITED VOLUMES

RIEDESEL
Leoppky, J.A. and M.L. Riedesel (eds.). 1982. Oxygen Tranport to Human Tissues. Proc. Luft Symp., Elsevier, North Holland. 377p.

3 CHAPTERS/MAJOR REVIEWS

CATES
Host resistance and susceptibility. In, Bark Beetles in North American Conifers: Evolution and Ecology (Mitton, J. and K. Sturgeon, eds.). U. Texas Press, Austin. pp. 212-263 (and H.J. Alexander).

CHIOVETTI
Instructions for use of lowicryl K4M and HM20. Booklet published by Chemische Werke Lowi GmbH, Postfach, D-8264 Waldkraiburg, W. Germany.

FINDLEY
Ecological significance of chiropteran morphology. In, Ecology of Bats (T.H. Kuntz, ed.). Plenum Pub. Corp. pp 243-260 (and D. Wilson).

GOSZ
A comparative analysis of nitrification and nitrate mobility in forest ecosystems. Ecological Monographs 52:155-177 (with T. Vitousek, G. Grier, M. Melillo and R.J. Reiners).

MARTIN
Floristic studies at the Los Medanos site. Ch. 3 In, Ecosystem Studies at the Los Medanos Site, Eddy County, New Mexico (Vol. II). West. Elect. Corp., TME 3141. 117 pp.

VOGEL
Tumor cell interactions with vascular endothelial cells and their extracellular matrix. In, Interaction of Platelets and Tumor Cells (J. Jamieson, ed.). Alan R. Lissa Inc., NY. pp. 333-351 (with T. Kramer, H. Randall, and G.L. Nicolson).

YATES
Moles: Talpidae. In, Wild Mammals of North America: Biology, Management and Economics (Chapman, J.A. and G.A. Feldhammer, eds.). Johns Hopkins U. Press. pp. 35-49 (and R.J. Pedersen).

4. SCHOLARLY ARTICLES

BARTON
A specific transport system for Fe^{2+} in bacteria. J. Plant Nutr. 5:405-411 (and H. Krivan and D. Klemm).

CRAWFORD
Water balance and apparent oocyte resorption in desert millipedes. J. Exper. Zool. 222:215-226 (and M.R. Warburg).

Desert ecosystems: their resources in space and time. Environ. Conser. 9:181-196 (and J.R. Gosz).

Microbial gut symbionts and desert detritivores. Sci. Rev. Arid Zone Res. 1:37-52 (with E.C. Taylor).

DUSZYNSKI
Development of Eimeria funduli in Fundulus heteroclitus. J. Protozool. 29:66-71 (with S.J. Upton).

Intestinal absorption of β-methyl-D-glucoside in rats infected with Eimeria nieschulzi. J. Parasitol. 68:727-729 (and K. Ramaswamy and G.A. Castro).

Eimeria from jumping mice (Zapus spp.): A new species and genetic and geographic features of Z. hudsonius luteus. J. Parasitol. 68:1146-1148 (and G. Eastham and T.L. Yates).

GOSZ
Research assessment and research needs for non-point source pollution of water by recreation. Eisenhower Consortium Bull. 13:1-14.

Desert ecosystems: their resources in space and time. Environ. Conser. 9:181-196 (with C.S. Crawford).

Strategies and management impacts. Ecol. Bull. (Stockholm) 33:405-4261.

JOHNSON, G.
Application of high performance liquid chromatography in the characterization of iron stress response. J. Plant Nutr. 5:499-514.

KERKOF
Preparation of primary cultures of ovine thyroid gland cells. J. Tiss. Cult. Meth. 7:23-26.

KIDD
Kepone - A case study of an environmental legacy. Amer. Biol. Teacher 44:466-471 (and W.M. Hadley).

Selenium kidney/liver ratios in rock squirrel populations from grassland and pinyon-juniper ecosystems. Ecotoxicol. Environ. Saf. 6:2-8 (with C.D. Rail).

Drinking water. Bull. Sci. Tech. Soc. 2:39-58.

KOGOMA
Suppressor mutations (rin) that specifically suppress the recA-dependence of Stable DNA replication in Escherichia coli K-12. Molec. Gen. Genet. 187:225-230 (with T.A. Torrey).

LIGON, J.D.
The cooperative breeding system of the green woodhoopoe. Scien. Amer. 247:126-134 (and S.H. Ligon).

LIGON, S.
The cooperative breeding system of the green woodhoopoe. Scien. Amer. 247:126-134 (with J.D. Ligon).

MOLLES
Trichopteran communities of streams associated with aspen and conifer forests: long term structural change. Ecol. 63:1-6.

POTTER
Mancos shale: some physical and chemical properties which affect vegetative communities on shale outcrops. In, 1982 Symposium on surface mining hydrology, sedimentology, and reclamation. Univ. Ken., Lexington, Dec. 5-10, 1982 (with E. Louderbough).

RIEDESEL
Pulmonary ventilation and cardiac activity in hibernating and arousing golden-mantled ground squirrels (Spermophilus lateralis). Cryobiol. 19:83-91 (with J.M. Steffen).

TAYLOR
Sensitivity of physiological time in arthropods to variation of its parameters. Envir. Entom. 11:573-7.

TOOLSON
Effects of rearing temperature on cuticle permeability and epicuticular lipid composition in Drosphila pseudoobscura. J. Exp. Zool. 222:249-253.

VOGEL
Solubilization and degradation of subendothelial matrix glycoproteins and proteoglycans by metastatic tumor cells. J. Biol. Chem. 257:2678-2686 (with H. Kramer, H. Randall, and G. Nicolson).

Production of proteoglycans by human lung fibroblasts (IMR-90) maintained in a low concentration of serum. Biochem. J. 207:369-379 (and R.E. Sapien).

Sulfated proteoglycans produced by human lung fibroblasts during in vitro cellular aging. Eur. J. of Cell Biol. 29:61-67 (and D.E. Pitcher).

WIENS
Song pattern variation in the sage sparrow (Amphispiza belli): dialects or epiphenomena? Auk 99:208-229.

Modeling the sensitivity of colonially breeding marine birds to oil perturbations: guillemot and kittiwake populations on the Pribilof Islands, Bering Sea. J. Appl. Ecol. 19:1-31 (with R.G. Ford, D. Heinemann, and G.L. Hunt).

On size ratios and sequences in ecological communities: Are there no rules? Ann. Zool. Fennici 19:297-308.

YATES
Biochemical systematics of North American moles (Insectivora: Talpidae). J. Mamm. 63:368-374 (and I.F. Greenbaum).

Eimeria from jumping mice (Zapus spp.): A new species and genetic and geographic features of Z. hudsonius luteus. J. Parasitol. 68:1146-1148 (with D.W. Duszynski and G. Eastham).

5. ABSTRACTS, NOTES, BOOK REVIEWS, AGENCY TECHNICAL REPORTS

BACA
Infection of a human macrophage-like tumor cell line (U937) with phase I and phase II Cosiella burnetii. Abst. No. 129. Tenth Ann. Minor. Biomed. Supt. Symp. Alb. (with M. Robles, A. Aragon, J. Rowatt, E. Akporiaye).

BARTON

Role of nitrogen, phosphorus and iron in occurence of algal blooms at Abiquiu and Cochiti Reservoir. Technical Completion Rept., N. Mex. Water Res. Res. Inst., 157 pp (with G. Johnson).

The effect of malathion, paraquat and glyphosphate herbicides on iron uptake in bacteria. Ann. Meet. Amer. Soc. Micro., p. 183 (with D.J. Klemm, H.C. Krivan).

Metabolism on the metal selenium by Desulfovibrio. Abst. CCI, II-8. Ann. Meet. Amer. Soc. Micro., p. 89 (with L.M. Gervais, C.J. Dean).

Coupling of sulfate transport to respiration in sulfate-reducing bacteria. Abst. No. 395. Tenth Ann. Minor. Biomed. Supt. Symp. Alb. (with M.A. Tafoya, S.M. Garcia).

CATES

A determination of the resistance-susceptibility characteristics of Douglas-fir to the western spruce budworm. Technical Report, 45 pp. (with R. Redak and C. Henderson).

Patch dynamics in shrubsteppe ecosystems: plant chemistry, arthropod distributions, and the role of avian predators. NSF Prog. Rept., 7 pp. (with J. Wiens).

A determination of the resistance-susceptibility characteristics of Douglas-fir to the western spruce budworm. USDA - Forest Service Prog. Rept., 1 pp.

Effect of plant community dynamics and chemical defenses upon herbivore feeding patterns and population dynamics. NSF Prog. Rept., 11 pp.

GOSZ

Decomposition of red pine needle litter in six sites in North America. Abst. Ecol. Bull. 63:95 (with M. Mellilo, S. Aber, A. Shaver, V. Van Cleve, R. Vitousek).

Moisture gradient effects on denitrification rates within a nonaggrading aspen site. Abst. Ecol. Bull. 63:134 (with G. Myrold).

The effect of plant roots on the net mineralization of nitrogen: Experimental and simulation approaches. Abst. Ecol. Bull. 63:133 (with F. Fisher).

Book Review: Nitrogen Cycling in West African Ecosystems. Science 28:869.

JOHNSON, G.

Los Medanos project - soil studies. Rept. Contract Research, West. Res. Corp., pp. 4.1-4.21.

Role of nitrogen, phosphorus, and iron in occurrence of algal blooms at Abiquiu and Cochiti Reservoirs. Tech. Comp. Rept., N. Mex. Water Res. Res. Inst., 157 pp (and L. Barton).

JOHNSON, G. (cont.)
Nitrogen fixation by soil crusts in a Chihuahuan Desert ecosystem. Abst. N. Mex. J. Sci. 22:23.

KERKOF
Book Review: Vol. VII, Biochemical Actions of Hormones (G. Litwack, ed.). J. Gen. Comp. Endocrin. 45:414-413.

Effect of TSH on thyroid peroxidase activity in ovine thyroid cells in culture. Abst. Fifth Ann. Meet. Endocrin. Soc., San Francisco, June 16-18, 1982. Endocrinology (Suppl) 110:385 (and S.L. Whisler A.M. Nieto, and S.A. Valverde).

MARTIN
A floristic survey of 18 study sites, Black Range Primitive Area. Tech. Rept., U.S. Forest Serv. (Contract No. 40-8371-1-278).

We have three responsibilities to rare plants. Native Plant Soc. N. Mex. Newsletter. Special edition, p. 1.

MOLLES
Effect of recreation (trampling) on the forest floor and associated streams of aspen and conifer forests. Final Report USDA Forest Serv. Eisenhower Consortium ($55,000).

Survey of the Middle Rio Grande for Notripis simus simus (Cope) an endangered minnow species. The Army Corps of Engineers ($7,700).

POTTER
Natural regeneration of ponderosa pine as related to land use and fire history on the Pajarito Plateau. Los Alamos Publ. LA-9293-NERP. 26 p. + map (and T.S. Foxx and F.J. Barnes).

TAYLOR
A reply to philogene: Development rates in insects. Amer. Nat. 120:692-693.

Thornhill
What causes rape? A dissenting view. Science 82 (Nov.):16 (with W. Shields, L. Shields, N. Thornhill).

VOGEL
Proteoglycans produced by human skin fibroblast cultures are different from those produced by lung fibroblasts. Abst. J. Cell Biol. 95:114a (with S.A. Felicetti).

Tumor cell degration of heparan sulfate proteoglycans, but not laminin or Type IV collagen, in basement membranes. Abst. J. Cell Biol. 95:135a (with R.H. Kramer).

WIENS

Ecosystem fragmentation in the pinelands of New Jersey. In, Ecological Solutions to Environmental Management Concerns in the Pinelands National Reserve (R.E. Good, ed.). Rept. Div. of Pinelands Res., Center for Coastal and Environ. Studies, Rutgers U., New Brunswick, NJ, pp 5-10 (and P.G. Risser, R.L. Burgess, R.T.T. Forman, and J. Terborgh).

The response of shrubsteppe birds to rangeland alterations: implications for assessing habitat occupancy. Abst. 100th Stated Meet. Amer. Ornithol. Union, Chicago, IL.

Book Review: Bird Problems in Agriculture (E.N. Wright, I.R. Inglis, and C.J. Feare, eds.). Auk 99:174-175.

Book Review: Montana Bird Distribution (2nd ed.) by P.D. Skaar. Auk 99:179-180.

Book Review: Allan Brooks: Artist Naturalist by H.M. Laing. Auk 99:180.

Book Review: The Descent of Man, and Selection in Relation to Sex by C. Darwin. Auk 99:399.

Book Review: Edward Wilson's Birds of the Antarctic (B. Roberts, ed.). Auk 99:401.

Editorial. Forum: Avian subspecies in the 1980's. Auk 99:593.

YATES

Systematic status of the mojave ground squirrel, Spermophilus mohavensis (Subgenus Xerospermophilus). Abst. Southwestern Ass. of Nat. (with D.J. Hafner).

Biochemical systematics of three species of catfish (Genus Ictalurus) in New Mexico. Abst. Southwestern Ass. Nat. (and M.A. Lewis and M.D. Hatch).

Evolutionary affinities among southwestern long-eared Myotis (Chiroptera: Vespertilionidae). Abst. #59. Amer. Soc. Mamm. (with D.W. Reduker).

Evolutionary relationships of North American Zapodidae. Abst. #61. Amer. Soc. Mamm. (with K.E. Peterson, D.J. Hafner and H.H. Genoways).

Genic relationships among the shrew-moles (Talpidae) of North America and Japan. Abst. #240. Amer. Soc. Mamm. (with D.W. Moore).

The role of voucher specimens in mammal collections: characterization and funding responsibilities. Abst. Proc. Third Intl. Theriological Congress, Helsinki, Finland.

Historical zoogeography and evolution of North American moles (Insectivora: Talpidae). Abst. Proc. Third Intl. Theriological Congress, Helsinki, Finland.

YATES (cont.)
Systematic status and habitat preferences of the mojave ground squirrel (Spermophilus mohavensis). Contract Rept., U.S. Dept. of Energy (with D.J. Hafner).

Distribution and occurrence of mammals in the Animas Mountains of New Mexico. Contract Rept., The Victoria Corp. (with J.A. Cook).

Progress report on the status of the Penasco chipmunk. N. Mex. Game and Fish (with R.M. Sullivan).

Systematic status of the headwater Catfish in New Mexico. Contract Rept., N. Mex. Game and Fish (and M. Lewis and M. Hatch).

6. GRANT PROPOSALS SUBMITTED

BACA
Studies on Coxiella burnetti and host cells. To: MARC-NIH. 1984-87. $58,800.

BARTON
Enhanced tolerance of chili peppers and cotton to saline water by use of appropriate mycorrhiza. To: N.M. WRRI. 1983. $20,548 (and G. Johnson). Not funded.

CATES
The effects of clearcut logging on food quality and availability for wildlife species. To: Pacific Northwest Forest and Range Experiment Station. 1983-84. $11,000 (and J. Wiens and B. Van Horne).

Foliage quality determinations of inherently resistant, susceptible, trenched and fertilized Douglas-fir: The effects on western spruce budworm. To: USDA-SEA. 1983-84. $21,600.

Role of plant secondary chemistry in ecosystem processes. To: NSF. 1983-85. $592,000 (with J.R. Gosz).

DUSZYNSKI
Host genetic factors affecting specificity of the Coccidia of small mammals. To: MBRS-NIH. 1984-87. $99,770 (and T.L. Yates).

EWING
On evolution of multigene families. To: NIH. 1983-86. $91,560 (Approved, funding pending).

Program in biomedical science and theoretical biology. To: MARC-NIH. 1983-88. $1,307,416 (with R. Griego PI; EPE 22% effort).

Prevalence survey of respiratory disease in NM Hispanics. To: NIH. 1983-87. $477,466 (with J.M. Samet PI; EPE 12-18% effort).

GOSZ
Role of plant secondary chemistry in ecosystem processes. To: NSF. 1983-85. $592,000 (and R.G. Cates).

JOHNSON, G.
Enhanced tolerance of chili peppers and cotton to saline water by use of appropriate mycorrhiza. To: N.M. WRRI. 1983. $20,548 (and L. Barton). Not funded.

Drought stress metabolites of Oryzopsis hymeniodes and Sporobolus cryptandrus. To: USDA-Rocky Mt. For. Range Exp. Stat. 1983. $23,246.

LIGON
An ecological study of the cooperatively breeding Harris' hawk. To: NSF (Dissertation Improvement Grant). 1983-84. $8,700 (with J. Bednarz).

MARTIN
Floristic survey of the Rio Puerco. To: U.S. Forest Serv. 1983. Not funded.

Floristic evaluations of prospective powerline routes in Montana. To: Montana Power and Light Co. 1983. Not funded.

MOLLES
Prey-selection by predaceous stoneflies. To: Off. Grad. Studies, Challenge Assistantships Prog. 1983-84 (and R. Pietruszka). Not funded.

The relation of forest succession to the structure and function of stream ecosystems. NSF. 1982. $163,469.

POTTER
Reassessment of understory and ponderosa pine growth six years after the LaMesa fire, Bandelier National Monument. To: Nat. Park Ser. 1983-84. $20,862.

Vegetational analysis of burrow exclosures, Bandelier National Monument. To: Nat. Park Ser. 1983-84. $5,070.

RIEDESEL
Overhydration with oral glycerol solutions. To: United States Air Force Office of Scientific Research. 1981-84. Not funded.

THORNHILL
Ecological determinants and evolution of behavior. To: NSF. 1983-1985. $74,000.

Sexual selection and the heritability of its associated traits. To: NSF. 1984-86. $106,000.

TRUJILLO
Isolation of Recombinant DNA clones encoding for liver fructose 1,6-Bisphosphatase. To: MARC-NIH. 1983-87. $30,000.

Control of carbohydrate metabolism in liver. To: MBRS-NIH. 1984-87. $88,000

VOGEL
Fibroblast proteoglycans and connective tissue matrix. To: NIH.

Glycosaminoglycans of the aging cell. To: NIH. Not funded.

WIENS
The effects of clearcut logging on food quality and availability for wildlife species. To: Pacific Northwest Forest and Range Experiment Station. 1983-84. $11,000 (with R. Cates and B. Van Horne).

YATES
Phylogenetics and species delimitation within the Dorsalis group (Diptera: Culcidae). To: NSF. 1982. $9,471.87 (with J. Schultz). Pending.

Host genetic factors affecting specificity of the Coccidia of small mammals. To: MBRS-NIH. 1984-87. $99,770 (with D. Duszynski).

7. GRANT PROPOSALS FUNDED

BACA
Interaction of intracellular parasites with macrophage-like tumor cell lines. NSF (PCM80-10633). 1980-84. $149,434.

Intracellular parasitism and the cell cycle. PHS-NIH-MBRS. 1980-83. $47,000.

CATES
Plant community structure plant chemical defenses, and insect population dynamics. NSF (DEB70-27067). 1980-83. $175,000.

Patch dynamics in shrubsteppe ecosystems: Plant chemistry, arthropod distributions, and the role of avian predators. NSF (DEB80-17445). 1981-83. $447,000 (with J. Wiens).

A determination of the effects of nitrogen and terpenes in western spruce budworm success. USDA/Sci. Ed. Admin. (81-CRSR-3-0126). 1981-83. $41,760.

Effects of recreation in the forest floor and associated streams of aspen and conifer forests. U.S. Forest Ser/Rocky Mt. Forest Range Exp. Stat. (RM-81-159-GR). $54,376. 1981-82 (with M. Molles and J. Gosz).

CATES (cont.)
Nitrogen cycle interactions with chemolithotropic and heterotrophic processes in Mt. St. Helens impacted lakes and hot water seeps. NSF. 1982. $5000 (with PI at Oregon St. U.).

CHIOVETTI
Establishment of a low-temperature embedding facility for electron microscopy. NIH-BRSG (281-140-3). 1982-83. $2,997.

An application of scanning transmission electron microscopy: the visualization of completely unstained thin sections of biological materials. Hofmann-LaRoche/Sandoz Corp./Ciba-Geigy Corp., Basel, Switzerland. 1982-83. $31,000. Awarded April 1982, but declined to accept UNM faculty position.

CRAWFORD
Cellulose decomposition by detritivore gut symbionts and free-living microbes in desert dune ecosystems. NSF (DEB 82-02-765). 1982-84. $80,000 (and E.C. Taylor).

DUSZYNSKI
Studies on genetic and other factors affecting host and site specificity by coccidians of small mammals. PHS-NIH-MBRS. 1980-83. $62,372.

The incidence of Coccidia in sandhill cranes. N.M. Game and Fish (519-71-04). 1982. $1,000 (and B. Parker).

EWING
A population survey of mobile elements in Drosphila melanogaster. NIH-BRSG. 1982. $5,000.

Evolutionary roles for transposable elements. UNM-RAC. 1982. $4,997.

Mathematical models and curricula in biology. NIH-MARC (5-T32-GM7661-05). 1978-83. $106,698 (with R. Griego, PI).

FINDLEY
Reorganization and updating of the recent mammal collections in the Museum of Southwestern Biology. NSF (DEB-821239). 1982-85. $100,000 (and T.L. Yates).

Evaluation of line transects as a means of evaluating reef fish populations. RAC. 1982-83. $855.

GOSZ
Impacts of a second season of trampling on natural and managed aspen and conifer stands. USDA (Rm-81-159-GR). 1981-82. $54,376 (with M. Molles and R. Cates).

GOSZ (cont.)
Evaluation of Sr isotopes for quantifying inputs to ecosystems. NSF. 1981-84. $305,433.

Prescribed fire effects on water soluble nutrients and organics. USDA (RM-28-C2-233). 1981-83. $21,000.

JOHNSON, G.
Testing three osmoticums on native plants. USDA-Rocky Mtn. For. & Range Exper. Stn. (RM-81-180-CA). 1981-82. $12,275.

Los Medanos biological studies project. Westinghouse Corp. (59-WFC-5340-SD). Funds frozen for current year. (With W.C. Martin and J.D. Ligon).

KERKOF
Action of thyroid-stimulating hormone on thyroid gland cells in culture. NIH (SO6RR08139). 1980-83. $66,754.

KOGOMA
DNA replication of E. coli: regulatory mutants. NIH (GM22092). 1982-85. $200,245.

LIGON, J.D.
An ecological and evolutionary study of community in two tropical birds. NSF. 1979-82. $108,165 (with S.H. Ligon).

Adaptive significance of avian polyandry. NSF. 1981-1984. $88,411 (with P.B. Stacey).

Los Medanos biological studies project. Westinghouse Corp. (59-WFC-5340-SD). Funds frozen for current year. (With W.C. Martin and G. Johnson).

LIGON, S.H.
An ecological and evolutionary study of communality in two tropical birds. 1979-82. $108,165 (with J.D. Ligon).

MARTIN
Los Medanos biological studies project. Westinghouse Corp. (59-WRC-5340-50). Funds frozen for current year. (With G. Johnson, J.D. Ligon).

Botanical field survey of the Black Range primitive area. U.S. For. Serv. (40-8371-2-278)

POTTER
Evaluation of the vegetational reclamation of five coal strip mines in N. Mex. Office of Surface Mining. 1981-83. $45,113.

Vegetation along Green and Yampa rivers and response to fluctuating water levels, Dinosaur National Monument. 1982-83. $37,400.

RIEDESEL
Respiration during hibernation and hypothermia. MBRS-NIH (RR08139-07). 1980-83. $30,000.

TAYLOR
Diapause induction under conditions of changing photoperiod and temperature in the Mexican bean beetle. NSF (181-024-1). $66,816.

Theoretical analysis of the evolution of hibernal diapause induction in insects. NSF (281-164-1). $66,449.

THORNHILL
Grant-in-aid. Univ. of Melbourne. 1982. $5,000.

TRUJILLO
Regulation of gluconeogenesis: phosphofructokinase and fructosel, 6-bisphosphatase . NSF. 1978-1982. $147,670.

Control of carbohydrate metabolism in liver. NIH. 1980-83. $67,000.

Hepatic fructose 1,6-bisphosphatase production rates and messenger RNA levels in rats. 1982. $3,500.

TOOLSON
Water relations and epicuticular lipid composition in Drosphila pseudooobscura. NSF (DEB-8110857). 1981-84. $110,000.

WIENS
Patch dynamics in shrubsteppe ecolsystems: plant chemistry, arthropod distributions, and the role of avian predators. NSF (DEB-8017445). 1981-84. $441,776.

Wildlife habitat modeling and nitrogen availability to herbivores in southeast Alaskan forests. USDA Forest Serv. (PNW-82-197). 1982-83. $20,000 (with B. Van Horne).

YATES
Reorganization and updating of the recent mammal collections, Museum of Southwestern Biology. NSF (DEB-8212395). 1982-85. $100,000 (and J.S. Findley).

YATES (cont.)
Premanagement laboratory studies of New Mexican vertebrates. N. Mex. Game and Fish (516-71-37). 1982-83. $33,000.

Status of the least chipmunk, Eutamias minimus atristriatus, in the Sacramento Mountains of New Mexico. N. Mex. Game and Fish (519-71-01). 1982. $5,000.

Cataloguing and curating skeletal material of bobcats (Felis rufus). N. Mex. Game and Fish (281-101-1). 1982. $3,600.

Cataloguing, curating, and computerizing skulls of Felis rufus. N. Mex. Game and Fish (516-71-36). 1982-83. $9,125.

8. PAPERS/POSTERS PRESENTED

BACA
Infection of a human macrophage-like tumor cell line (U937) with phase I and phase II Coxiella burnetti. 10th Ann. Minority Biomed. Supt. Symp., Alb., Apr. 3-6 (with M. Robles, A. Aragon, J. Rowatt, E. Akporiaye).

The effect of antibody treatment on the fate of Coxiella brunetti in the J774 macrophage-like cell line. Fall Meet. N. Mex. Br. Amer. Soc. Microbiol., Las Cruces, Oct. 1-3 (with J. Rowatt).

Oxidative metabolism of a murine macrophage cell line. Fall Meet. N. Mex. Br. Amer. Soc. Microbiol., Las Cruces, Oct. 1-3 (with E. Akporiaye).

BARTON
Regulation of adenylyl sulfatase as a means of controlling sulfate metabolism. Fall Meet. N. Mex. Br. Amer. Soc. Microbiol., Las Cruces, Oct. 1-3 (with C. Dean).

Metabolism of molybdate by the anaerobic bacteria, Sesulfovibrio gigos. Conf. Sci. Tech. Sci. Ed. in 80's., Alb., Oct. 8-9 (with M. Tafoya).

Metabolic activities of Cenococcum graniforme, an ectomycorrhizal fungus. Fall Meet. N. Mex. Br. Amer. Soc. Microbiol., Las Cruces, Oct. 1-7 (with R. Rodriguez).

Characteristics of molybdate transport in sulfate-reducing bacteria. Fall Meet. N. Mex. Br. Amer. Soc. Microbiol., Las Cruces, Oct. 1-7 (with M. Tafoya).

Metabolism of molybdate and selenium in sulfate-reducing bacteria. Microbial Chemoautro. Colloq., 8th Ann. Coll. Biol. Sci. Colloq., Columbus, OH, Oct. 4-5, 1982 (with L. Gervais, M. Tafoya).

Coupling of sulfate transport to respiration in sulfate-reducing bateria. Tenth Ann. Minor. Biomed. Supt. Symp., Alb., NM, Apr. 3-6, 1982 (with M. Tafoya, S. Garcia).

BARTON (cont.)
Metabolism of the metalloid selenium by Desulfovibrio. Nat. Mtg. Amer. Soc. Microbiol., Atlanta, GA, Mar. 7-12 (with L. Gervais, C. Dean).

The effect of malathion, paraquat and glyphosphate herbicides on iron uptake in bacteria. Nat. Mtg. Amer. Soc. Microbiol., Atlanta, Ga, Mar. 7-12 (and H. Krivan, D. Klemm)

EWING
An analysis of hybrid dysgenesis in D. melanogaster. Second MARC Scholars, Washington, D.C., Sept. 7-10 (with T. Neuberger, B. Torres).

The examination of hybrid dysgeneses. Science for the 80's, Alb., NM, Oct. 8-9, 1982.

FINDLEY
Pacific butterfly fish communities: are they interactive assemblages? Guild Rocky Mtn. Pop. Biol. Mtg., Boulder, CO, Sept.

JOHNSON, G.
Nitrogen fixation by soil crusts in a Chihuahuan Desert ecosystem. Southwest. & Rocky Mtn. Div. Amer. Assoc. Adv. Sci., El Paso, TX, April 28-May 1.

KERKOF
Iodine metabolims of sheep thyroid gland cells in culture: some factors affecting the response to TSH. Tenth Ann. Nat. Minor. Biomed. Res. Supt. Symp., Alb., NM, April 3-5 (with A.M. Nieto, S.A. Valverde).

KIDD
Distributional characteristics and management--implications of heavy metals in the Lake Powell ecosystem located on the Colorado River. Seventh Ann. Water Wkshp., Gunnison, CO, August 4.

KOGOMA
A second phenotype of sdrA mutants of Escherichia coli: sensitivity to nutritionally rich media. Internat. Symp. "Inducible Responses to DNA Damages in Prokavyotes and Eukaryotes," Toulouse, France, May.

Mutants of Escherichia coli lacking the requirement for DNA-dependent RNA polymerase function for the initiation of DNA replications. Nat. MBS Symp., Alb., NM, April (with N. Subia).

Cloning of a DNA replication regulatory gene, sdrA, of E. coli. Fall Meet. N. Mex. Br. Amer. Soc. Microbiol. Las Cruces, NM, Oct. (with G.G. Pickett).

LIGON, J. D.
Cooperation among cooperative breeders. Nat. Cooper Ornithol. Soc. Mtg., Utah State Univ., April.

LIGON (cont.)
Monogamy and parental strategies in the cooperatively breeding green woodhoopoe. Nat. Amer. Ornithol. Soc. Mtg., Chicago, IL, October (and S.H. Ligon).

Competition for cavities: the birds and the bees. Nat. AOU Mtg., Chicago, IL, October (and S.H. Ligon).

LIGON, S.
Monogamy and parental strategies in the cooperatively breeding green woodhoopoe., Nat. Amer. Ornithol. Soc. Mtg., Chicago, IL, October (with J.D. Ligon).

Competition for cavities: the birds and the bees. Nat. Amer. Ornithol. Soc. Mtg., Chicago, IL, October (with J.D. Ligon).

MOLLES
Mechanisms of prey selection by predaceous stoneflies: roles of prey morphology, behavior and predator hunger. Guild Rocky Mtn. Pop. Biol., Boulder, CO, Sept. 17-19.

POTTER
Mancos shale: some physical and chemical properties which affect vegetative communities on shale outcrops. Symp. Surface Mining Hydrology, Sedimentology, and Reclamation, Univ. Kansas, December 5-10 (with E.T. Louderbough).

TAYLOR
Estimating the sensitive stage for diapause induction in the Mexican Bean Beetle. Conf. Sci. 80's, Alb., October 8-9 (and D. Garcia).

Theoretical analysis of the fitness function associated with diapause induction in insects. Soc. Study Evol., Stony Brook, NY, June 27-30.

TRUJILLO
Organic synthesis of fructose-2,6-bisphosphate. Nat. MBS Symp., Alb., NM, Apr. (with D. Delgado).

VOGEL
Proteoglycan production by human embryo lung fibroblasts maintained in a low concentration of serum. Swedish Conn. Tiss. Soc., Sotckholm, Sweden, September.

The effects of serum concentration of fibroblast synthesis of proteoglycans. MBRS Symp., Alb., NM, Apr. (with R. Sapien).

WIENS
The response of shrubsteppe birds to rangeland alterations: implications for assessing habitat occupancy. Amer. Ornithol. U., Chicago, IL, October.

YATES
Biochemical systematics of three species of catfish (Genus Ictalurus) in New Mexico. Southwest. Assoc. Nat., Corpus Christi, TX, April (and M.A. Lewis, M.D. Hatch).

Evolutionary affinities among southwestern long-eared Myotis (Chiroptera: vespertilionidae). Amer. Soc. Mamm., Snowbird, UT, June 1982 (with D.W. Reduker).

Evolutionary relationshjips of North American Zapodidae. Amer. Soc. Mamm., Snowbird, UT, June (with K.E. Petersen, D.J. Hafner, H.H. Genoways).

Genic relationships among the shrew-moles (Talpidae) of North America and Japan. Amer. Soc. Mamm., Snowbird, UT, June (with D.W. Moore).

Systematic status of the mojave gound squirrel, Spermophilus mohavensis (subgenus xerospermphilus). Southwest. Assoc. Nat., Corpus Christi, TX, April (with D.J. Hafner)

9. JOURNAL EDITOR

WIENS
Editor, The Auk (American Ornithologists' Union), 1977-

YATES
Managing Editor, MSB Publication Series, Jan. 1982-present.

10. MEMBER OF EDITORIAL BOARD

CRAWFORD
Editorial board service:
Journal of Arid Environments, Scientific Reviews on Arid Zone Research

11. OFFICER/BOARD MEMBER, MAJOR PROFESSIONAL SOCIETY/GRANTING AGENCY

BACA
Elected President, N. Mex. Branch Amer. Soc. Microbiology

Elected Treasurer and Member of Board of Directors, Soc. Adv. Chicanos and Native Amers. in Sci.

CATES
Member, Grant Proposal and Advisory Panel, NSF

DUSZYNSKI
Elected member, Executive Governing Board, Amer. Soc. Parastologists

Member, Executive Council, Soc. Protozoologists

FINDLEY
Elected President, Amer. Soc. Mammalogists

GOSZ
Member, Review Panel, Long Term Ecological Research Program, NSF

Member, Review Panel, Ecosystems Study Program, NSF

JOHNSON, G.
Elected Secretary, S.W. and Rky Mt. Div. Amer. Assoc. Adv. Sci (SWARM).

Elected Chairman, Nominating Committee, SWARM/AAAS.

KIDD
Appointed Director, Outstanding Biology Teacher Award Program in NM, Nat. Assoc. of Biol. Teachers

LIGON, J.D.
Host, 1983 Cooper Ornithological Society Meeting to be held in Alb.

POTTER
Elected President, Eisenhower Consortium for Western Environ. Forestry Res. (a consortium of 9 western universities and U.S. For. Serv.)

WIENS
Elected Member and Fellow, Executive Council, Amer. Ornithologists' Union

Elected, Council Member-at-Large, Ecol. Soc. Amer.

Program Chairman, Cooper Ornithological Soc.

YATES
Elected member, Board of Governors, SW Assoc. Naturalists

Chairman, Systematics Committee, Amer. Soc. Mammalogists.

12. SERVICE

ALTENBACH
Refereed one paper for Mammalogy and 2 papers for Southwestern Naturalist.

ALTENBACH (cont.)
Attended Annual Meet. Amer. Soc. Mammalogists, Snowbird UT (June), with 1 student.

Chairman, Biology Undergraduate Curriculum Committee, Spring

Member, Grants-in-Aid Committee, Amer. Soc. Mammalogists.

Member, Biology Undergraduate Policy Committee.

Lecture to Albuquerque Cactus and Succulent Soc. (Apr.), "Bat-Plant Interactions."

Appearance on KNME-TV panel discussion on Zoos and Their Importance on Illustrated Daily.

BACA
Attended Annual Meet. Amer. Soc. Microbiology, Atlanta GA, (Mar.), with 3 students.

Attended 3rd Annual Meet. Amer. Soc. for Rickettsiology & Rickettsial Dis., Atlanta GA (Mar.), with 3 students.

Attended N. Mex. Br. Amer. Soc. Microbiology, Las Cruces NM (Oct.), with 2 students.

Attended 10th MBRS Symposium, Alb. NM (Apr.), with 4 students and chaired a scientific sesession.

Chairman, Policy Board, SW Hispanic Research Institute.

Member, Biology Dept. Seminar Committee.

Member, Biology Dept. Undergraduate Policy Committee, Fall.

Member, SURP-BRSG Committee.

Member, UNM Institutional Biosafety Committee.

Member, Hispanic Engineers Advisory Council.

Member, UNM/Alb/School Liaison Committee.

Member, Selection Committee for MBRS program.

Television appearance on the Graciela Olivares "Impacto" talk show, Alb., Channel 13 (May) regarding the MBRS program at UNM.

Judge, Conference on "Science in the 80's" sponsored by UNM SW Res. Centr. for Sci. Engr. (Oct).

Participant, NM Academy of Science's 23rd Visiting Scientist Program, presentation at Cloudcroft High School (Oct).

BACA (cont.)
Recruitment trip for UNM Graduate School to the Ft. Worth/San Antonio, TX area (Feb).

Office of School Relations Calling Campaign (Feb. 5) to recruit top NM high school students.

Presented a lecture in the UNM Medical School's BSEP program.

BARTON
Attended Ann. Meet. Amer. Soc. Microbiology, Atlanta GA (Mar.), with 3 students.

Attended conference on"Science in the 80's," sponsored by UNM SW Res. Centr. for Sci. Engr. (Oct.), with 1 student.

Attended N. Mex. Br. Amer. Soc. Microbiology, Las Cruces NM (Oct.), with 3 students.

Attended 10th Ann. MBRS Symposium, Alb. NM (Apr.), with 2 students.

Attended Microbial Chemoautotropy Colloquium, Ohio State Univ., Columbus, OH (Oct).

Member, Evolutionary Molecular Biologist Faculty Selection Comm., Biol. Dept., Fall

UNM Academic Mart--Student advisement.

Presented a talk to Kiwanis Club of Rio Rancho.

Presented a talk to program participants in College of Engineering which is for high school students--UNITE (Uninitiates Introduction to Engineering).

Participated in Senior Day Advisement for high school seniors at the UNM Student Union Building.

BOURNE
Member, Student Standards Committee, UNM Undergraduate Curriculum Committee.

Health Professions Advisor during Arts and Sciences Advisement Day.

CATES
Refereed papers for the following journals: Bulletin Torrey Botanical Club (1); Ecology (2); Science (1); Amer. J. Bot. (1); Forest Science (1).

Attended 183rd Ann. Meet. Amer. Chem. Soc., Las Vegas NV (Mar.).

Attended Ann. Meet. East Texas Forest Entomology, Kurth Lake Lodge, Near Lufkin TX (May).

CATES (cont.)
Attended 30th Ann. Meet., Western Internat. Forest Dis. Conf., South Lake Tahoe CA (Sept.).

Attended Technology Transf. Meet., CANADA/US Spruce Budworms Program West, Portland OR, USDA/Forest Service (Oct.).

Attended Foliage Growth and Budworm Feeding Conference, USDA/Forest Service (Dec.).

Member, UNM Research Allocations Committee.

Chairman, Biol. Dept. Graduate Policy Committee.

Member, Biol. Dept. Greenhouse Committee.

Member, Biol. Dept. Safety Committee.

Presented lecture to Accelerated Learning Center, Sombra del Norte Elementary School gifted students on poisonous plants.

Presented a lecture to Optimists Club.

Sponsored a student on summer research program through the APS' Career Enrichment Center. Supervised student through summer research activities (June-July).

Involved as a leader in Klondike Derby for the Boy Scouts (Jan.).

CHIOVETTI
Refereed papers for the following journals: J. Microscopy (3); Lowicryl Letters (2).

Attended Ann. Meet. Amer. Soc. Cell Biol., Baltimore MD (Nov.).

Conducted building tour for Sombra del Monte Elementary School, Oct.

Member, Speaker's Committee for Wellness, N.Mex. Assoc.

Member, Planning Committee for Children's Ranch, St. Mathew's Episcopal Church.

Shelter Bed Volunteer, N. Mex. Runaway Children's Program.

Member, Membership Committee, Soc. Protozoologists.

CRAWFORD
Refereed papers for the following journals: Sci. Rev. on Arid Zone Res. (1); Pedobiology (1); J. Arid. Environments (2); Environ. Entomol. (1).

Curator, Insect Division, Museum of Southwestern Biology.

Attended Ann. Meet., SWARM/AAAS, El Paso TX (Apr), with 1 student.

CRAWFORD (cont.)
Attended Ann. Meet., Pacific Br. Entomol. Soc. Amer., Tucson AZ (June).

Chairman, A&S Curriculum and Academic Policy Comm.

Member, UNM Long Range Planning Comm.

Member, Biol. Dept. Graduate Policy Comm.

Member, Biol. Dept. Search Comm. for Electron Microscopist, Fall.

Chairman, Biol. Dept. Sevilleta Study Comm.

Frequent insect identification for general public.

DEGENHARDT
Member, Biol. Dept. Teaching Evaluation Committee, Spring.

Member, N. Mex. Union Board.

Curator, Amphibian and Reptiles Division, Museum of Southwestern Biology.

Helped organize Parent's Day Open House, Biol. Dept.

Member, N. Mex. Museum Natural History Policy Advisory Committee and member, Subcommittee on Exhibits.

Consultant, Poison Control Center.

President, International Science Fair and co-chairman of judging team for botany.

Provides occasional assistance to "Action Line" and "Mr. Fixit."

Parliamentarian, N. Mex. Herpetological Soc.

DUSZYNSKI
Chairman, Department of Biology.

Member, A&S Promotion Committee, Spring.

Member, A&S College Budget Allocation Formula Committee, Fall.

Veterinary Medicine Advisor, Dept. of Biology.

Took Advanced Marine Biology class (Biol. 496/596) to Discovery Bay Marine Laboratory, Jamaica (Mar.). This included 14 students and faculty from UNM.

Member, Public Responsibilities, Comm., Amer. Soc. Parasitologists.

Member, Business Advisory Comm., Soc. Protozoologists.

DUSZYNSKI (cont.)
Member, Editors & Advisory Comm., Soc. Protozoologists.

Took Marine Invertebrate Lab class (Biol. 370L) to Puerto Penasco, Mexico (Oct.). This included 35 students and 3 faculty from UNM and 6 visiting scientists from the Univ. of Texas, N. Colorado Univ., and the Univ. of California, Berkeley.

Attended Ann. Meet. Southwestern Assoc. Parasitologists, Lake Texoma, OK, with 6 students (Apr.).

Attended Ann. Meet. Amer. Soc. Parasitologists, Toronto, Ontario, Canada with 1 student (Aug.).

Refereed papers for the following journals: J. Parasitology (6); J. Wildlife Diseases (2).

Chairman, Biol. Dept. Search Comm. for Electron Microscopist, Fall.

EWING
Reviewed papers for the following journals: Amer. Naturalist (5); Theoretical Pop. Biol. (1).

Attended conference on "Science for 80's", sponsored by UNM SW Res. Centr. for Sci. Engr. (Oct.), with 2 students.

Chairperson, Biol. Dept. Search Comm. for Molecular Evol. Biologist, Fall.

Assisted Dept. Chairman, Fact Finding Rept. to Dean.

Organizer, Biol. Dept. Cell Seminar, Fall.

Judge, conference on "Science for 80's."

Science Fair Chairperson for Gov. Bent. Elem. School.

Volunteer for Easter Seals, Amer. Cancer Soc.

Member, UNM Faculty Senate.

Refereed a grant for the Hispanic Institute.

FINDLEY
Refereed papers for following journals: J. Mammalogy (4); Amer. Naturalist (2); Ecology (2); Science (1); Auk (1).

Director, Museum of Southwestern Biology.

Attended Ann. Meet. Amer. Soc. Mammalogists, Snowbird UT (June), with 5 students.

Attended Ann. Meet. Guild Rky. Mt. Pop. Biol., Boulder CO (May), with 4 students.

FINDLEY (cont.)
Attended "The New Ecology, An ad hoc symposium at No. Ariz. Univ. (Aug.), with 4 students.

10% time curator, Division of Mammals, Museum of Southwestern Biology.

Organized Parent's Day effort for Biol. Dept.

Conducted tour of Biol. Dept. for Alumni Assoc.

Prepared hall exhibits, Biol. Dept.

Member, Policy Comm. for Exhibits, N. Mex. Museum for Natural History.

Member, Village of Corrales Bosque Advisory Comm.

Member, Honorary Membership Comm., Amer. Soc. Mammalogists.

Scouted Belize, CA as site for future Biol. Dept. Field trips, partly at own expense.

GOSZ
Refereed papers for following journals: Ecology (5); Science (2).

Ecology Advisor, N. Mex. Museum for Natural History.

Member, Biol. Dept. Graduate Curriculum Comm.

Member, Biol. Dept. Undergraduate Policy Comm.

Chairman, Biol. Dept. Safety Comm.

Member, A&S Promotion Committee, Fall.

Member, Biol. Dept. Sevilleta Refuge Comm.

Chairman, Publicity Comm., Bernalillo Co. 4-H.

Member, Fair Board Comm., Bernalillo Co. 4-H.

Member, Rodeo Comm., Bernalillo Co. 4-H.

Key Volunteer Leader, Livestock Project, Bernalillo Co. 4-H.

Leader, Ponderosa 4-H Club: rabbit project and swine project leader.

Alternate delegate, Eisenhower Consortium.

Member, Study Comm., Ecological Soc. Amer.

Member, Research Advisory Study Comm., Eisenhower Consortium.

JOHNSON, G.
Judge and Chairman, Jr. Div. (Botany), State Science Fair (Apr.), Socorro, NM.

Chairman, Botany Div. for International Science Fair (to be held in Alb., May 1983).

Chairman, Comm. on Desert and Arid Zone Res., SWARM/AAAS.

Consultant, Science Fair Projects for Gifted Student Progam at Taylor Middle School.

Attended SWARM/AAAS (Apr.), El Paso, TX.

Refereed 1 paper for U.S. Forest Serv., Rky. Mt. Forest and Range Exper. Station.

JOHNSON, W.
Associate Chairman, Dept. of Biology.

Guest Speaker for Ed. Foundations (503-001), "Genetics of Human Development.

Guest Speaker, Alb. Genealogical Soc., "Genetic Relatedness."

Worked UNM Academic Mart and High School Senior Day.

Transfer Student Advisor and Biol. Dept. contact for approving transfer credit by Admissions Office.

Chairman, Biol. Dept. Undergraduate Policy Comm.

Member, UNM Admissions and Registration Comm.

Member, Student Standards and Grievance Comm.

Member, Library Liaison Comm., Spring.

Member, Biol. Dept. Teaching Evaluation Comm., Spring.

KERKOF
Member, Organizing Comm. Natl. MBRS Symposium

Chairman, UNM Radiation Protection Subcommittee.

Member, Biol. Dept. Core Curriculum Comm.

Member, Biol. Dept. Graduate Student Selection Comm.

Chaired paper sesssion, Natl. MBRS Symposium.

Member, UNM/MBRS Grant Proposal Review Comm.

KERKOF (cont.)
Member, Biol. Dept. Search Comm. for Electron Microscopist, Fall.

Member, UNM Admissions and Registration Comm.

Member, Credentials Component for the Health Sci. Advisory Comm.

Member, MBRS Advisory and Selection Comm.

Member, Jefferson Middle School Parent Advisory Council and APS Parent Advisory Council.

Attended 10th MBRS Symposium, Alb. (Apr.), with 2 students.

Attended 64th Ann. Meet. Endocrin. Soc., San Francisco CA (June).

Attended 22nd Ann. Meet. Amer. Soc. Cell Biol., Baltimore MD (Nov.), with 3 students.

KIDD
Refereed 2 grant proposals for SW Res. Cntr. for Sci. and Eng.

Attended NM Acad. Sci. Meet., Socorro, NM (Oct.).

Member, Dean's Teaching Resource Comm.

Member, UNM Curriculum Comm.

Member, Search Comm. for Gen. Coll. Faculty.

Biol. Dept. representative for Faculty Representative Assoc.

Extensive participation in General College-related affairs.

Helper, Altmount Little League All-Star Baseball Team.

Initiated use of diagnostic exams in reading comprehension and logical relationships in 100 level skills course.

Applied a new technique called Cooperative Group Learning to Biol. 100 and 123 classes.

Set up system of workshops for university skills students at the Skills Cntr. of Zimmerman Library.

KOGOMA
Attended International Symp. in Toulouse, France (May).

Member, Biol. Dept. Graduate Policy Comm, Fall.

LIGON, J.D.
Curator, Bird Division, Museum of Southwestern Biol.

Member, UNM Research Allocations Comm.

Chairman, Biol. Dept. Teaching Evaluation Comm, Fall.

Refereed papers for the following journals: Evolution (1); Ecological Monographs (1); Amer. Naturalist (1); Science (1); Behavioral Ecol. and Sociobiol. (1); Auk (3); Condor (1); Murrelet (1).

Attended Ann. Meet. Cooper Ornithological Soc., Utah St. Univ (Apr.), with 6 students.

Attended Ann. Meet. Cooper Ornithologists' Union, Chicago IL (Oct.), with 6 students.

Member, Membership Comm., Amer. Ornith. Union.

LIGON, S.H.
Attended Ann. Meet. Amer. Ornithologists' Union, Chicago IL (Oct.).

Member, Biol. Dept. Undergraduate Policy Comm.

Member, Biol. Dept. Teaching Eval. Comm., Fall.

MARTIN
Outside lectures:

a. New Mexico Cactus and Succulent Society, Alb., NM (Feb.), "Mechanics of speciation."
b. Native Plant Society, St John's College, Santa Fe (Feb.), "Flora of New Mexico."
c. Community Education class, Alb., NM (Mar.), "Wildlife of New Mexico.
d. Organic Growers Society of New Mexico, Santa Fe, NM (Apr.), "Selection and care of fruit and nut trees."
e. Animal Rescue Service, Alb., NM (Oct.), "Food chain relationships among plants and animals.
f. New Mexico Society of Allergists, Alb., NM (Dec.), "Wind pollinated plants, their distribution and regional differences in pollination patterns.

Greenhouse tours--various primary education groups.

Herbarium/museum tours--various primary education groups.

Consultant (unpaid) to New Mexicon Poison Control Center.

Numerous (usually daily) plant identifications for various private individuals and for representatives of a number of agencies.

Cooperation and consultation with personnel of Maxwell Museum of Anthropology regarding exhibits, etc.

MARTIN (cont.)
Cooperation with personnel of the New Mexico Natural History Museum on exhibit matters, etc.

Sponsored (along with Tom Andrews) a new chapter of the Native Plant Society.

Participated in Parent's Day along with other museum staff, provided tours, exhibits, and narratives, Oct.

Participated in Senior Day at the New Mexico Union, provided advisement to prospective new students, Nov.

Participated in the New Mexico Native Plant Society annual field trip to the Magdalena Mountains, Oct.

Assisted in the U.S. Forest Service in a floristic study of the Mills Canyon area, May.

Obtained a large lichen collection from a private source as a significant addition to the Herbarium holdings, Oct.

Provided herbarium facilities and study area for a U.S. Forest Service field botany training session, Dec.

Consultant to National Geographic Magazine regarding life zones in New Mexico.

Botany Committee, New Mexico Natural History Museum.

Curator, Herbarium and Botany Division, Museum of Southwestern Biology.

Chairman, Biol. Dept. Graduate Student Selection Comm., Fall.

Member, Sandia Colloquium Committee.

Member, Biol. Dept. Sevilleta Comm.

Member, UNM Sigma Xi Nominations Comm., Spring.

MOLLES
Refereed papers for following journals: Marine Biol. (1); J. Arid Environments (1); Ecology (2).

Chairman, Biol. Dept. Grad. Student Selection Comm., Spring.

Member, Biol. Dept. Core Curriculum Comm.

Member, Biol. Dept. Teaching Evaluation Comm.

Curator, Ichthyology Division, Museum of Southwestern Biology.

Worked at Parent's Day.

MOLLES (cont.)
Gave invited talk, Rio Grande Trout Club (Dec.).

Attended Ann. Meet. Guild Rky. Mt. Pop. Biologists, Boulder CO (Sept.), with 6 students.

Attended Symposium, "Novel Approaches to Community and Population Ecology," No. Ariz. Univ., Flagstaff AZ (Aug.), with 2 students.

POTTER
Refereed 1 paper for J. Arid. Lands.

Attended Ann. Meet. SWARM/AAAS, El Paso TX (Apr.), with 3 students.

Attended Ann. Meet. Mineral Waste Stabilization Soc., Tucson AZ (May).

Member, Biol. Dept. Comm. on Space.

Member, Biol. Dept. Core Curriculum Comm.

President, UNM Chapter Sigma Xi.

NM Representative, Amer. Inst. Biol. Sci.

RIEDESEL
Refereed papers for the following journals: J. Mammalogy (1); Physiological Zoology (1).

Attended Ann. Meet. Amer. Physiol. Soc., New Orleans LA (Apr.), with 1 student.

Attended Ann. Meet. Amer. Physiol. Soc., San Diego CA (Oct.).

Member, UNM Humane Care of Laboratory Animals Comm.

Co-chairman, Zool. Sect. International H.S. Science Fair to be held in Alb., 1983.

Participated in telephoning outstanding H.S. seniors.

President, UNM Chapter Sigma Xi.

NM Representative, Amer. Inst. Biol. Sci.

TAYLOR
Refereed papers for the following journals: Environ. Entomol. (5); Ann. Entomol. Soc. Amer. (2); Amer. Nat. (3); Ecol. Monographs (1).

Refereed grant proposals for NSF.

Attended Ann. Meet. Soc. Study of Evolution, Stony Brook NY (June).

TAYLOR (cont.)
Member, Biol. Dept. Grad. Policy Comm.

Chairman, Biol. Dept. Computer Use Comm.

Biol. Dept. Library Liaison.

Member, Faculty Senate Library Comm.

Judge, Conference on Science in 80's, Alb. (Oct).

Faculty participant, MARC program.

Administer Biol. Dept. Honors Prog.

THORNHILL
Refereed papers for the following journals: Soc. Biol. Structures (1); J. Theoretical Biol. (2); Animal Behaviour (2); Evolution (2); Amer. Nat. (3); Ann. Entomol. Soc. Amer. (3); Zeitschrift Tierpsychologie (2); Auk (1); Science (2); Behavioral Ecol. and Sociobiol. (2); Amer. Midl. Natr. (2); Evol. Theory (1).

Attended Ann. Meet. Amer. Soc. Zoologists, Louisville KY (Dec.).

Faculty sponsor, Biol. Graduate Student Assoc.

Identify arthropods, N. Mex. Poison Control Cntr.

Prepared a public exhibit for Research Administration display of research at UNM (organized by Denise Kern).

TOOLSON
Refereed 1 paper for J. Acarology.

Chairman, Biol. Dept. Space Utilization Comm., Spring

Member, Biol. Dept. Graduate Core Comm., Spring

Member, Biol. Dept. Graduate Policy Comm.

Consultant, N. Mex. Poison Control Cntr.

Identified scorpions for hospitals in Raton and Ruidoso and advised regarding treatment of scorpion envenomations.

TRUJILLO
Refereed papers for following journals: Archives of Biophys. Biochem. (1); Cancer Res. (2).

Attended Ann. Meet. Amer. Soc. Biol. Chem., New Orleans LA (Apr.), with 2 students.

TRUJILLO (cont.)
Member, Medical Sch. Applicant Review Comm., College of A&S.

Member, MBRS Review Comm.

Member, Advisory Council, MBRS.

UNM Recruiting Trips to Calif. St. Univ. in San Jose, Fresno, Sacramento (Apr.)

VOGEL
Refereed papers for following journals: J. Cell Biol. (4); Exper. Cell Res. (1).

Member, Faulty Senate, Spring.

Attended Ann. Meet. Federation of European Connective Tissue Societies, Copenhagen, Denmark (Aug.).

Attended Ann. Meet. Swedish Connective Tissue Soc., Stockholm, Sweden (Sept.).

Attended Ann. Meet., MBRS Symposium, Alb., NM (Apr.), with 2 students.

Attended Michigan Molecular Institute International Symposium, Midland, MI (June).

Member, UNM Research Policy Comm., Spring.

Member, UNM Research Administration Subcommittee, Spring.

Member, Biol. Dept. Space Utilization Comm., Spring.

Member, Biol. Dept. Seminar Committee, Spring.

Organizer, Biol. Dept. Cell Seminar, Spring.

WIENS
Refereed papers for the following journals: Science (4); Ecology (2); J. Wildl. Management (2); Can. J. Zool. (1); J. Field Ornithology (1); J. Theoretical Biol. (1).

Attended Ann. Meet. Amer. Ornithologists' Union, Chicago IL (Oct.), with 3 students.

Chairman, Biol. Dept. Seminar Comm.

Chairman, Biol. Dept. Ecology Core Curriculum Comm.

Member, A&S Graduate Comm.

Member, ad hoc Dissertation Proposal Comm. (Graduate Studies).

Basketball coach and referee, YBA/NMCA.

YATES
Refereed papers for the following journals: Science (1); Mammalian Species (1); Systematic Zool. (1); Auk (2); J. Mammalogy (3).

Attended Ann. Meet. Amer. Soc. Mammalogists, Provo UT (June), with 8 students.

Attended Ann. Meet. SW Assoc. Naturalists, Corpus Christi TX (Apr.), with 7 students.

Attended Third International Theriological Congress, Helsinki, Finland (Aug.), with 1 students.

Gave Museum tours on Parents' Day, to the Alumni Executive Board, to numerous public school groups and to numerous visiting scientists.

Curator, Division of Mammals, Museum of Southwestern Biology.

Member, Biol. Dept. Space Utilization Comm., Spring.

Member, Biol. Dept. Graduate Policy Comm.

Member, Biol. Dept. Search Comm. for Molecular Evol. Biologist, Fall.

Chairman, Systematics Comm., Amer. Soc. Mammalogists.

13. SPECIAL CATEGORY

ALTENBACH
Scientific advisor for Bureau of Land Mgmt. on Journada del Muerto bat cave, Socorro, NM.

High-speed motion picture film of fishing bats and long-nosed bats shown in British Broadcasting Corp. film Life on Earth, episode #10.

High-speed motion picture film of vampire bats flying in wind tunnel shown in British Broadcasting Corp. film Vampires, in The Tropics.

BACA
Invited Seminar, Texas Christian University, Ft. Worth, "Events during rickettsial infection of macrophage-like tumor cell lines" (Feb.).

Invited Seminar, Univ. Texas Health Sci. Cntr., San Antonio, "Events during richettsial infection of macrophage-like tumor cell lines" (Feb.).

His Ph.D. studlent, E.T. Akporiaye was invited to present seminars at Ohio State Univ. and at Los Alamos National Labs on his doctoral research.

BARTON
His graduate student, M. Tafoya, received 1st place in Biology Section for his presentation at conference on "Science in the 80's".

CATES
His Ph.D. student, H.J. Alexander was invited to give seminars at Guilford Technical Institute, Dept. of Science and Mathemathics, Jamestown NC, and at Brunswick Junior College, Brunswick GA.

Reviewed 22 grant proposals from NSF, USDA in 1982.

Selected, Prominent Chemical Ecology Laboratory to be visited by colleagues: 1) Dr. A.J. Oliver, Agriculture Protection Board of Western Australia; and 2) Drs. C. Lofstedt and G. Bengtsson, Laboratory of Ecological Chemistry, University of Lund, Sweden.

Invited Paper, Ann. Meet., Amer. Chem. Soc.; selected as worthy of news release by the Society and set up for interviews by National News Media. One of the places that this ended up in was a feature article in Science by T. Maugh II on "Exploring Plant Resistance to Insects."

Invited by the McKnight Foundation to submit a proposal to them in the areas of environmental science, biological stress, and coevolution.

Selected as a member of "Who's Who" in Frontier Science and Technology because of current involvement in frontier scientific work in forest pest problems.

Invited Symposium Paper, Amer. Chem. Soc. Symp. on Mechanisms of Plant Resistance to Insects, Las Vegas NV (Mar.), "Patterns of defensive chemistry in Douglas-fir, stress physiology, and western spruce budworm success."

Invited Symposium Paper, Southern Pine Beetle Workshop on Host-Bark Beetle Interactions, Nacogdoches TX (May), "The evolution of plant defenses.'

Invited Symposium Paper, East Texas Forest Entomology Meetings, Kurth Lake TX (May), "Stress in Douglas-fir, defensive chemistry, and forest pests."

Invited Symposium Paper, 30th Ann. Western International Forest Disease Conference, South Lake Tahoe, CA (Sept.), "Stress and changes in host tree physiology affecting spruce budworm success."

CHIOVETTI
Reviewed 2 grant proposals for Swiss NSF.

Invited Seminar, Univ. Kansas, Lawrence KS (Aug.), "Recent advances in electron microscopy: Low temperature embedding and scanning transmission microscopy."

CRAWFORD
Invited Symposium Paper, SWARM/AAAS Symposium on Desert Ecosystems, El Paso TX (Apr.), "The role of invertebrates in desert ecosystems."

Invited Symposium Paper, Pacific Br. Meet. of Entomological Soc. of Amer., Tucson AZ (June), "Biology of desert arthropods."

CRAWFORD (cont.)
Reviewed grant proposals for NSF.

Requested by the editor of Environmental Conservation to write a book chapter. It has been submitted.

Invited Seminar, College of Biological Science, University of Guelph, Ontario, Canada (Mar.), "Desert invertebtrates' patterns of adaptation."

His graduate students published 2 papers on their own in refereed journals.

DUSZYNSKI
Advertising Editor, The Journal of Protozoology.

Reviewed 1 grant proposal for NSF.

His graduate students published 3 papers on their own in refereed national journals.

EWING
Works with T-10 Biophysics Group on DNA Sequence Library (USA Bank).

FINDLEY
Reviewed 5 grant proposals for NSF.

His Ph.D. student, D.J. Hafner, was invited to present a symposium paper on ground squirrel phylogeny at the University of Alberta.

His graduate students presented 5 papers on their own at national meetings.

GOSZ
Reviewed 74 grant proposals for NSF.

Scientific Advisor, Coweeta Forest Rec. Prog., Univ. Georgia, Athens.

Scientific Advisor, Konza Prairie Res. Prog., Kansas St. Univ., Manhattan.

Scientific Advisor, Joranada Desert Res. Prog., NMSU, Las Cruces.

Member, Organizing Committee, Sixth International Environmental Biochemistry Symposium.

Invited Seminar, Univ. of Georgia, Athens (May), "Strontium isotopes for quantifying inputs."

Invited Seminar, Kansas State Univ., Manhattan (Apr.), "Terrestrial contribution of N to streams."

GOSZ (cont.)
Invited Seminar, Univ. of Wyoming, Laramie (Sept.), "Influence of N cycling on ecosystem production."

Invited Seminar, Univ. of Wyoming, Laramie (Sept.), "Strontium isotopes for quantifying inputs."

KERKOF
Member, National MBRS Symposium Organizing Committee for 1982 National Meeting held in Albuquerque.

KIDD
NSF/AAAS Chautuaqua Short Course lecturer, Oregon Graduate Center, Beaverton OR (Nov.).

Outstanding Science Teacher Award, N. Mex. Acad. Sci.

KOGOMA
Sabbatical leave appointment as Visiting Associate Professor, Dept. Microbiology, Polytechnical Univ., Denmark.

Reviewed 1 grant proposal for NSF.

Invited Seminar, Dept. Molecular Biology, Univ. of Odense, Odense, Denmark (Feb.).

Invited Seminar, Max-Planck-Inst. for Molecular Genetics, Berlin, West Germany (Mar.).

Invited Seminar, Institute of Microbiology, Univ. of Heidelberg, Heidelberg, West Germany (Mar.).

Invited Seminar, Dept. of Molecular Biology, Univ. of Geneva, Geneva, Switzerland (Mar.).

Invited Seminar, Dept. of Microbiology, Polytechnical Univ. of Denmark, Copenhagen, Denmark (Mar.).

Invited Seminar, Centro de Investigaciones Biologicas, Instituto de Biologia Celular, Madrid, Spain (May).

Invited Seminar, Dept. of Genetics, Univ. of Cordova, Cordova, Spain (May).

Invited Seminar, Institute of Microbiology, Univ. of Copenhagen, Copenhagen, Denmark (June).

LIGON, J.D.
Reviewed 7 grant proposals for NSF.

His Ph.D. student, S. Zack, has won two national awards for the best student paper presented at the Cooper Ornithological Society meeting (May) and at the Amer. Ornithological Union meeting (Oct.).

LIGON (cont.)
His graduate students presented 5 papers on their own at national meetings.

MARTIN
Research Associate, Los Angeles Museum of Natural History. Continuing work on the flora of L.A. County.

His graduate student, Tom Andrews, received a National Audubon Society Grant to study watersheds in the Sangre de Cristo Mountains.

Another student, Karen Clary, received a Smithsonian Institution/NSF grant for botanical field studies and archeological studies in western Panama.

MOLLES
Nominated Expert Advisor on fishes and aquatic invertebrates, N. Mex. Mus. Nat. History.

Reviewed 2 grant proposals on stream ecology for NSF.

Requested by N. Mex. Game and Fish Department to develop a culture system for the Socorro Isopod, an endangered species. This has been done and the endangered isopod is now growing and reproducing in Dr. Molles' artifical stream environment in his lab.

Invited Seminar, Dept. of Anatomy, UNM Medical School, (May), "Patterns of case design by caddisflies: behaviorally controlled morphology."

POTTER
His Ph.D. student, Charles Reith, received an award for best student paper presented at SWARM/AAAS meeting.

Two of his graduate students, Tim Fisher and Charles Reith, were invited to present their research at the 1982 Symposium on Surface Mining Hydrology, Sedimentology, and Reclamation, Univ. of Kentucky, Lexington (Dec.).

RIEDESEL
Reviewed 3 grant proposals for NSF and 1 grant proposal for NIH.

His graduate students published 1 paper on their own in a refereed national journal.

TAYLOR
Invited Seminar, Univ. California, Davis (Oct.), "Evolution of hibernal diapause in insects."

TAYLOR (cont.)
Invited Seminar, Univ. of California, Davis (Oct.), "Predicting diapause induction under conditions of changing photoperiod: a test using the Mexican bean beetle."

His graduate student presented a paper on his own at a regional meeting.

THORNHILL
Three Invited Seminars, Dept. of Zoology, Univ. of Melbourne, Parkville, Victoria, Australia (Jan., Feb.), "Female choice in scorpionflies," "Panorpa scorpionflies: alternatie reproductuve tactics," " Human rape: an evolutionary analysis."

Invited Seminar, Dept. of Zoology, Latrobe Univ., Bundoora, Victoria, Australia (May), "Cryptic female choice."

Invited Seminar, Dept. of Biology, Monash Univ., Clayton, Victoria, Australia (June), "Cryptic female choice."

Invited Seminar, Dept. of Psychology, Univ. of Toronto, Ontario, Canada (Oct.), "Human rape: an evolutionary analysis."

Invited Seminar, Dept. of Psychology, McMaster Univ., Hamilton, Ontario, Canada (Oct.), "Female choice."

Distinguished Ecologist Invited Seminars, Simon Fraser Univ., Burnaby, B.C., Canada (Sept.), "Human rape: an evolutionary analysis" (Univ. wide lecture) and "Female choice in bittacid scorpionflies" (Dept. of Biol.).

His visit to Canada was published in all major Canadian newspapers. TV and radio appearances and newspaper publicity involved interest in his public lectures at Simon Fraser Univ. The Biology Dept. and the Univ. of New Mexico were mentioned in all interviews and newspaper accounts:

a. Vancouver Show. Live TV interview for talk show, 100,000 viewers.
b. Canadian Broadcasting Company. Two live radio talk shows (The Early Edition and Daybreak), broadcast throughout British Columbia.
c. CBC Nationwide broadcast-telephone interview.
d. CBC telephone interview broadcast throughout Nova Scotia.
e. Canadian National Newspaper release. In all major Canadian newspapers.

Sabbatical leave appointment as Visiting Research Fellow, Univ. of Melbourne, Parkville, Victoria, Australia.

Reviewed 1 grant proposal for NSF.

Invited Symposium, presented at Symposium on Alternate Reproductive Tactics at Amer. Soc. Zool. Meeting, Louisville KY (Dec.)., "Condition-dependent female choice tactics in the scorpionfly Hylobittacus apicalis (Mecoptera: Bittacidae)."

His graduate students published 3 papers on their own in refereed national journals.

TRUJILLO
Sabbatical leave appointment as Visiting Associate Professor, Dept. of Biochemistry, Case Western Reserve Univ., Cleveland OH.

Reviewed 1 grant proposal for Biophysics Panel of NSF.

His doctoral student, Larry Foe, received honorable mention in national NSF Fellowship competition.

Nominated and accepted into Amer. Soc. of Biological Chemists.

Invited Seminar, Dept. of Chemistry, California State Univ., Fresno (Spring), "Isolation and characteristization of a PFK-stabilizing factor from pig liver."

Invited Seminar, Dept. of Biochemistry, Case Western Reserver Univ., Cleveland OH, "Are the association properties of liver PFK related to regulatory properties?"

Invited Seminar, Dept. of Chemistry, California State Univ., Sacramento (Spring), "Isolation and characterization of a PFK-stabilizing factor from pig liver."

VOGEL
Research Career Development Award, NIH, Renewed 1982.

Sabbatical leave appointment as Visiting Research Professor, Dept. of Physiological Chemistry, The Univ. of Lund, Lund, Sweden.

Invited Speaker, Gordon Conference on Basement Membranes, Andover NH (June), "Degredation of proteoglycan components of a basement membrane-like sub-endothelial matrix by inetastatic tumor cells."

Invited Seminar, Dept. of Pharmacology, Yale Univ., New Haven CT (Feb.).

Invited Seminar, Dept. of Physiological Chemistry, Univ., of Lund, Lund, Sweden (Sept.).

Invited Seminar, presented at the 1982 Michigan Molecular Institute International Symposium on the Extracellular Matrix, Midland, MI (June), "Proteoglycan production by proliferating, non-proliferatng, and senescent cultures of human embryo lung fibroblasts."

WIENS
Two Invited Seminars, Univ. of Oklahoma, Norman OK (Feb.), "Testing hypotheses in community ecology: lessons from a simple system" and "Methodology and the detection of community patterns."

Two Invited Seminars, Univ. of Virginia, Charlottsville VI (Mar.), "Patterns in avian communities: lessons from a nonequilibrium system," and "Procedures in community ecology: How shall we know reality?"

Two Invited Seminars, University of Uppsala, Uppsala, Sweden (Sept.), "Patterns, processes, and paradigms in community ecolgy: lessons from a nonequilibrium system" and "Myths and reality in avian community patterns: the influence of methodology."

Two Invited Seminars, Univesity of Lund, Lund, Sweden (Sept.), "Patterns, processes, and paradigms in community ecology: lessons from a nonequilibrium system" and "Myths and reality in avian community patterns: the influence of methodology."

Invited Seminar, University of Texas, Austin (Dec.), "Patterns, processes, and paradigms in community ecology: lessons from a nonequilibrium system."

Invited Symposium Paper, presented at Conference on Ecological Solutions to Environmental Management Concerns in the Pinelands National Preserve, Camden/Cherry Hill NJ (Apr.), "Landscape structure as it related to population features."

Invited Symposium Paper, presented at Nordic Council of Ecology Symposium on Competition and Community Structure, Tvarminne, Finland (Sept.), "Experiments are important, but..." (1 hour paper).

Invited Symposium Paper (1 hour), presented at same Symposium as in 7, "Pattern detection and process explanation in community ecology: reality or religion."

Invited Symposium Paper (1 hour), presented at same Symposium as in 7, "Is nature orderly, or do we just wish it were?: Coping with a onequilibrium world."

Invited Symposium Paper (1 hour) presented at same Symposium as in 7, "North American shrubsteppe birds do not compete."

Invited Symposium Paper (1 hour), presented at same Symposium as in 7, "Let's forget the 1.3 rule."

Invited Symposium Paper (1 hour) presented at Symposium on A New Ecology: Novel Approaches to Interactive Systems, Univ. of N. Arizona, Flagstaff (Aug.), "Resources in a population and community processes."

He is the only North American Member, International Evaluation Group, Swedish Research in Terrestrial Vertebrate Ecology, Swedish Natural Science Research Council.

Reviewed grant proposals for the following NSF study panels: Ecology Program (6), Population Biology Program (1), Ecosystems Program (1), Oceanography Program (1).

Reviewed grant proposals for the National Geographic Society (1) and NATO (1).

His graduate student, G. Miller, received a two year grant ($35,000) from the Arizona Power Company to investigate the home ranges and movements of desert bighorn sheep.

WIENS (cont.)
His Ph.D. student, Dennis Heinemann, won the University of New Mexico Graduate Fellowship ($5,500).

His graduate students presented 12 papers at regional and national meetings and published 8 papers on their own in refereed journals.

YATES
Invited Symposium Paper, presented at the Third International Theriological Congress, Helsinki, Finland (Aug), "The role of voucher specimens in mammal collections: characterization and funding responsibilities."

Invited Seminar, Dept. of Biology, Univ. Texas, El Paso (May), "Evolutionary strategy and historical biogeography of holarctic Talpidae."

Advertising Editor, SW Naturalist.

His M.S. student, Joseph Cook, received a grant ($1,200) from the N. Mex. Fish and Game Dept. to do a census of white-sided jackrabbits and bats in Hidalgo county, NM.

His Ph.D. student, Dwight Moore, received two grants:
a. Sigma Xi ($300), to study chromosomal polymorphism within and among populations of the Mexican mole Microtus mexicanus;
b. Theodore Roosevelt Memorial Fund, American Museum of National History ($600), to study chromosomal and genic variation in Microtus mexicanus in Mexico.

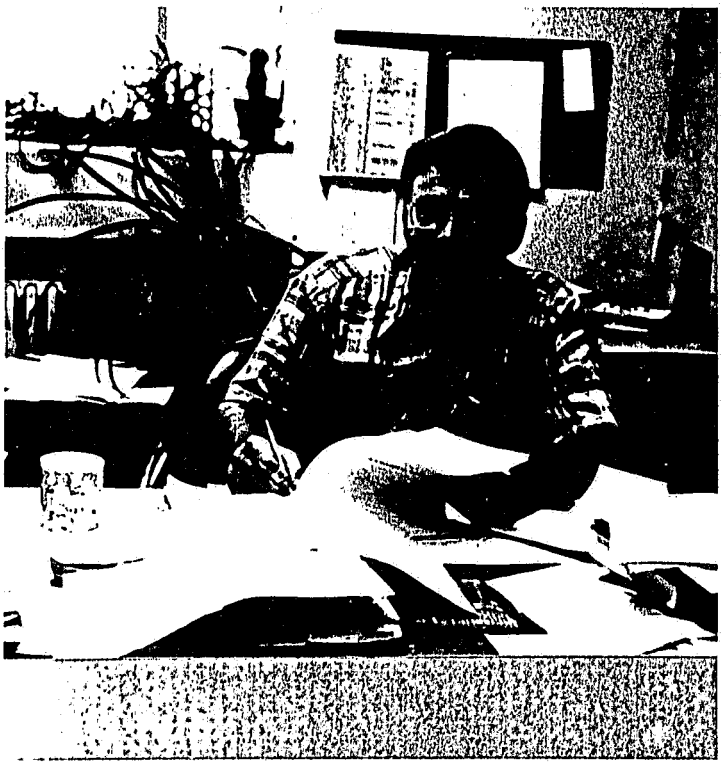
His Ph.D. student, Robert Sullivan, received a grant ($2,000) from the N. Mex. Fish and Game Dept. to study the systematics of southwestern chipmunks.

His graduate students presented 6 papers at regional and national meetings and published 2 papers on their own in refereed journals.

Reviewed 7 grant proposals for NSF.

B. Biology newscasts: selected highlights of personal and professional interest.

Often the activities of faculty and students go unnoticed by the general public and, particularly, by the University Administration. To establish a better channel of communication this section brings to attention some of the newsworthy achievements of UNM biologists during the past year. I hope the University will take pride in their accomplishments, as ambassadors of UNM, as I do.



Professor James R. Gosz has recently been awarded a National Science Foundation grant for $106,981. The award supports his current research with Professor Douglas G. Brookins (Geology) entitled, "Quantification of Atmospheric Inputs with Strontium Isotope Ratios." Professor Gosz is married, has two children and is actively involved in 4-H club-work with his family. He has been a faculty member here since September 1970.

Environmental Developments Aren't All Bad

Santa Fe Ski Basin, target of an extensive ecological study by the University of New Mexico

By Melissa Howard

If you think all biologists wear white coats and work in labs, you should see Jim Gosz and his students skiing around Santa Fe Baldy.

And if you think all the news about the environment is bad, you should hear Gosz talk about Santa Fe Ski Basin.

James R. Gosz, Ph.D., professor of biology at the University of New Mexico and recipient of nearly $2 million in research grants, doesn't wear a white coat. In fact, he looks more like a forester than a biologist — maybe because he started out to be a forester.

Since 1970, Gosz has led three faculty colleagues and 50 to 75 UNM students in an ecological study of Santa Fe Ski Basin and the surrounding area. Their conclusion: despite rapid growth, heavy construction and year-round traffic, the ski facility has not degraded environmental quality in any significant way. The most noticeable problem — pollution by the salt applied to icy roads — is being addressed.

The ski basin studies were inspired by two of Gosz's students when they asked why trees were dying along the road leading to the ski facility. Both students wrote their dissertations on the subject.

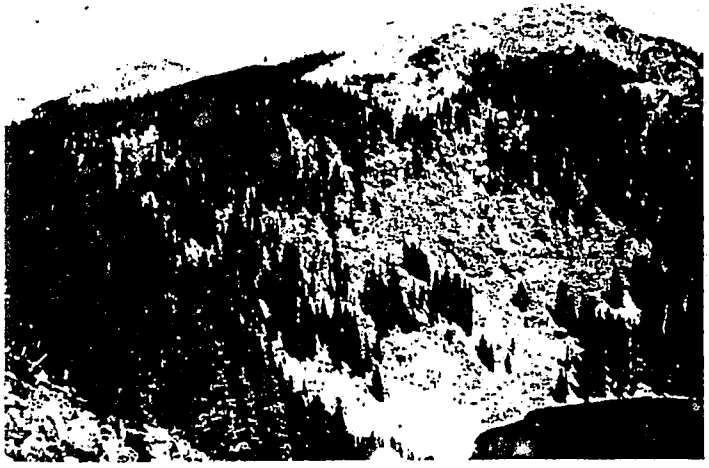
The UNM studies were based on samples of soil, water, snow, air and plant life gathered, winter and summer, along the ski runs, at the lodge, along the road and atop Santa Fe Baldy. Collecting samples in winter was only possible on skis, so the students learned to ski — and got free lift tickets.

In presentations at conventions and articles in journals, Gosz and his colleagues reported on the ski basin studies. "The area is now internationally known among biologists," he says.

Among the findings:

- The ski area's current sewage-disposal system has not harmed water quality.
- Construction of the poma lift and removal of trees along trails has had no measurable effect on streams.
- Car exhaust has caused slight elevations of lead levels along roadsides, but not enough to be damaging.
- Trampling by human feet damages the forest floor, which in turn injures trees, but trample-resistant grasses can be planted.
- Road salts build up levels of harmful so-

A close view of the ski basin area which the study determined had not suffered any significant environmental damage



sium and chloride in soils, causing leaves to discolor and eventually killing aspen and conifer trees along the road. The salts also increase levels of nutrients, sediments and heavy metals in streams. Different salting materials have more or less effect on water quality — but the more benign salts cost more and may be less effective in preventing ice build-up. Mixing salt with a moisture-holding material reduces the damage.

At Gosz's recommendation, the State Highway Department has reduced the volume of salt used on the road leading to the ski basin. For the last two winters, a mixture of salt and cinders has been used. In addition, part of the road has been closed and a parking lot relocated.

"We think there's been a positive effect" from these changes in salting practices, says Bud Stephenson, Tesuque district forest ranger. "We're not seeing the volume of dead trees increasing like we used to."

Santa Fe National Forest has a multiple-use designation, making it appropriate for basic research like Gosz's, but Stephenson notes that the Forest Service can grant only a few of the many requests for access from would-be researchers.

The Forest Service's relationship with Gosz has been "congenial," says Wendell Gore of the regional office. "Our objective was tied to our need for information that would benefit the Forest Service," he says. "We had close, frequent contact with Dr. Gosz and the permit we issued required him to report annually on what he had done and what the proposed management applications were."

Stephenson looks forward to incorporating Gosz's future reports on nutrient cycling and aspen regeneration into forest management practices. "This type of basic research is bound to be useful somewhere down the line when we go to manage these stands of aspen from a scenic or wildlife standpoint," he says.

Providing information so others can make management decisions — he calls them value judgments — is Gosz's goal. The Forest Service is becoming increasingly sophisticated about these value judgments, Gosz says. "We've had an excellent working relationship.

"The right information can improve management resources to minimize the effects of human use of forests," he says. "You can't manage one aspect alone. You can't do something that only affects one thing. That's the nature of nature."

Now that scientists can help identify areas that can be managed well, those areas should be open to people, Gosz believes. "You can't keep people out of the forest. You have to have both human-use areas and pristine areas."

Gosz holds a doctorate in forest ecology from the University of Idaho. A post-doctoral study of clear-cutting in a New Hampshire forest led him to studying forestry from an ecological standpoint, which led him to the UNM biology department in 1970. In 1978, he was invited to New Zealand to set up a research program on the influence of forest cutting on nutrients. Techniques he developed for the ski basin project are applicable in New Zealand and elsewhere, Gosz says.

UNM biology students systematically trample grass in Santa Fe Ski Basin to learn effects of heavy human use of the forest

"I'm interested in land management and ecosystems," he says, defining an ecosystem as "a concept that organisms interact with each other and their environment. So anything — even a goldfish bowl — can be an ecosystem. In our studies, it's usually been a watershed."

Under his definition, Gosz's home in the Sandia Mountains is an ecosystem, too. "Our place is like a zoo," he says happily.

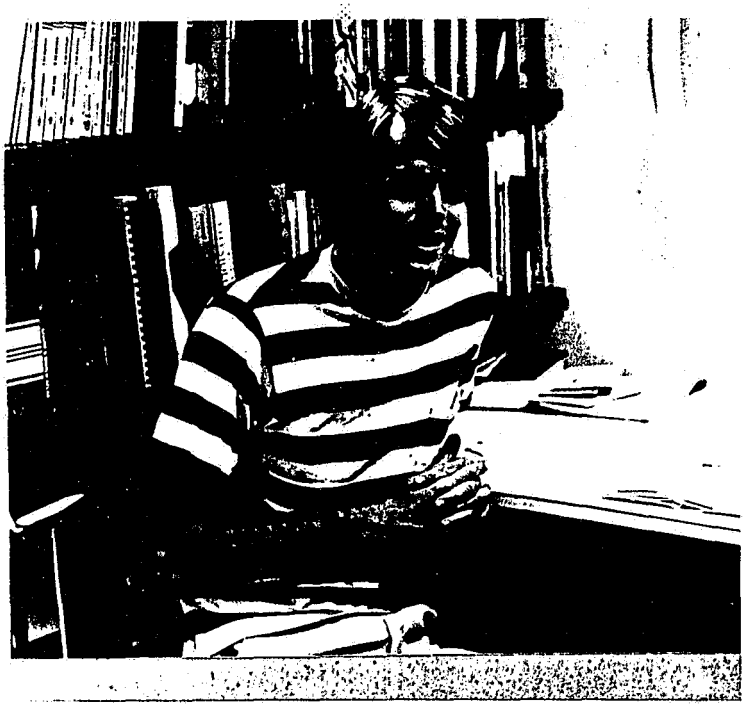
The two children raise prize-winning rabbits, swine and poultry, and the family travels to livestock shows throughout the Southwest. Mrs. Gosz is the leader of the Ponderosa 4-H Club, and her husband directs the club's rabbit project.

Melissa Howard is a free lance writer who lives in Albuquerque.

Dr. James Gosz, who directed the study, takes a reading from an air pollution monitor near the ski basin

• road-salts build up levels of harmful so-

Mr. Steve Zack is a doctoral candidate in Biology. Steve typifies the excellence of many of our graduate students and you will be reading more about him and other of our graduate students in the future. Also included are copies of letters from scientists who have visited our department this past fall. They are typical of thank you letters we receive; note, in particular, their impressions of our graduate students.



In May, Mr. Steve Zack presented a paper, "Tropical Lanius shrikes: comparing habitat and demography to understand communal breeding" at the 52nd Annual Meeting of the Cooper Ornithological Society held in Logan, Utah. Steve's paper was judged to be the best student research paper presented at the meeting and the honor carried with it a prize of $150. This is the first time that any student in the Rocky Mountain West, much less New Mexico, has been so recognized at a national ornithological meeting. Steve is one of Dr. J. David Ligon's doctoral students and his work in Kenya, Africa has been supported by Dr. Ligon's NSF grant, "An ecological and evolutionary study of communal breeding in two tropical birds: the green woodhoopoe and the grey-backed fiscal." Steve plans to graduate in May 1984.

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The University of Oklahoma

DEPARTMENT OF ZOOLOGY
730 Van Vleet Oval, Room 314
Norman, Oklahoma 73019
(405) 325-4821

November 10, 1982

Dr. Don Duszynski, Chairman
Department of Biology
University of New Mexico
Albuquerque, New Mexico 87131

Dear Dr. Duszynski:

I would like to thank your department for inviting me out for the seminars last week. The visit gave me a chance to observe first-hand what I had heard, that UNM really has become a first-class powerhouse in behavioral ecology. During my stay, I had stimulating interactions with Ligon, Wiens, Thornhill, and a host of articulate and interesting graduate students. (Just three weeks before, I had seen many of these same people having a major impact at the American Ornithologists' Union meetings in Chicago.) When I discuss future academic homes for top quality undergraduates at Oklahoma, I automatically categorize UNM with the best (and more high-profile) departments like Michigan, Berkeley, and Cornell.

Again, many thanks for the chance to come visit.

Sincerely yours,

Douglas Mock

Douglas Mock
Assistant Professor

DM/de

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11/22/82

Dr. Donald Duszynski
Dept. of Biology
Univ. of New Mexico
Albuquerque, New Mexico, 87131

Dear Don,

I thoroughly enjoyed my recent visit to New Mexico. I was impressed with the facilities, staff, and with the very strong group of organismal biologists/ecologists which form the faculty. I was especially impressed with the outstanding group of graduate students in your department. They generally seemed to be at least as competent and dedicated as any students at other universities with which I have been associated, including Univ. of Michigan, Texas, California at Davis, and Georgia.

I want to wish you continued success in directing the development of an exceptionally good Biology department.

Sincerely yours,

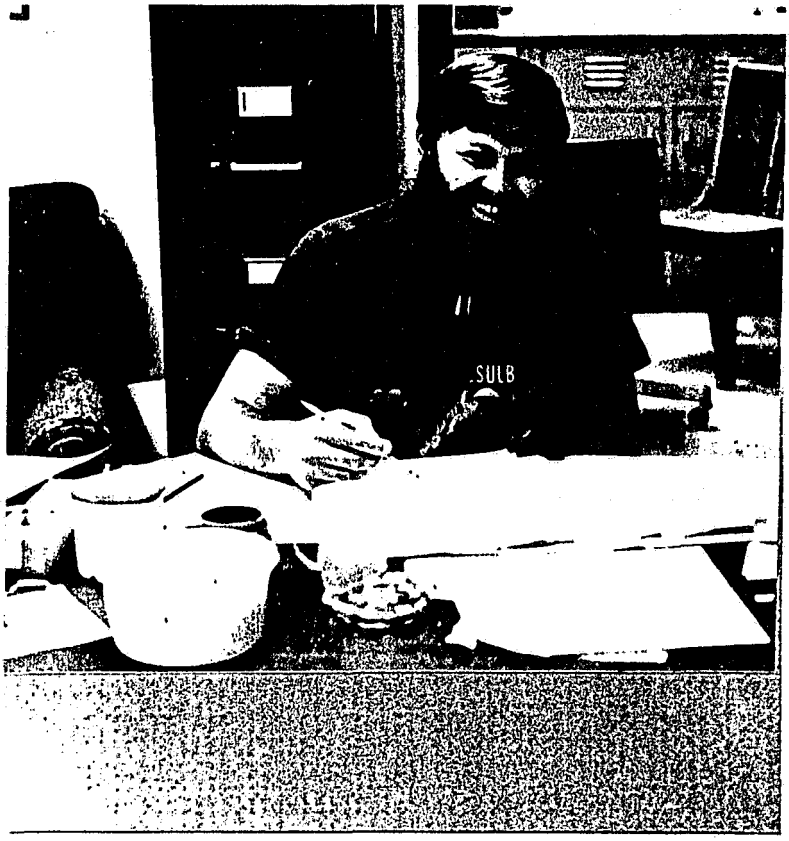
John C. Avise

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION INSTITUTION

Dr. Kate Vogel joined our faculty in August 1977 and since then she has distinguished herself as an excellent teacher, an internationally respected scientist, and a hardworking and a cooperative department citizen. You will be hearing great things about Kate Vogel in the future.

Here's a face you won't see around here for a while. Professor Kathryn Vogel has just left for Sweden where she will spend the 1982-83 school year as a Visiting Research Associate working in the Department of Physiological Chemistry at the University of Lund. In January 1981, Dr. Vogel received a National Institutes of Health Research Career Development Award. This five year award (for over $125,000) is designed to enhance the research capabilities of promising scientists in the formative stages of their careers. Dr. Vogel's award was one of only 270 new awards by NIH in the U.S. and allows her to continue her studies on "Glycosaminoglycans of the Aging Cell." Persons who receive these prestigious and highly competitive grants are able to devote full time to their research and to participate in other related research activities--which is what she will be doing during her year abroad.

Bruce is one of our recent graduates who has decided to stay in the department for a year or two to do research. He funds his work through outside research grants and contracts and has served as a lecturer in our Evolution and Ecology course (Biology 222) for the past two summers. He interacts with a number of our faculty including Drs. Randy Thornhill, Fritz Taylor, Norm Scott and Tom Fritts and currently has a $35,000 National Science Foundation grant proposal in review.



Dr. Bruce Woodward has recently been awarded a National Science Foundation grant for $9,993 to support his research on the "Proximal Factors Affecting Anuran Behavior." Dr. Woodward finished his Ph.D. in 1981 under the direction of Dr. Randy Thornhill and Dr. Norm Scott and is currently a Visiting Research Assistant Professor in Biology.

Dr. Cliff Crawford is a highly knowledgeable and respected scholar in the area of desert invertebrates. Dr. Elsa Taylor is just beginning her career, but with the opportunity for interaction available to her in Biology she should soon become a respected scientist in her own right.

Drs. Clifford S. Crawford and Elsa Taylor have recently been awarded $80,000 by the National Science Foundation to support their collaborative research project entitled "Cellulose Decomposition in Desert Dune Ecosystems." Professor Crawford, a former chairman of this department, is an acknowledged expert in the study of deserts and the invertebrates that inhabit them. He is the author of a scholarly text, Biology of Desert Invertebrates, recently (1981) published by Springer-Verlag and is frequently invited as a guest speaker at symposia nationwide. Dr. Taylor's research interests are directed toward examining the evolution and ecology of symbiotic associations between microorganisms and invertebrates, their effect on the interacting organisms and on the surrounding environment. Dr. Taylor, a Visiting Scholar in Biology, received her Ph.D. from UNM in 1981 and is married to Professor Fritz Taylor of our department.

LoBo, Aug 27, 1982

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Insect charms hard work but alluring to females

It's not clear why cicadas make that thrumming noise, but it must be important to them because it's such hard work, says a UNM biology professor.

"It's generally only the male cicada that choruses," says Dr. Clifford S. Crawford. "The idea may be they are attracting females, asking them to compare individual singers."

The chorus — presumably alluring to female cicadas but anathema to some people — issues from tymbals, vibrating membranes in pouches on the abdomen. Voluntary muscle contractions produce "a sort of vibrating drum effect," says Crawford.

"It is one of the most highly energy-using muscles known," he adds.

Albuquerque is the congenial home of a species of floodplain cicada which can be heard, like it or not, from early June to mid-October.

Cicadas thrive in temperate and tropical regions all over the world, but despite their profusion they are little understood, says Crawford. He is the co-author, with Mary M. Dadone, of a technical paper on the chorusing habits of the Albuquerque cicada.

Asked what more he'd like to know about cicadas, Crawford said, "I'd like to know why they have the song pattern they do.

"There are two distinct units," he continues, "the erratic daytime singing and the continuous, predictable evening chorus.

"Why? I think attracting females is the only answer."

The chorus may also be a "spacing arrangement," Crawford speculates, a noisy no-tresspassing sign. Or perhaps the multiple voices are intended to confuse predators. Cicadas' enemies include cats, dogs, sparrows, raptor birds and a species of wasp that dines on cicadas.

Crawford's paper, published by the Entomological Society of America, says the Albuquerque cicadas begin their chorus just after sunset in early and late summer and close to sunset in midsummer. Overcast skies trigger the song earlier. Temperature and humidity do not seem to affect the starting time but light intensity and barometric pressure changes do.

If cicadas take their cues from the setting sun, Crawford wonders if "they sing at the same moment in the Northeast Heights and downtown.

"I'd like to know if the timing of the evening chorus is the same relative to environmental factors wherever they are or if it's localized in populations," he says. "That would tell us something about the genetics and evolution of cicadas."

The cicadas we are hearing this summer probably were born at least four years ago, Crawford says. Their mother laid eggs on twigs, and when the twigs fell the newly hatched nymphs burrowed into the ground. They lived at root level, feeding on trees' nutrients. When they emerged they made a finger-sized hole in the groung and left behind, often on the bark of a nearby tree, a beige outer covering of nymphal "skin," complete with feet and feelers.

Adult cicadas live in trees. Their beaks pierce twigs and branches so they can suck liquid nutrients, but there is no evidence they harm the trees, Crawford says. The cicada sings all summer, mates and is dead before the first frost.

Behavioral scientists are interested in animals like the cicada, Crawford says.

"They seem to illustrate a principle called lekking, in which animals get together in discrete areas for reproductive purposes.

"Cicadas also illustrate sexual selection, the question of how individuals compete to attract members of the opposite sex."

Crawford doesn't dislike the cicadas' thrumming chorus — to him it's a welcome sign of summer — but his cats eat them, and they shriek as they go down.

"I imagine cicadas would be a good, high-protein food," Crawford says.

Dennis Heinemann is one of our senior doctoral students who has been exceptionally active professionally over the last few years. Since 1977 he has published 6 papers in refereed national journals and has presented 7 papers at national scientific meetings. Dennis is typical of the high caliber of graduate student we have been fortunate enough to recruit in recent years. He plans to graduate at the end of Summer Session 1983 and will also receive an MS in Statistics to strengthen his Ph.D. in Biology.

Dennis Heinemann (he's the one on the right) has just been informed by Dean of the Graduate School, Charlene McDermott, that he has been chosen as the recipient of the 1982-83 University of New Mexico Graduate Fellowship. Dennis is a Ph.D. candidate in Biology working with Dr. John Wiens and his dissertation research involves studying competition between hummingbirds and Hymenopterans. The award ($5,500) will allow him to pursue his doctoral studies full-time. Dennis was selected from a group of 30 outstanding graduate students nominated by 27 academic departments. Dr. Alan Reed of the Office of Graduate Studies said, "This award represents a recognition of years of great personal effort and excellent academic achievement. We feel that your record evidences great ability and dedication to scholarship and we expect the award will further your development as a biologist who can contribute immensely to the progress of human knowledge." Congratulations Dennis!

Dave and Sandy Ligon have been studying the green woodhoopoe in Africa for over 5 years. Their scholarly work has been well accepted internationally as attested to by their recent Scientific American article. An excerpt was even published in "Ripley's Believe It or Not." How many other faculty do work published in the Sunday funnies?! Dave has also been doing work closer to home. He is co-principal investigator on a 3 year NSF grant with Dr. Peter Stacey (University of St. Louis, MO) to study acorn woodpeckers in the Magdalena Mountains. See attached copy of the article that appeared in the June 27 issue of the Albuquerque Journal summarizing their work.

Professor J. David Ligon, and his wife Sandy, have recently published the results of nearly five years of their work on birds in Africa. The study entitled, "The Cooperative Breeding Behavior of the Green Woodhoopoe" was published in the July 1982 issue of Scientific American. Articles that appear in Scientific American are all invited review papers and publication in this Journal is considered to be near the acme of publication in American science circles. Scientific American has more than a million readers world-wide and is published in English, Italian, Japanese, Spanish, French, German and Chinese. Professor Ligon has been a member of the Biology Department since 1967. Sandy received her M.S. in Biology in 1973 and she and Dave were married in 1975. Their work in Africa was supported by several grants from the National Science Foundation and National Geographic.

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an Article from SCIENTIFIC AMERICAN

JULY, 1982 VOL. 247, NO. 1

The Cooperative Breeding Behavior of the Green Woodhoopoe

Among these East African birds one pair in each flock breed while the nonbreeding adults assist in the raising of the breeders' chicks. How did this pattern of seemingly altruistic animal behavior evolve?

by J. David Ligon and Sandra H. Ligon

Over the past few years investigators of animal behavior have devoted much attention to the evolution of complex social organizations. One aspect of social behavior is cooperation: exchange between individuals of some kind of resource or assistance. Cooperation is common in human societies and in general is mutually beneficial. The giving of assistance can, however, be unequal and even one-sided (as in life-sacrificing human heroism). The commonest instances of unequal exchange among the lower animals are found in the social insects. In these animal societies workers are sterile and spend their entire adult lives engaged in activities that benefit the reproduction of the queen. Often they give their lives to defend the nest. Such behavior seems to go beyond the bounds of cooperation and to meet the biologist's definition of altruism: "behavior that decreases or potentially decreases the lifetime reproductive output of the altruist to the benefit of another individual or individuals." This definition does not, of course, imply any conscious reasoning or forethought.

Although the social insects provide the most striking examples of apparent altruism, complex levels of cooperation, including apparently unequal aid giving, are also found among higher animals other than man. A vivid case in point is a species of insect-eating bird of Africa: the green woodhoopoe (*Phoeniculus purpureus*). The birds' social unit, the flock, may have as many as 16 members but only one breeding pair. The other sexually mature but nonbreeding flock members serve both as "nest helpers," sharing the burden of bringing food to the incubating female and later to the nestlings, and as "guards," defending the nestlings and later the fledglings against predators and participating throughout the year in such flock activities as protecting the home territory.

More than 100 species of birds share with the green woodhoopoe this pattern of cooperative breeding, but no single set of factors can explain why one species displays the behavior pattern and an apparently similar species does not. To understand the selective pressures that favor the evolution of cooperative breeding one must take into account the influence of the environment on a given social system. Among the environmental factors are the climate, the distribution of food both in time (with the seasons) and in space (within the utilized area), the availability and quality of roost sites and nest sites and the kinds and numbers of predators. Another important component of natural selection is what may be called the social environment: the effect on the individual of interaction with other members of its own species.

We began our work with the woodhoopoes in 1975. The birds were well suited for study. The flocks we observed inhabit acacia woodland near Lake Naivasha in Kenya, where they roost at night inside cavities in the trunks of the acacias, some of them naturally formed and some unoccupied woodpecker holes. This makes individuals easy to catch and mark; one simply plugs the mouth of the cavity after dark and then lets the bird emerge into a transparent bag the next morning. Both the openness of the woodland and the sparseness of the acacia foliage made observing the birds fairly easy; so did their generally calm disregard of human beings and the birds' comparatively large size. (The males are about 36 centimeters long and the females about 30.)

During our first period in the field, from July, 1975, through May, 1976, we color-banded 151 birds, a total that included nearly all the members of 25 flocks. We subsequently banded an additional 218 birds, most of them offspring of the first flocks we had banded. As a result our field notes include the sex, the age and the flock affiliation of the birds and also the parentage of nearly all of the second group.

The birds in our study area were highly territorial. It was unusual when a suitable habitat, for example a patch of woods that included roosting cavities, was not "owned" by one flock or another. Each territory was vigorously defended both against intrusion by birds from neighboring flocks and against individual "outsider" woodhoopoes that occasionally wandered into the area. This pattern of behavior made the establishment of new territories rare. The groups varied in size, some consisting only of the breeding pair. Generally, however, the flocks were larger, and the birds that "helped" the breeding pair were usually, although not invariably, the siblings of one breeder or the offspring of one or both birds in the breeding pair.

The woodhoopoes in our study area did not on the average live long. Each year between 30 and 40 percent of the population died. The distribution of the death rate in the population was uneven. Breeding males were the most frequent casualties, their deaths outnumbering those of the other three categories: breeding females, female helpers and male helpers. Most of the deaths were caused by predation. The primary predators appeared to be genets (catlike members of the mongoose family) and driver ants (the African counterpart of the New World army ants). Both predators raid the woodhoopoes' roosts at night. On several occasions we found the remains of dead birds still in the roost holes or on the ground below the nest sites.

Two environmental factors in addition to predation also have a great effect on the woodhoopoe population. The first is the timing and amount of rainfall. The rains in this region of Kenya are highly variable. The "normal" annual pattern includes a dry season that ex-

cular surgeons therefore adopted an "intrasaccular" approach, wherein the artery is temporarily clamped above and below the aneurysm and the dilated sac is opened. Then a prosthetic graft is sutured from within to undilated, healthy segments of the artery; extensive dissection outside the aneurysm is not needed, with the result that damage to neighboring structures is avoided.

Aneurysms in smaller arteries of the abdomen and in arteries supplying the head and extremities have a lower risk of rupturing than those of the aorta, but they seem to have a greater risk of thrombosis or embolization, and they too should generally be repaired when diagnosed. If the site of the aneurysm is one that has enough collateral vessels parallel to the diseased one, the aneurysm can simply be ligated, or tied off. In other cases a bypass graft is required; usually the graft is either a segment of the saphenous vein taken from the patient's thigh or a piece of plastic tubing. Aneurysms that arise from infection create special difficulties. They often result from penetrating damage, as when an artery is punctured for illicit drug injection or in diagnostic procedures such as arteriography. The area of infection must first be widely excised and drained and then blood flow beyond the aneurysm must be reestablished with a bypass graft tunneled through healthy tissue.

Cerebral berry aneurysms can be extremely hard to treat both because they are difficult to reach and because many patients already have a severe neurological deficit as a result of sudden, catastrophic intracranial bleeding. A direct surgical approach—usually an attempt to ligate the base of the aneurysm—is the appropriate treatment in most instances. Indirect approaches are also tried. One method diminishes the intraluminal pressure in the aneurysm by gradual occlusion of the carotid artery in the neck. A tiny balloon, inserted by means of a catheter and then maneuvered into the aneurysm, may stimulate thrombosis; in some cases a quick-setting glue injected into the aneurysm may work as well. John F. Alksne of the University of California at San Diego School of Medicine has investigated a technique in which the aneurysm is pierced with a needle introduced through an opening in the skull; iron filings are injected through the needle and a magnetic field is applied, again in an effort to stimulate clotting.

Along with improved diagnostic technology and surgical techniques, better understanding of the factors predisposing an individual to the development of aneurysms should continue to enhance the ability of physicians and surgeons to deal with these dangerous lesions.

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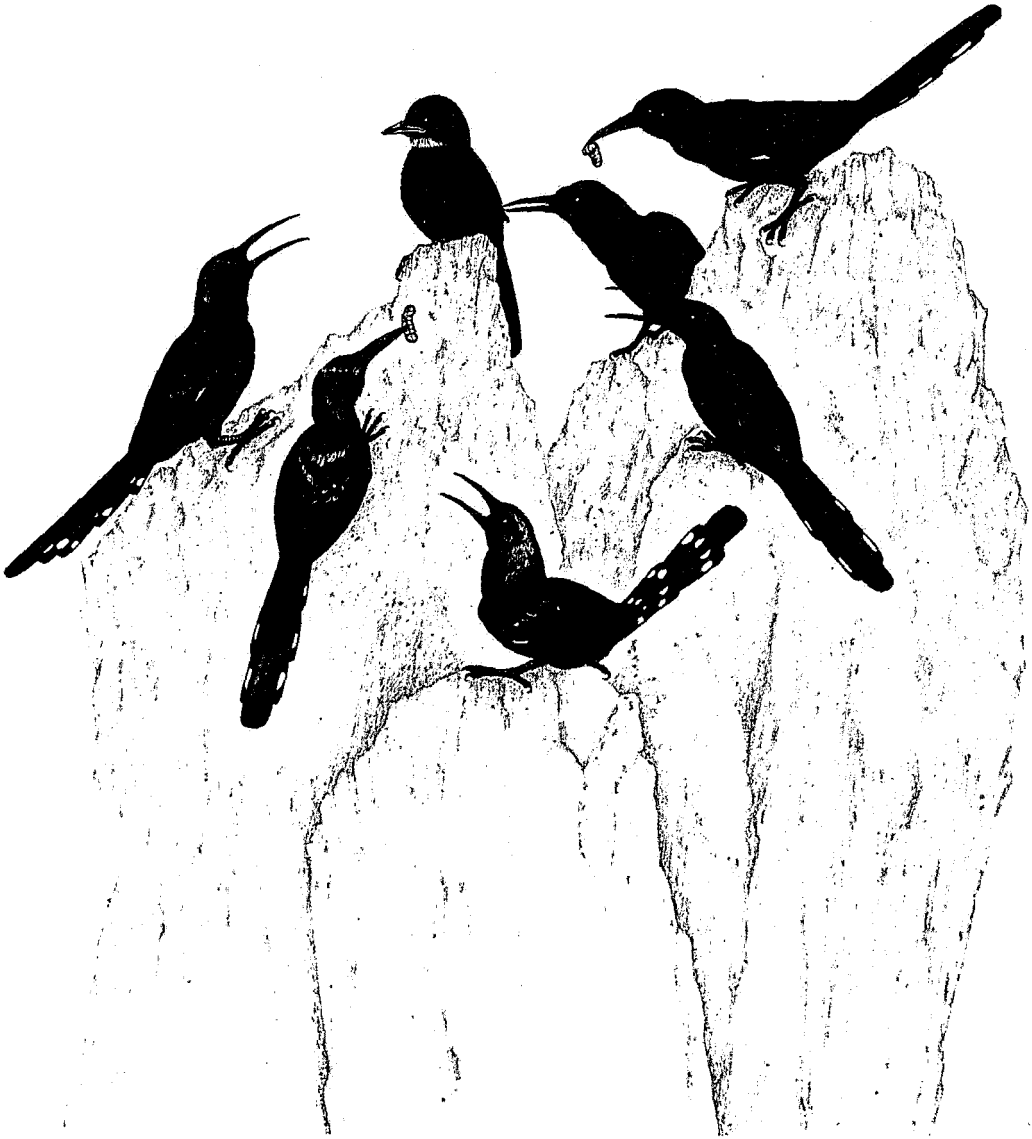
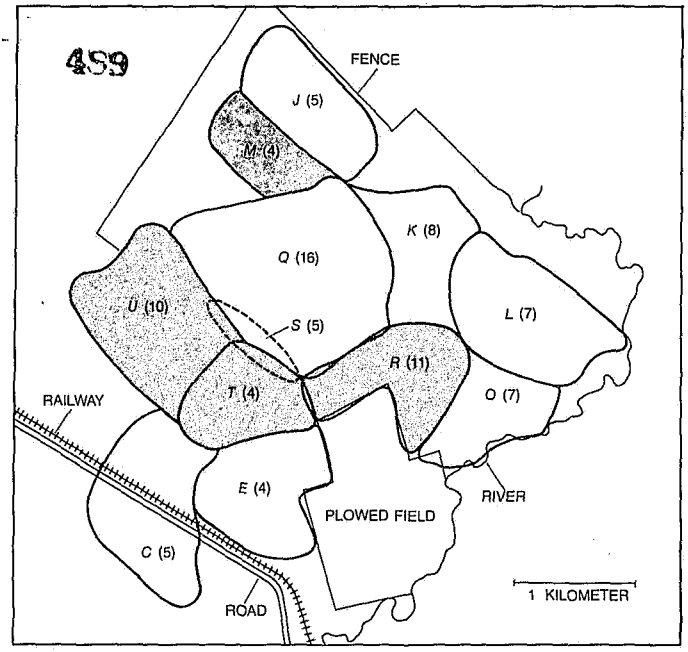
tends from December through February, followed by the "long rains," which begin in March or April. Over the seven years of our study the woodhoopoes began their breeding activity in May or June, a few weeks after the onset of the long rains.

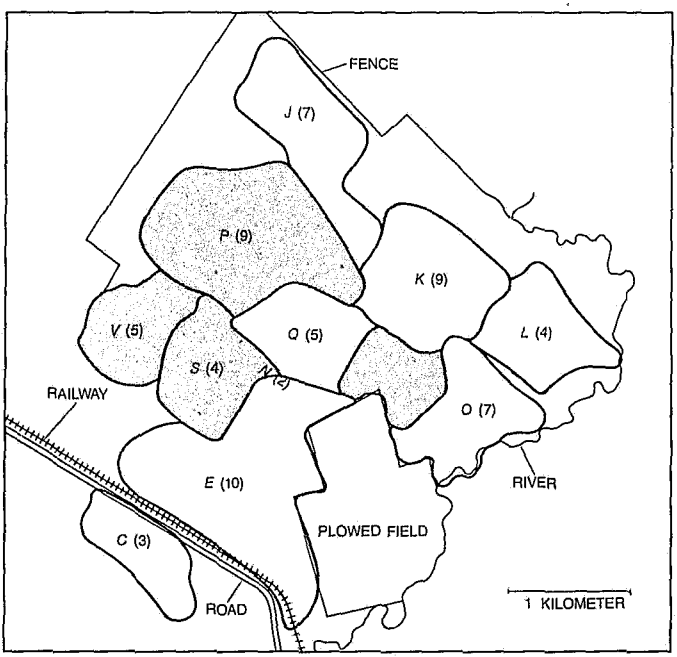
Abnormal rainfall can sharply limit the woodhoopoes' main food supply: the larvae of some 2,000 species of moths that inhabit the woodland. If the dry season is truly dry, the pupating moths thrive in their buried cocoons. As the rains begin the moths emerge to breed and lay the eggs that give rise to the next generation. If, however, there is rain in the dry season, the pupae may rot or be destroyed by fungi and other microorganisms. With fewer pupae to become moths and lay eggs there are fewer caterpillars.

We witnessed such an unfavorable state of affairs in 1979. That year nearly 30 centimeters of rain fell in January and February, compared with a 34-year average of less than six centimeters. The woodhoopoes started nesting in June,



NONBREEDING "HELPERS" from a flock of green woodhoopoes surround a fledgling (*center*) in this painting. Two have brought the main local foodstuff, caterpillars, to the juvenile woodhoopoe and one is grooming it. The three remaining helpers, their bills agape, are vocalizing in the direction of the fledgling. A woodhoopoe flock may include as many as 16 birds, but only one adult pair breed. The nonbreeding adults in the flock take part in the upbringing of the breeding pair's offspring and also assist in the defense of the flock's territory.





OPEN ACACIA WOODLAND on a large farm in the Rift Valley of Kenya was the area selected for the woodhoopoe study. In late 1975 (*top*) the 2,000-acre site was inhabited by 11 established flocks and a 12th flock in the process of establishment (*broken boundary line to the left of center*). The numerals indicate the number of birds in that flock at the end of the year. The total was 86. The four territories shown in color no longer existed by late 1981 (*bottom*), but four new territories, shown in gray, had been established. The number of birds then was 65.

but only two of the 11 flocks in our study area managed to raise any young. Exactly the opposite happened in 1981. Only 2.1 centimeters of rain fell in January and February, and the moth pupae thrived. The long rains of March through May were unusually heavy: 36 centimeters. All 19 of the woodhoopoe flocks in our area that year, including four pairs with no helpers, nested in May and June. Reproductive success was unusually high, with all but two groups producing young. It would have been higher still if predators had not eaten two broods of nestlings. This large annual variation in food supply (and reproductive success) represents one critical environmental variable for the woodhoopoe.

Another variable, perhaps equally critical, consists of the number of roost holes available to the woodhoopoes. The birds compete for the cavities with birds of other species and also with honeybees and small mammals. The presence or absence of roost holes in a particular woodland area determines both the distribution of woodhoopoe flocks and the reproductive success of the flocks over the years. Suitable roosts are often so scarce that most or all members of each sex roost together. Such "dormitory" behavior may be a by-product of sexual dimorphism: the difference in size between the males and the females. The females, being smaller, can enter cavities the larger males cannot. In territories where suitable roost holes were rare we have found as many as eight females roosting together in a single cavity.

This segregation by sex has an important territorial implication. A nocturnal predator can by chance eliminate most or all of the males or females in a flock in one night. Such an event leaves the flock's territory open to colonization by birds of the sex that has been eliminated; the colonizers may be either solitary individuals or members of flocks in adjacent territories.

Our years of observation yielded numerous examples of the adaptive and evolutionary significance of the behavior of the helper woodhoopoes. For example, consider the birds' high mortality rate. For a newly fledged bird to leave its parents' territory and search for a territorial vacancy elsewhere without a known roost for shelter at night is quite risky. It is also indirectly risky for the young bird's parents: in an evolutionary sense producing mature offspring is their only reason for existence. For the young bird to remain in its parents' territory in the role of a nonbreeding helper is far less risky. Since helpers are usually the offspring of one or both of the members of the flock's breeding pair, their remaining with the flock for an extended period is also indirectly

beneficial in an evolutionary sense to one or both of the parents. Indeed, we view this pattern of continuing affiliation with the flock as constituting a form of extended parental care.

An observed fact supporting this interpretation of continuing affiliation by the helper birds is that there is no positive correlation between the number of helpers in a flock and the number of offspring produced by the breeding pair in the course of a season. This means the protection that continuing affiliation with the flock gives the helpers does not necessarily increase the reproductive output of the breeding pair and may sometimes even decrease it.

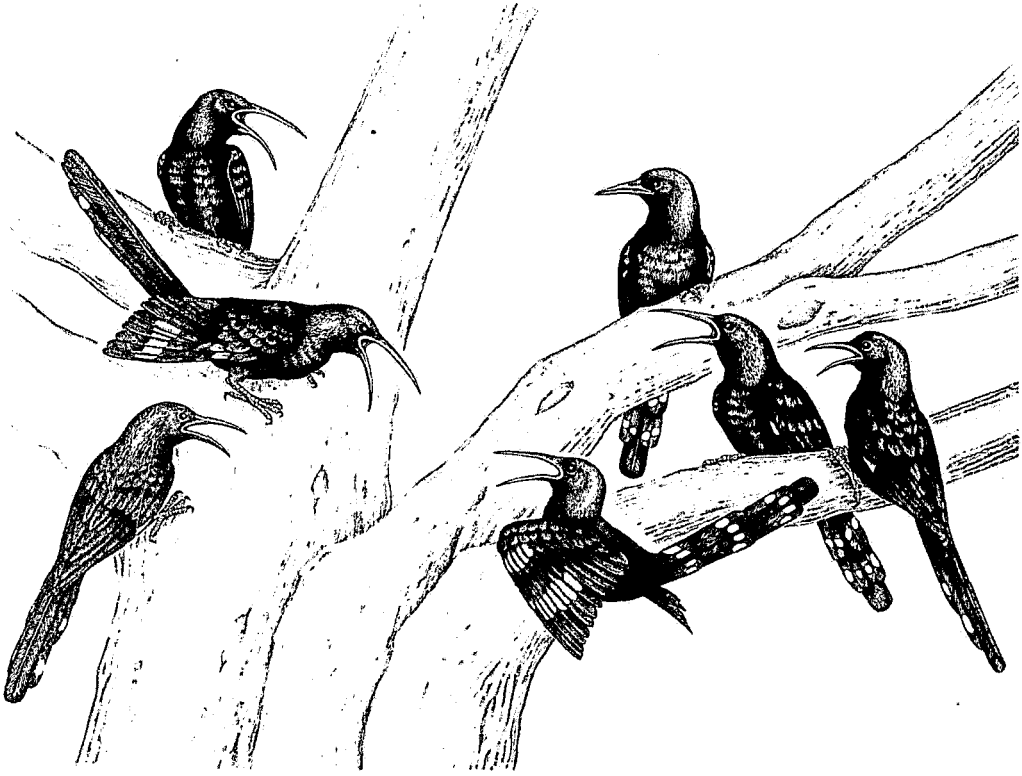
A further aspect of high mortality is the likelihood that one or another of the breeding pair in a flock will die and be replaced within a short span of time. As an example, in 1981, a year of exceptionally high breeding success, the 12 flocks in our study area included only 25 helpers. Of this total five helpers (20 percent) had the same parents as the nestlings the helpers were feeding. The degree of relatedness between the other 20 helpers and the nestlings they attended ranged from zero (three birds known not to share close relatives) to 37.5 percent (six birds with one parent in common with the nestlings and the other parents siblings). In other words, high adult mortality leads to lower levels of relatedness between helpers and nestlings than kinship theory might predict.

If one asks whether helpers have the option of being able to colonize new territory, the answer is no, at least most of the time. For example, the number of woodhoopoes in our main study area fluctuated widely between August, 1975, and August, 1981, ranging from a low of 46 birds to a high of 94. The number of territories containing a breeding pair at the onset of each breeding season, however, fluctuated far less, ranging from a low of 12 territories to a high of 14. Between 1975 and 1981 four flocks ceased to exist; their former territories remained empty. In the same period four new territories were developed.

Considering the large variation in the number of individuals over the seven-year period, the relative stability in the number of breeders and territories suggests that the opportunity to colonize a new territory is rare. A pattern of wandering—in effect searching out a new territory—with its attendant dangers is evidently uncommon because it is usually disadvantageous. These considerations help to explain why young woodhoopoes stay with their parents' flock. They do not, however, account for the birds' helping behavior.

That is not to say emigration is always disadvantageous. The adult woodhoopoes' high mortality rate means that neighboring territories have frequent breeding vacancies. As a result the commonest way for a mature nonbreeder of either sex to attain breeding status is to emigrate to a territory where a vacancy has been created by the death of a breeder of the same sex (and of mature nonbreeders of that sex, if any).

Emigrants seldom made these shifts alone. We observed that a successful move into a strange territory usually involved a team of two or more birds of the same sex. Such teams were generally composed of flock mates but they never included nest mates; antagonism between former nest mates is strong and



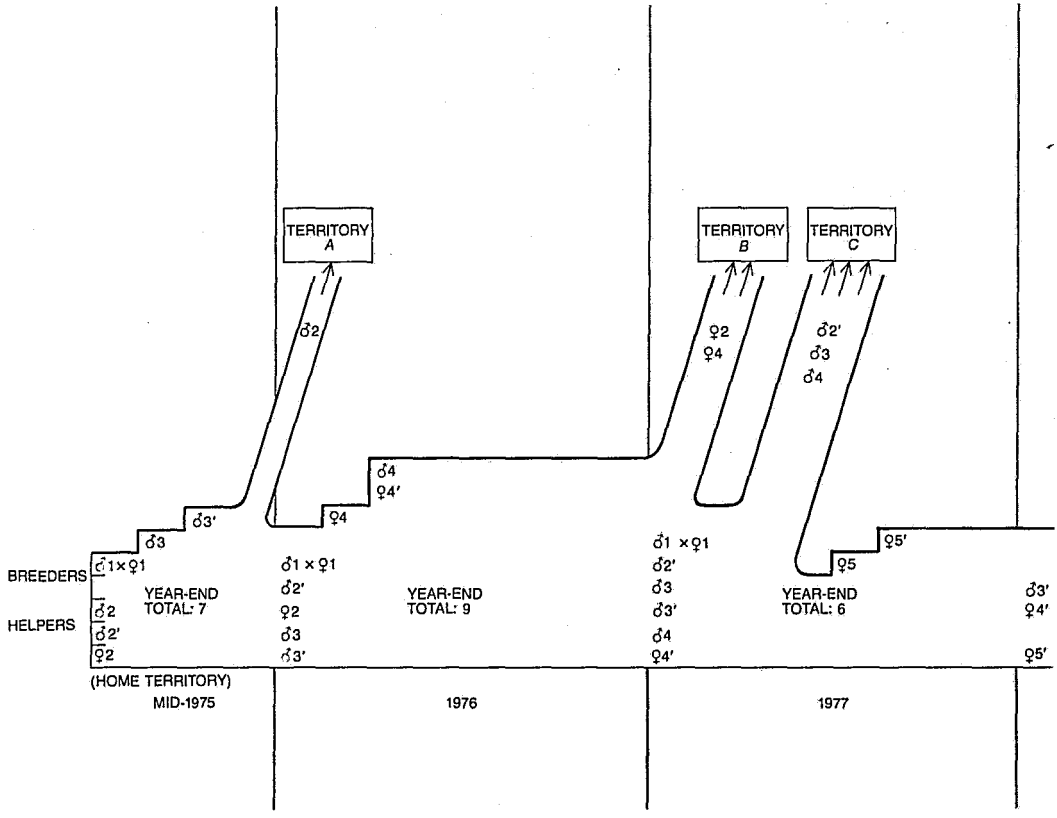
TERRITORIAL DISPUTE depicted in this drawing based on observations in the field brings three birds from one flock to a confrontation with four from a neighboring flock. The dispute is chiefly vocal. One bird in each group, however, stands with wings loosely held.

they do not emigrate together. As a result the emigrant teams consisted of an older nonbreeder (we labeled them alpha birds) and a younger one or two (beta and gamma birds). A subtle dominance hierarchy, positively correlated with greater age, was apparent. We found that the alpha emigrant became the breeding replacement in the adopting flock. If the alpha emigrant then died, the beta emigrant inherited the alpha's breeding status.

The observed facts of team emigration, with the dominant older partner a helper that had been involved in rearing the subordinate younger partner or partners, gave us an insight into the evolution of helper behavior. For a nonbreeder to achieve breeder status by emigration—one of the two roads to survival in the genetic sense—it was first necessary for it to acquire one or more subordinate allies. Could this be, at least in part, why helpers help? Nothing in this evolutionary process need involve the exercise of reasoning: the genes of unhelpful and therefore unallied nonbreeders are at risk of being eliminated from the gene pool of the species within a single generation.

How is the bond established between the helper and the nestling it helps? We found that helpers not only brought the nestlings food but also stole caterpillars from other helpers in order to deliver them to the nestlings they tended. Helpers interacted with nestlings in other ways. For example, they groomed them. They also perched nearby and vocalized with their attention directed to the nestlings. Neither these activities nor the fetching of food seems to represent a costly investment in time and energy compared with the high genetic return that may result: achievement of breeding status.

The fact that older nonbreeders may benefit in this way still leaves a key question unanswered: Why do younger birds accompany their elders when the opportunity to emigrate arises? Not only do the betas help the alphas to become established in the new territory but also they take up the burdens of a helper when the offspring of the alphas are hatched. The answer again seems to lie in the pattern of woodhoopoe mortality. Without implying any reasoned behavior, an anthropomorphic description of the young birds' actions would not be



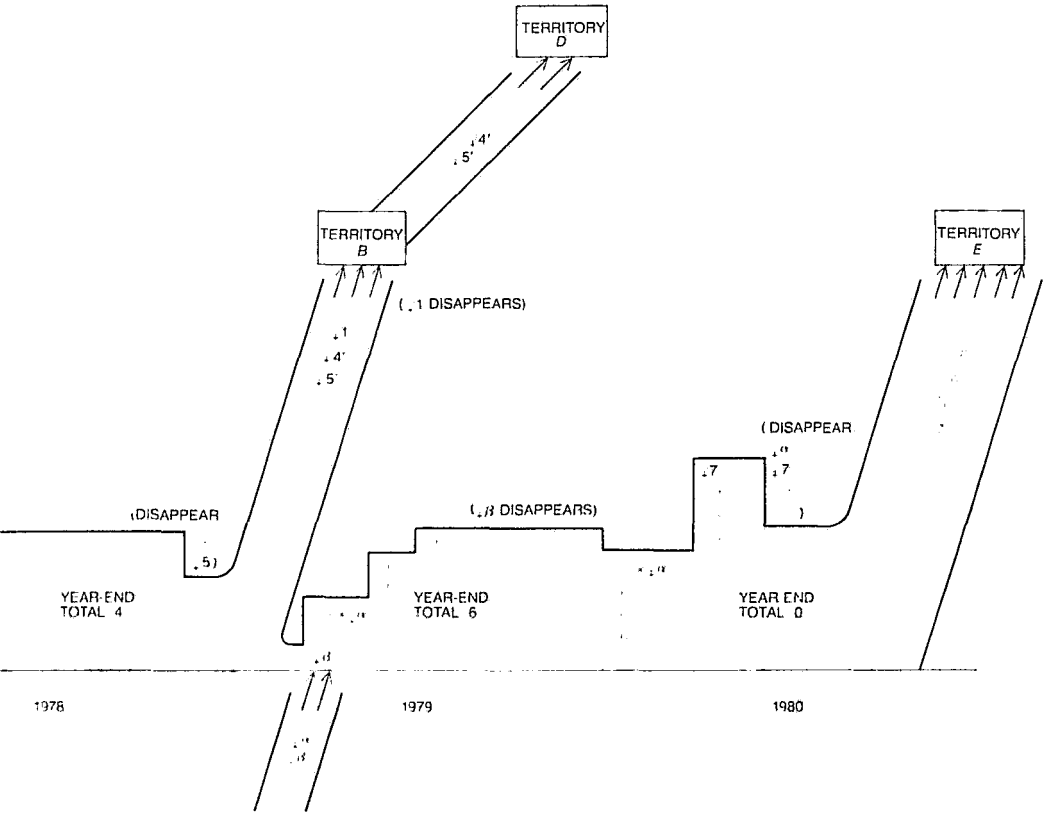
SHIFTING MAKEUP of one woodhoopoe flock over a 66-month interval is shown in this diagram of the individual birds' breeding successes, emigrations, immigrations and disappearances. When the birds were first banded, in a territory adjacent to the main study area, the flock included a breeding pair (*male 1 and female 1; the numbers identify them as the first observed generation*) and three other mature birds of a second generation (*males 2 and 2' and female 2*), all probably offspring of the breeding pair. In the 1975 breeding season two more birds (*males 3 and 3'*) were added to the flock. Early in 1976 male 2 emigrated alone to Territory *A*. In the 1976 breeding season three offspring (*female 4 and males 4 and 4'*) were added to the flock. Early in 1977 two birds (*female 2 and female 4*) emigrated to Territory *B*. This accorded with the normal pattern of emigration: an older bird being accompanied by a younger subordinate of the same sex. Later in 1977 three more emigrants left the flock for Territory *C* (*male 2', male 3 and male 4*). This left behind the breeding pair, a

that they were "paying back" the older birds for their earlier help but rather that they were "playing the odds" in expectation, as it were, of their own genetic reward.

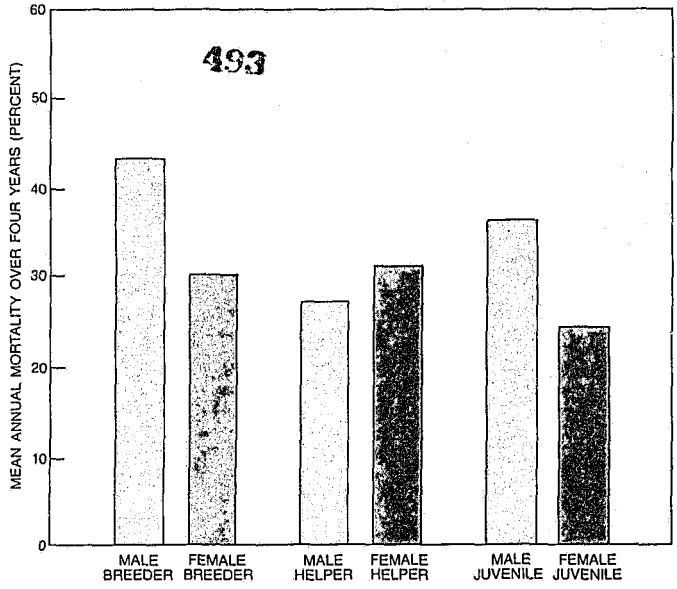
For example, male alphas, it will be remembered, have a significantly higher mortality rate than male betas. As a result subordinate males will frequently outlive their dominant allies and then themselves inherit breeding status. We observed that among groups of two to four emigrant males, and among newly formed flocks composed of only two adult males and one or two adult females, in 10 out of 13 instances the alpha male died before the younger males. We also found that over their lifetime once-subordinate emigrant males left as many surviving offspring as the originally dominant males. This observation bears crucially on the evolutionary concept known as individual fitness. With regard to the beta birds' behavior, as with regard to the alphas', there is no reason to suppose that when they emigrate with older flock mates they are in any way acting contrary to their own long-term reproductive interests.

In this connection we also observed that some female helpers, unlike male helpers, voluntarily left their original territory unaccompanied by subordinates and wandered over a large area apparently searching for a territorial vacancy. This behavior may arise from the fact that the mortality rate for female breeders is significantly lower than that for male breeders. Therefore the likelihood of a female helper's achieving breeder status at an early age in the home flock is remote, and seeking breeder status somewhere else, although it is risky for a solitary bird, may be genetically rewarded.

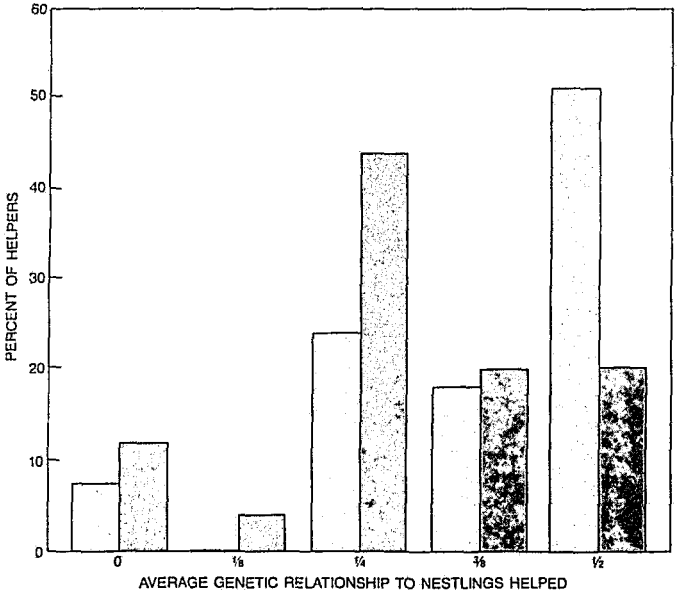
Since any individual bird's future is uncertain, it is genetically advantageous for breeding woodhoopoes to produce behaviorally variable young. The point can be illustrated by observations we began to make in 1977. That year three out of four male-sibling helpers in a flock composed of the usual breeding pair and five nonbreeders emigrated to a neighboring territory. There they drove out the lone male occupant and joined three females. The fourth male helper did not emigrate. Two years later the male parent died and the



third-generation male and a fourth-generation female. Late in the year the breeding pair nested twice, raising two fifth-generation females. This was the last season for male 1; it disappeared in 1978, as did one of the young females: female 5. No offspring were produced that year. In mid-1979 the breeding female, female 4' and female 5' emigrated to Territory *B*, leaving male 3' as the sole occupant of the home territory. The emigrant mother soon disappeared and the two younger females moved on to Territory *D*. Two female emigrants from an adjacent flock (*females alpha and beta*) now joined male 3'. At the very end of the year male 3' and female alpha became the second breeding pair in the home territory. They produced the sixth generation: males 6, 6' and 6''. In 1980 they produced four more offspring: female 7 and males 7, 7' and 7''. Both female alpha and female beta disappeared that year, as did female 7, male 7' and male 7'. The breeding male and its offspring (*males 6, 6', 6'' and 7*) then emigrated to Territory *E*, leaving the home territory deserted.



HIGH MORTALITY RATE among woodhoopoes over a four-year period (January, 1976, through December, 1979) was not evenly distributed either by sex or by social status. Breeding males and juvenile males led in fatalities; juvenile females and male helpers trailed. The rates for breeding females and female helpers were much alike and fell between those of the others.



TIES OF KINSHIP within individual flocks were increasingly diluted over time. This graph compares the relationship between helpers and the nestlings they cared for in 1978 (*color*) and 1981 (*gray*). In the earlier year 14 flocks included a total of 55 helpers; in the latter year nine flocks included a total of 25 helpers. More than 50 percent of the helpers in 1978 shared common parentage with the nestlings. By 1981 only 20 percent of the helpers did so. Fewer than 25 percent of the helpers in 1978 were the equivalent of half-siblings of the nestlings and none were the equivalent of first cousins. By 1981 these relationships were close to 45 and 5 percent.

fourth male helper's mother and two sisters subsequently emigrated, leaving the male helper as the sole inheritor of his parents' territory.

This male soon mated with one of two female emigrants from a neighboring flock. In late 1979 and in 1980 the new breeding pair raised a total of seven offspring. In contrast to this record of reproductive success two of the male's three emigrant siblings had died by the end of 1979 without ever having produced young. The youngest of the three was still alive in early 1982, but it has fledged only one offspring. If the fourth male sibling had not stayed at home, its contribution to the woodhoopoe gene pool might easily have been nil.

Although many emigrant groups consist of siblings, we also observed unrelated woodhoopoes of the same sex merging to provide the nucleus of a new flock. Typically this happens when an older, dominant bird allows a younger, subordinate individual to join it. We observed such behavior only when an older male needed an ally to defend and hold its territory. Two females would occasionally allow a third unrelated female to join them under the same circumstances. Of 40 observed instances of the formation of a new flock (or the replacement of all the members of one sex or all but one member of one sex) 17 of the groups included nonrelatives of the same sex and 17 included known or probable relatives of the same sex. In six instances kinship ties, if there were any, were not known to us.

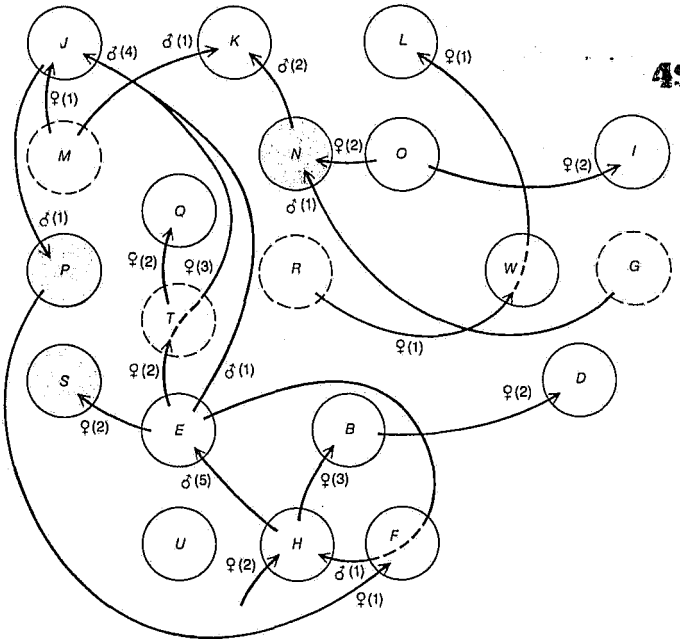
Let us now suggest how cooperative breeding behavior may have originated among the green woodhoopoes and how this behavior in turn may have led to reciprocal assistance among unrelated individuals of the same sex. First, as we have seen, three features of the woodhoopoes' environment and life cycle appear to have set the stage for the development of cooperative breeding by favoring those breeding pairs that allowed at least some of their offspring to remain indefinitely in the parental territory. The three features are a high adult death rate, an unpredictable birth rate due to a fluctuating food supply and the uncertain availability of roost sites.

The extended term of residence for adult offspring confers two benefits on the breeding pair. The first of them is the opportunity for territorial expansion available to a flock that consists of more than two adults. In this uniform acacia-woodland environment a larger territory means an increased foraging area. Similarly, the presence of more than two adult birds means that territorial defense weighs less heavily on the individual adults.

The second benefit of an extended term of residence is whatever assistance the young adults may offer the breeding

pair in feeding and protecting their nestlings. The presence of helpers probably reduces the cost to the breeding pair of annual nesting, thereby increasing the pair's potential lifetime reproduction record. Then when opportunities to occupy new territory arise for the adult nonbreeders, these emigrants find their chances of success enhanced by the availability of allies from among their younger flock mates of the same sex.

Once this interdependence for territorial defense and expansion, for reproduction and later for the acquisition of new territories became established among related individuals, any unaided woodhoopoe pairs or single birds were placed at an overwhelming competitive disadvantage. If most such birds are ever to gain territory for themselves and eventually to breed, the best option open to them once a mate is found is to obtain unrelated allies of their own sex. This they do by allowing unaffiliated younger and subordinate birds to join them.



EMIGRANTS' MOVEMENTS among 20 woodhoopoe territories during a four-year period (1978–81) are shown in this schematic diagram. Where the territories are the same as those in the illustrations on pages 128 and 130–131 the identifying letters correspond. Thirty-one individual migrations are shown, involving flights by 14 males and 17 females. Birds that enter and leave one territory en route to another (for example from *E* to *J* by way of *T*) are counted only once. The same birds, however, may move more than once. For example, two of the three females that went from *H* to *B* subsequently moved from *B* to *D*. The four territories with broken perimeters were abandoned and three shown in color were colonized during this period.

How well do the facts of the woodhoopoe social system correspond to the various theories that deal with cooperative behavior? Three theories are particularly relevant: Darwinian individual selection, kin selection and reciprocity. The theory of individual selection, as set forth by Charles Darwin, is based on the premise that animals behave in a way that maximizes opportunities for them to produce their own offspring. In the context of cooperative breeding among birds, a nest helper of either sex might eventually gain valuable resources such as territory, for example by first serving as an apprentice to the older, socially dominant breeders.

Kin selection, an extension of individual selection, is a theory developed (primarily by W. D. Hamilton of the University of Michigan at Ann Arbor) to account for what seemed to be altruistic behavior. In order to explain the apparent altruism seen in nature Hamilton proposed that if the unselfish behavior shown by an individual was directed toward a relative, it would serve to promote genes shared by the altruist and the recipient of the altruist's aid, so that the costs and benefits of such behavior should be correlated with the degree of genetic relatedness between the two interacting individuals.

The idea behind the third theory, reciprocity, is that an individual provides aid to another individual with the expectation that it will be repaid (at a value equal to or greater than that of the aid but not necessarily in the same form). Reciprocity is a specialized means of obtaining benefits for the individual and thus does not differ fundamentally from Darwinian individual selection.

Now, because the majority of the birds that interact within the woodhoopoes' closed social unit are relatives, it could be argued that what has been crucial to the evolution of the system is kin selection: natural selection where animals preferentially aid relatives, perhaps at a cost to themselves. Indeed, one kinship bond has clearly been fundamental to the evolution of the woodhoopoe social system: the bond between parent and offspring. It is not clear, however, whether other kinship ties are necessary to the maintenance of the system. For example, in three to four flocks each year since at least 1977 we have observed helpers that were not related to the nestlings they were tending. Some of these nonkin not only fed the nestlings but also fed the female member of the breeding pair while she was still incubating the eggs. Moreover, the merger of unrelated individuals either to increase the size of the flock or to form new flocks suggests that genetic relationships are not all-important to the woodhoopoes' forms of cooperation.

Reciprocity of various kinds occurs among flock mates, whether they are related or not, and it seems to be an important component of the woodhoopoe social system. As we have seen, nonbreeding members of the flock both serve as helpers and aid in territorial defense. In return these individuals can benefit in two ways. First, if the helper outlives the breeder of its own sex in the flock, it may inherit breeder status. Second, as a result of interaction with the developing young the helper wins potentially valuable allies in the flock in the event of emigration.

Moreover, when an older helper emigrates to take advantage of a territorial breeding vacancy, it is usually accompanied by one or more younger allies. By helping to establish the older bird's position in the new flock the younger birds can be thought of as repaying the older bird for the services they received in the nest. The younger birds will also tend the older bird's offspring, thereby establishing a kind of cross-generational reciprocity because the fledglings the older bird feeds may eventually help the helper to advance its own breeding program. The merger of unrelated adult birds is also suggestive of reciprocity; because of the high death rate this form of co-

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operation may often lead to an eventual breeding status for all involved.

Finally, what appears to be the primary underlying basis for the woodhoopoes' complex behavior is Darwinian individual selection: the maximizing of individual reproductive opportunities with respect to the other members of the population. The various woodhoopoe strategies I have described are most parsimoniously explained as behavior that has evolved to maximize these opportunities under an unusual and unpredictable set of circumstances.

TERRITORIES	NUMBER OF MALES	ALPHA	BETA	GAMMA	DELTA
H	3	(1)	(2)		
A	4	(1)		(1)	(1)
S		(1)	(4)	(3)	(2)
Q	2	(1)	(2)		
Q	2	(2)	(1)		
E	2	(1)	(2)		
M	2	(1)	(2)		
K	2	(1)	(2)		
L	2	(2)	(1)		
X	2	(2)	(1)		
O	2	(1)			
J	4	(1)	(2)		(1)
F	2	(1)	(2)		
	AVERAGE	2.23	3.00	.33	

REPRODUCTIVE SUCCESS of emigrating male woodhoopoes is plotted. Nine pairs of males and four larger male groups emigrated from the territories identified at the far left. An empty pie chart in any of the four columns indicates lack of breeding success for the bird in question. (Alpha is the oldest male, beta the second-oldest and so on.) A full pie chart indicates the maximum breeding success observed: 11 sired by the beta bird from Territory *E*. The extent to which the pie charts are filled elsewhere is proportional to the breeding success of that bird. The numeral beside each pie chart indicates the order of death in the group; for example, of the four emigrants from Territory *A* three died simultaneously. The beta male in that group was still alive when observations were concluded, and so its pie chart is unnumbered. Although the alpha males were the first to breed, the beta males' average reproductive success was greater.

Woodpeckers' Private Life Goes Public

By BYRON SPICE
Journal Science Writer

MAGDALENA MOUNTAINS — Among the oaks and pines at the lush base of Water Canyon lives the acorn woodpecker. There's no question that the 'pecker is there — the limbs and trunks of dead trees are riddled with nut-sized holes.

It's just one of 109 species of birds known to inhabit this narrow canyon west of Socorro, where northern birds mingle with birds like the woodpecker that are common to Mexico but usually venture no farther north.

The 8-inch-long acorn woodpecker stands apart from the others — and most of the bird world — in its adoption of a communal lifestyle.

The vast majority of birds are monogamous, but the acorn woodpeckers in Water Canyon typically live in groups, with two or more males mating with the same female or helping to nurture the same brood.

Male birds usually make every effort to ensure they alone are the father of their mate's offspring, so biologists wonder what sort of evolutionary principles are represented by the acorn woodpeckers' lifestyle.

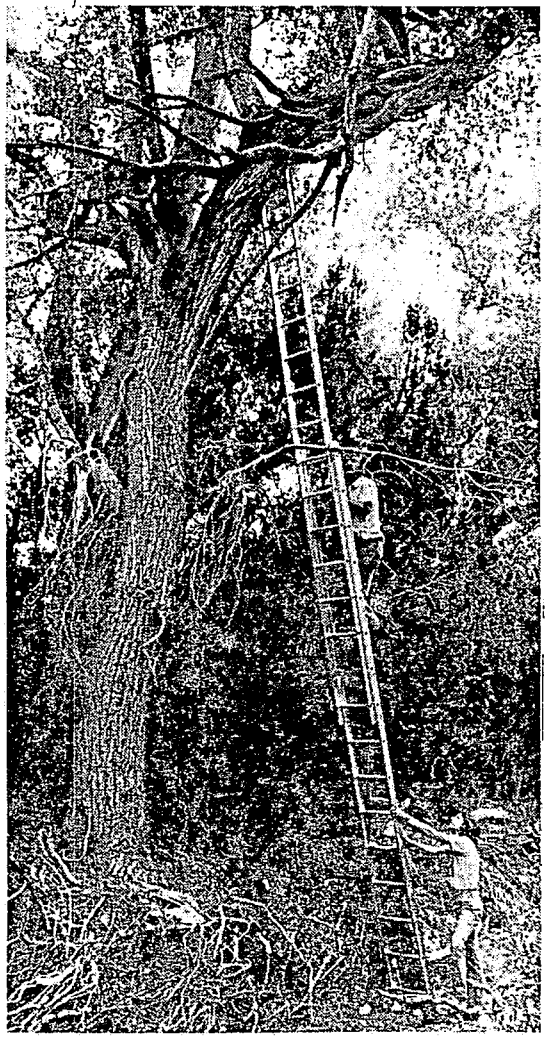
Peter Stacey, an assistant professor of biology at the University of Missouri-St. Louis, has been studying the canyon's woodpeckers for eight years in hopes of unraveling the mystery. He and co-investigator J. David Ligon, professor of biology at the University of New Mexico, are in the midst of a three-year, $88,411 study of the birds funded by the National Science Foundation.

For this study, Stacey and his wife, Roxie Jansma (originally of Albuquerque), have spent their summers in the canyon with several research assist-

Continued on A-10

Acorn Woodpecker
Family Habits Different

Woodpeckers Give Up Private Life for Science



Peter Stacey Climbs Ladder to Nest

Continued From A-1

ants, tagging the birds and keeping track of their mating, nurturing and other activities.

Ligon does not participate in the field work, but provides lab facilities at UNM and research assistants, in addition to his own expertise, for the study.

Stacey has much admiration for the acorn woodpecker. "The species shows a remarkable flexibility," he said, noting that acorn woodpeckers being studied in Arizona are monogamous, while another group being studied at the Hastings Reservation in California lives in even larger groups than those of Water Canyon.

The birds display a remarkable degree of cooperation, not only in their mating habits, but also in sharing incubation duties, feeding the babies and gathering and storing acorns and pinon nuts for the winter.

But conflicts exist between the reproductive instinct and the communal lifestyle. This dark side of cooperative breeding was reflected recently when Stacey and his assistant observed what may be the first documented case of infanticide among birds.

The killing of the baby birds occurred after their mother, who had been living in a group with two males, suddenly disappeared. A female from a neighboring group moved into the nest and, despite the efforts of the males to protect the young, began killing the four babies over a period of days. Eventually, she started laying her own eggs.

"We're seeing, basically, a strategy of the new female to make sure she can reproduce this year," Stacey explained. Because it is late in the breeding season and the group would have been unable to nurture more than the four babies, "if she's ever going to have any young, she's forced into getting rid of the existing young."

The bizarre case of natural selection has been observed among primates and humans, but not previously among birds. "It's an event people don't know much about," Stacey noted.

Ligon said infanticide is not typical of cooperative breeders. The green woodhoopoe — a bird Ligon and his wife Sandy have studied extensively in Kenya — also lives in groups, but a new female will help nurture another female's brood, perhaps because the Kenyan climate allows year-round breeding. (A report on the Ligons' research will appear in the July issue of Scientific American.)

There seem to be a couple of reasons for the group lifestyle the birds have adopted, Stacey said. One has to do with storing food. If at all possible, the acorn woodpeckers will not leave the canyon in winter, preferring to live on the acorns and pinon nuts store individually in the holes they drill into trees. Thousands of nuts might be stored in a single tree and each nut must be turned weekly to keep it from rotting.

"Groups seem to be able to store more food for longer periods of time than just a pair," Stacey explained. And his research indicates the more food stored, the earlier the group can begin reproducing in the spring, making for more offspring.

Another reason may have to do with habitat saturation. Young birds may be unable to find territory of their own in which to mate and thus may be forced to stay with the group.

In either case, biologists wonder why a dominant bird would allow a helper to mate with the female. And they wonder why all members of the group usually help raise the young.

The classical explanation, Stacey said, would be that the birds are related — perhaps brothers, or fathers and sons. In those cases, the genetic bond would be sufficient to satisfy the instinct of each individual to reproduce and make all group members willing to help with the brood.

Some groups do appear to include members of the same family, he noted, but there are others in which the members are unrelated.

Ligon and Stacey suggest the fact that more than one male sometimes mate with the female might explain why all help in nurturing the young. In 1977, Stacey and Ms. Jansma observed that birds who joined the group before eggs were laid helped with nurturing and those who joined afterwards did not help.

"What we're doing now is seeing if that's the case," Stacey said. "First off, we have to know who's related to whom," so the birds are tagged and family relations noted.

Tissue and blood samples are taken from captured birds for analysis to genetically determine who is — or more precisely, who isn't -. the father of a brood. Baby birds also are routinely removed from their nests inside trees so they can be weighed and measured.

All these observations, measurements and analyses produce a mass of data which ultimately must be processed by computer for its full significance to be appreciated. For instance, Stacey said, the computer analysis indicates that though a fourth bird is an asset, a fifth bird doesn't increase the group's productivity proportionately.

Obviously, the bird community is complex, Ligon observed, and "there's not going to be one clean answer that applies to all situations."

Gene Baca Examines Nest in Tree Riddled by 'Peckers

82

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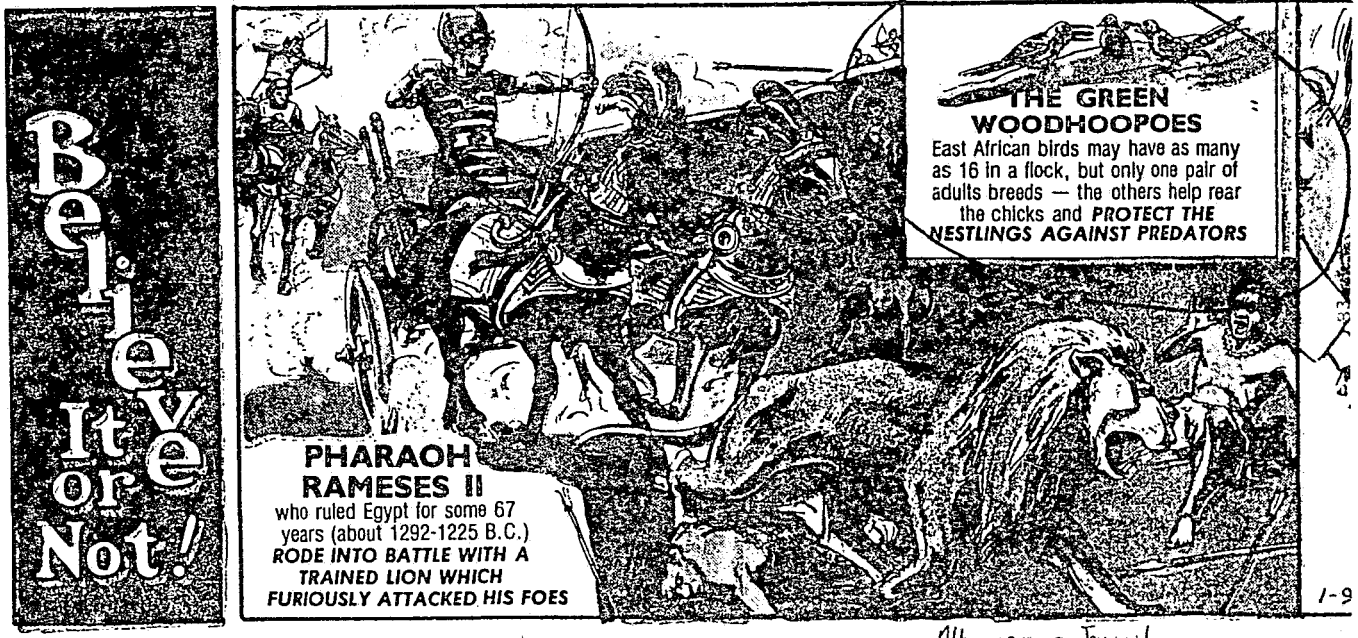
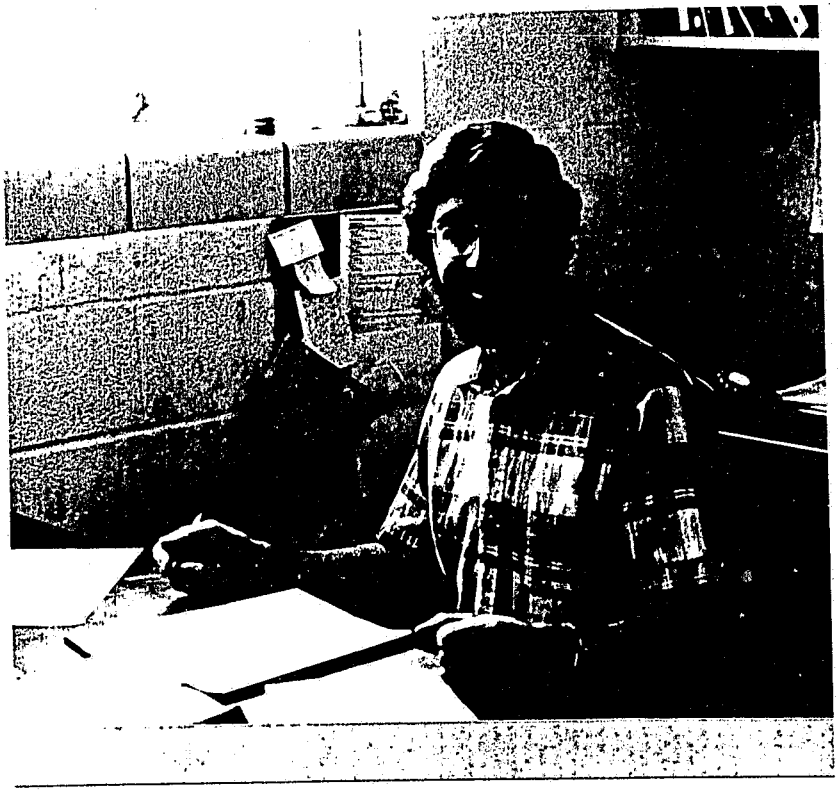


Albuquerque Journal
Sunday, January 1983

Dr. Baca is one of the many young superstars in the Biology Department. Oz is the elected President of the New Mexico Branch of the American Society for Microbiology, but in addition to his many scientific achievements he is also very active in minority activities and in promoting UNM to the people of New Mexico. For example he is the current elected Treasurer of the Society for the Advancement of Chicanos and Native Americans in Science (national organization); he has appeared on Channel 13 to advertise the MBRS program at UNM; he was a judge at the October "Science in the 80's" Conference sponsored by the UNM Southwest Resource Center for Science and Engineering; he participated in the New Mexico Academy of Science's 23rd Visiting Scientist Program; he has travelled to Ft. Worth and San Antonio, Texas on a recruitment trip for the UNM Graduate School; and he has been an active participant in the Office of School Relations Calling Campaign to recruit top high school graduates to UNM. UNM can be very proud of this young man.



Professor Oz Baca has just received notice from the National Science Foundation that his grant proposal "Interaction of Intracellular Parasites with Macrophage-like Tumor Cell Lines" has been funded for $54,700. This is the fifth consecutive year that NSF has funded Dr. Baca's research and in that time his awards have totaled $149,434. Dr. Baca joined our faculty in 1976, he received early promotion to Associate Professor in 1981 and he was recently notified that he has attained tenure in the Biology Department effective July 1, 1982.

501

Dr. Fritz Taylor's research on insect physiological responses to their environment and the "triggers" that cue these changes has received a good deal of national recognition. He now holds two concurrent two-year NSF awards ($66,449 noted here and $66,816 awarded May 1981) to support his work. This is a noteworthy accomplishment for such a young researcher. Fritz is also a popular seminar speaker.

The National Science Foundation has just announced that Professor Fritz W. Taylor has been awarded $66,449 to support his studies on "Theoretical Analysis of the Evolution of Hibernal Diapause Induction in Insects." The award is effective 1 August 1982 and expires 31 December 1985. Dr. Taylor joined the Biology Department in 1975 after receiving his Ph.D. at the University of Chicago. In September 1979 he married Elsa Scott who, at the time, was one of Professor Crawford's doctoral students. Effective 1 July 1982, Dr. Taylor was promoted to Associate Professor and was awarded tenure at UNM. This has been a banner year. Congratulations Fritz!

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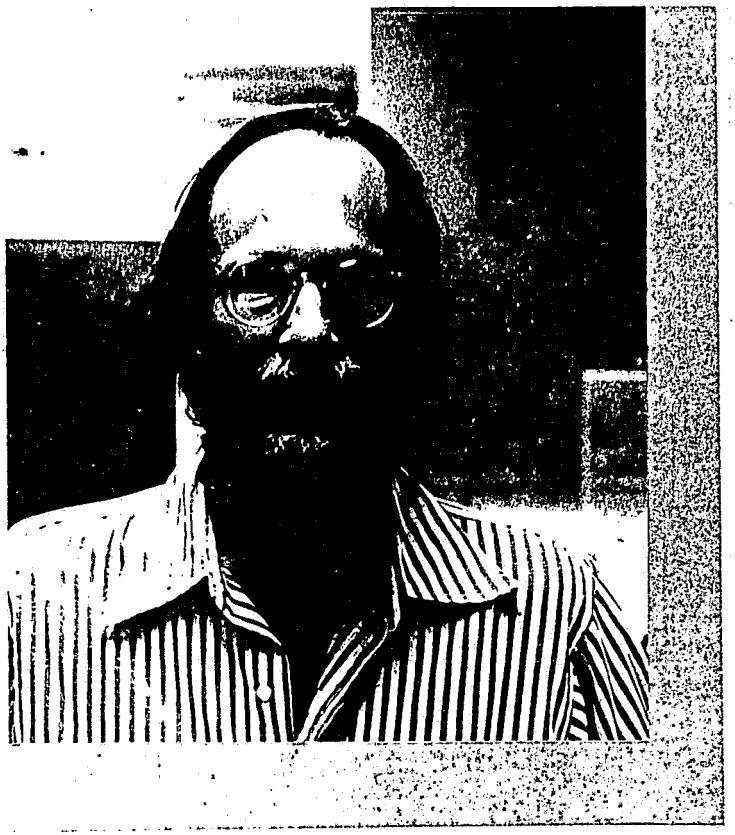
Tom is another of our current crop of outstanding graduate students. During the summer of 1979, while doing a study of bighorn sheep for the U.S. Forest Service, Tom made a comparative study of the alpine vegetation in the White Mountains of California. It was his fascination with that work that led him to Dr. Martin in our Department to pursue a second Ph.D. degree. He is particularly interested in the role rare and endangered plants play in ecological processes within the world's vanishing ecosystems.



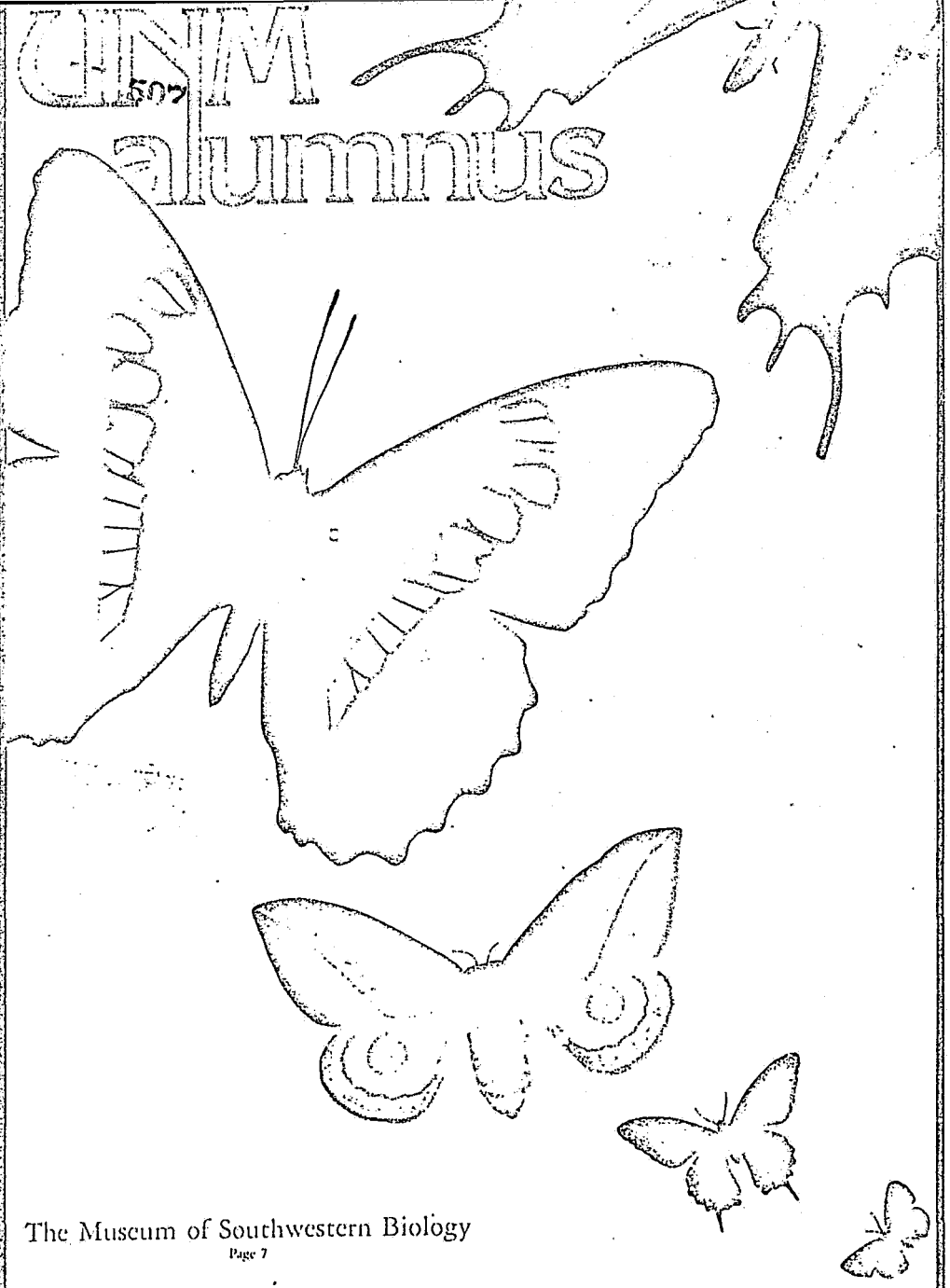
Dr. Thomas Andrews was notified recently that he has been awarded a grant from the National Audubon Society Expedition Institute (ASEI). The grant will enable Tom to conduct an ecological study of meadow and riparian vegetation in the Pecos Wilderness and the Sangre de Cristo Mountains looking for clues toward better management of the areas. Both wilderness areas are now used in grazing, forestry, and recreational activities and the ASEI is one of the most ardent supporters of wilderness conservation worldwide. Tom holds a doctoral degree in biochemistry from the University of California Santa Barbara, but has decided to return to graduate school at UNM to pursue an M.S. and Ph.D. in Biology. He is working with the direction and cooperation of Dr. William C. Martin, Curator of the Biology Department's herbarium.

505

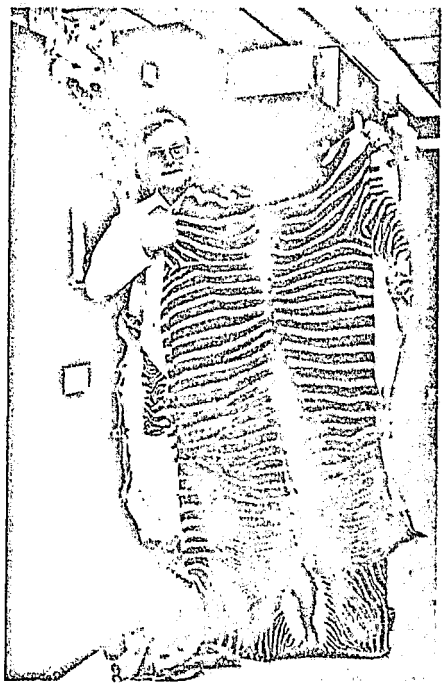
The University of New Mexico's Museum of Southwestern Biology has grown over the years into one of the most respected museums in the United States. The National Science Foundation has supported this view by awarding $100,000 to the Mammal Division of the MSB. This division was conceived and built over the years by Professor James S. Findley. It is now the 12th largest museum of its type in the world. Independent referees from across the U.S. who reviewed the grant proposal for NSF consistantly rated it as excellent. It is clear they hold a great deal of respect for the MSB and for Professors Findley and Yates. Curating the MSB is more than a fulltime job. Unfortunately UNM expects the various curators to work for free during the summer months. This situation cannot continue for long into the future if we are to maintain the Museum's established reputation.

We have just been informed by phone that the National Science Foundation will award $100,000 to the Biology Department for "Reorganization and updating of the recent mammal collection of the Museum of Southwestern Biology" through its Biological Research Program. Dr. Terry L. Yates (on the left) and Dr. James S. Findley (on the right) are co-principal investigators on the grant which will be effective from November 1982 through October 1984. Professor Yates is currently Curator, Division of Mammals, and is the author of a chapter, "Moles: Talpidae," in the prestigious Wild Mammals of North America recently (1982) published by the Johns Hopkins University Press, Baltimore. Professor Findley, a past chairman of the department, and now Director of the Museum of Southwestern Biology, joined our faculty in 1955 and has been instrumental in building the Mammal Division into one of the 10 largest in the United States.

UNM alumnus



The Museum of Southwestern Biology



Museum curator Jim Findley models a zebra pelt while a taxidermied lobo looks on. The zebra was one of two delivered—recently deceased but intact—by the Albuquerque Zoo to the biology building parking lot, Findley recalls. He and some students were dressing the carcasses when an old boy pulled up in a pickup. "Wow, I didn't know you could shoot those things in New Mexico," he said.

Our Undiscovered Treasure

The University's museums are a favorite destination for the field-trip set, those unnaturally well-behaved youngsters who arrive in yellow buses at least once a week. But that may be because few of them go to the Museum of Southwestern Biology.

Only a fifth-grader who is determined to be different would admire a jar of pickled fish fetuses.

Most kids probably would chorus, "Oooh, GROSS!" when shown a drawer full of dead moles, and a few might be genuinely distressed by a stuffed bluejay.

But while the kids enjoy the University's more entertaining museums – anthropology, geology, art and meteorites – researchers from all over the world sign the guest book at the Museum of Southwestern Biology.

"We're not an exhibit museum," says the director, James A. Findley, professor of biology. "Our basic function is to provide research and teaching materials for students, faculty of UNM and other universities, and other researchers, including people from government agencies.

"We have such a large accumulation of material from the southwestern United States and Mexico that no one can do research in that area without using our facility," Findley continues. "At this point our holdings are probably among the top 10 to 15 percent of collections like this in North America."

The museum has six divisions: birds, fish, insects, mammals, plants and reptiles/amphibians. Each division has its own budget and quarters and its own curator (a faculty member) and graduate-student staff.

About half the museum's budget is from University funds, supplemented by government and foundation grants and contracts.

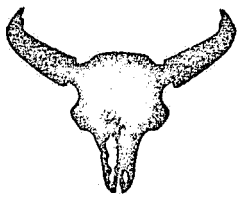
Most specimens have been collected by students and faculty members, but some were donated and a few acquired in trades or loans.

The Museum of Southwestern Biology consisted of small reference collections of local plants and animals when Findley arrived at UNM in 1955. He gives much of the credit for the museum's founding and early growth to the late Edward F. Castetter, longtime biology department chairman and an enthusiastic specimen collector, and to William J. Koster, now professor emeritus of biology.

Today, the museum supports numerous UNM graduate students and faculty researchers who will contribute to our understanding of the Southwest. Other users of the museum include anthropologists, who compare fossils and other excavated material with known samples; state Game and Fish Department officials, who are keeping track of endangered species; and even some Soviet scientists, who are studying their first kangaroo rats, received in a trade with the UNM museum.

What follows are highlights from each of the six divisions of the Museum of Southwestern Biology: an *Alumnus* tour that the school kids missed.

Text by Melissa Howard
Photos by Michael Gibson



Mammals

Not many people would be delighted with a gift of 12,000 bobcat skulls, but the curator of the Museum of Southwestern Biology's mammal collection was.

The New Mexico Game and Fish Department donated the skulls, which were turned in by trappers in exchange for permits to sell bobcat pelts.

"To our knowledge this sample represents one of the largest, if not the largest, samples of a single species of mammal from one geographic area currently in existence," says Terry Yates, an assistant professor of biology and curator of the division. The skulls will reveal much information about New Mexico bobcats because they are accompanied by records of their date of capture, location, gender and age.

UNM's recent-mammal collection is the tenth largest in the United States and among the top 20 in the world. It includes about 47,000 cataloged specimens. About a third of the collection has been entered in a computer file.

If the computer is one of the last steps in entering a specimen in the collection, bugs are one of the first.

Animals brought to the museum are skinned and stuffed. Next, the carcasses are turned over to a roomful of dermestids, small, drab beetles that dine on just about anything organic. They strip the bones clean so the skeletons can be studied, cataloged and stored. With an average of 3,000 new specimens arriving at the museum each year, the dermestids stay well fed.

The mammal collection was begun in 1938. Today, it is strongest in North America animals, especially those from the Southwest. In addition, large collections from the Pacific Northwest, the Northeast and California are included. Other specimens are from Mexico, Africa and Japan, as well as most of the rest of the world.

Rodents, bats, shrews, squirrels and especially moles are well represented in the UNM museum. The genetic make-up of the moles is being examined, as are their parasites.

In fact, most of the specimens added to the collection recently have been accompanied by genetic and parasitic data. Most are voucher specimens for a wide variety of genetic and ecological studies. (Voucher specimens are often the only ones in a collection relied on to verify data in a scientific report and to make historical comparisons possible.)

The UNM museum also includes donated collections of 30 mounted heads of hoofed animals from Africa and Alaska and 2,000 skins and skeletons from Oklahoma and Baja California. The collection also includes 7,000 whole or partial skeletons, one of the largest such groups in the nation. There is also a sizable collection of frozen tissue and genetic material.

Nearly a thousand people from outside the UNM biology department used the recent-mammal collection from 1976 to early 1982, and many specimens were exchanged or loaned to other researchers and institutions. At least 136 professional papers have resulted from research in the museum in recent years. Yates estimates that 150 UNM students have written master's theses and doctoral dissertations based on the collection.

The National Science Foundation this fall awarded $100,000 to the mammal collection—an extremely large grant in this budget-cutting era.

Yates says the three-year grant will improve the division's service to researchers by allowing processing, cataloging and installation of some 14,000 backlogged specimens, including the bobcat skulls. The grant also will allow computerization of the rest of the collection's records.

Ichthyology

Well over 90 percent of the 170,000 specimens in the ichthyology collection are from New Mexico—"and that's the strength of our collection," says Curator Manuel Molles.

"This is one of the best regional collections of fish in the United States," says the assistant professor of biology. "It's the focal point for a lot of ichthyology research around the country—I'm always being asked to send samples."

More than 80 fish species exist in New Mexico. Despite its scarcity of water, the state is interesting to an ichthyologist, says Molles, because it is home to three major types of fauna, each associated with a different river system.

"There's been a tremendous change in surface drainage in New Mexico in the last forty years or so," Molles adds. "The water tables are lower and some drainages have been eliminated, so some fish populations have disappeared—making the specimens in our collection irreplaceable."

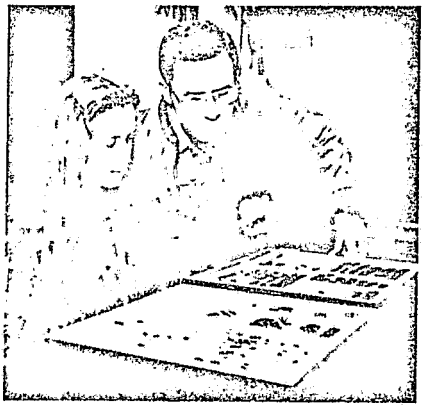
Two highlight's of UNM's ichthyology collection are:

—About 20,000 specimens collected during the last few years along the middle Rio Grande. The effort, by federal Fish and Wildlife Service agents, also turned up evidence that a species of minnow has become extinct in the area.

—A collection of skeletons of representative fishes of the Southwest. Professor Koster began the collection in the 1930s, when little was known about what species existed at that time and in the past. Journalism Professor Emeritus Keen Rafferty, an avid fisherman, helped Koster collect specimens.

Minnows and suckers are the most common native species in New Mexico, says Molles. The UNM collection also has catfish, pupfish, mosquitofish, sticklebacks, bass, sunfish and crappies, among others.

Bugs and butterflies and other tiny creatures



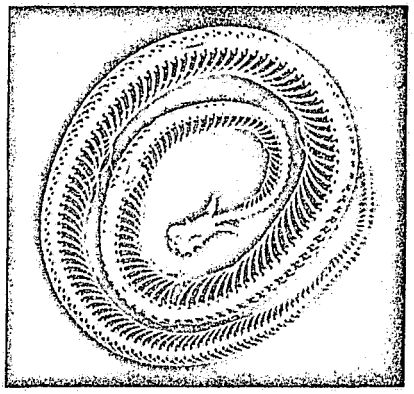
Student assistant Larrea Martinez and Dr. Clifford Crawford in the invertebrate collection.

Clifford Crawford may be the only division curator in the Museum of Southwestern Biology who doesn't boast of a comprehensive collection. Crawford is in charge of the invertebrate collection, which is almost entirely insects and is the newest division of the museum.

"Our emphasis has been making a knowledge base available to researchers in this region," says the professor of biology. "When you consider the immensity of invertebrates—half of all the plant and animal species in the world are insects— you realize we can't have a comprehensive collection."

Researchers and collectors from UNM and elsewhere supply specimens for the collection. They range from dazzling butterflies to drab critters called blister beetles.

Crawford finds the latter interesting "because they have a very complicated life cycle and do things most insects don't." Among other things, blister beetles grow up in a series of borrowed homes; for example, the larvae are flown to beehives by unsuspecting bees.



Snakes 'n lizards

New Mexico hosts a large number of reptiles and amphibians, and samples of many of them are in the herpetology collection of UNM's Museum of Southwestern Biology.

"The state is a meeting place for many species," says Curator William Degenhardt, professor of biology. New Mexico's varied climate and topography encourage migration and species differentiation, he adds.

The herpetology collection is approaching 40,000 specimens and is "the best source of New Mexico herpetological material in the world," says Degenhardt. Taxonomic research, along with studies of diets and parasites, is the collection's main purpose.

In addition to specimens collected by students and professors, there are items donated by zoos, museums and other universities, plus some gift collections. Among the specimens are:

—A species of salamander found only in the Jemez Mountains and another limited to the Sacramento Mountains, along with the Animas Mountains rattlesnake. All are endangered species and much sought after by collectors, says Degenhardt, but it is illegal to capture them for private use or sale.

—The wandering gartersnake, short-horned lizard (commonly called the horny toad) and the black-tailed rattlesnake, all natives of the Sandia Mountains.

—Whip-tailed lizards, common in Albuquerque, who are all females. They reproduce by fertilizing their own eggs. "Most amphibians and reptiles are beneficial," Degenhardt asserts, because they feed on insects and rodents. And the most venomous snakes in New Mexico have rattles to warn of their presence, he said.

Plants

The herbarium in the Museum of Southwestern Biology is a research collection, separate from the idyllic greenhouse, which is open to the public.

"The herbarium contains specimens of populations of plants of New Mexico and surrounding states, including Mexico," says the curator, William C. Martin, professor of biology and author of the definitive study, "A Flora of New Mexico."

Flowering plants, fungi, lichens and one of the world's largest cactus collections are part of the 100,000-piece herbarium. The collection was begun in 1927 by Castetter, for whom the new and old wings of the biology building were named.

The specimens are dried under pressure, to preserve color and morphological features, then mounted on boards and stored in cabinets.

Users of the collection include herbarium staff researchers who are interested in the distribution and nature of plant populations in New Mexico. Special attention is paid to poisonous plants and threatened or endangered species.

The herbarium also has a physiology lab, where studies of seed germination are conducted, and an ethnobotany section, where four research associates are learning about early human cultures by examining their plant remains.

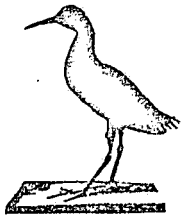
Birds

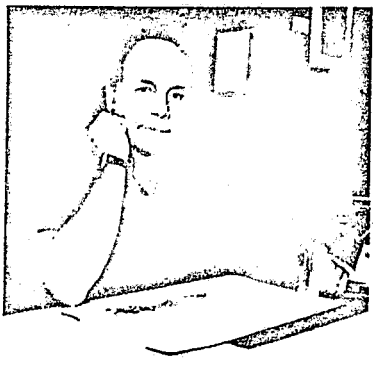
About 4,000 skins and 1,000 skeletons make up the Museum of Southwestern Biology's ornithology collection. Curator David Ligon says it's the best in the state.

Most of the specimens are from contemporary birds, some donated by the Albuquerque zoo and the federal Fish and Wildlife Service. Properly prepared and stuffed, they will last indefinitely.

In addition to a representative collection of Southwest birds, there are exotic specimens from Asia and Africa, as well as eagle eggs collected by the late W. W. "Nibs" Hill of the UNM anthropology department.

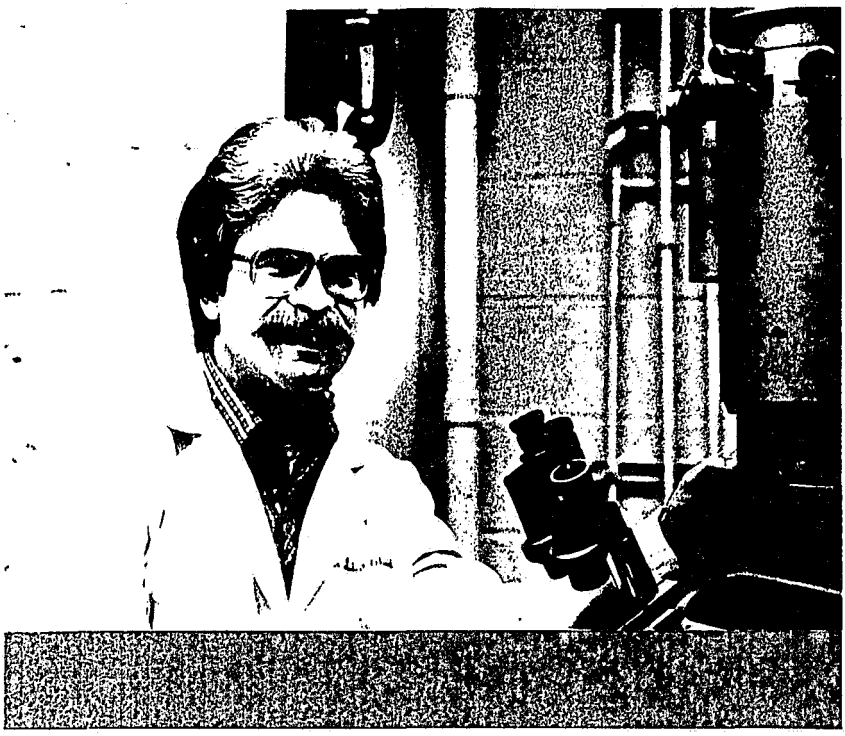
UNM faculty and students, plus local schoolteachers, are heavy users of the collection. The main research clients are local ornithologists and anthropologists. A hundred or so specimens are loaned to other institutions each year.





Specimens in the herbarium are dried and pressed on display boards. Curator William C. Martin is especially proud of the cactus collection.

Dr. Bob Chiovetti was hired specifically to help us develop a first rate electron microscope facility for both teaching and research. He has recently submitted a comprehensive grant proposal to the Biological Instrumentation Program of the National Science Foundation in hope of generating the funds to purchase new transmission and scanning electron microscopes, with all the necessary ancillary equipment to support both instruments. From Bob's conversation with NSF, we should be highly competitive in this program. The first order of business, the renovation of the current EM dungeon and two adjacent rooms into a modern, well-lit laboratory facility, is underway and is progressing smoothly. The facility should be completed by mid-August.



We all extend a hearty New Mexico welcome to Dr. Robert Chiovetti, Jr. who joined our Department on 1 October 1982 as our newest Assistant Professor. Bob completed his Ph.D. at the University of Kansas in Cell Biology, he has taught and done research in the Departments of Biology and Pathology at the University of Alabama Medical Center, Birmingham and he recently finished a two year postdoctoral fellowship in the Department of Microbiology, The University of Basel, Switzerland. Bob is the Director of our Department's electron microscope facility and he will teach a course in transmission electron microscopy each semester, beginning Spring, 1983. Bob has authored 11 scientific papers and his current research interests include liposome-cell interactions, cell membrane structure/function and advances in low-temperature embedding for electron microscopy. Welcome to UNM, Bob! We hope the relationship will be long and mutually beneficial.

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Dr. Randy Thornhill joined the Biology faculty in September 1975. Since then he has been one of our most prolific writers (21 publications), has had three National Science Foundation grants (totaling $160,000), and has presented 51 (!) papers, invited seminars and invited symposium talks at meetings and universities throughout the world. His forthcoming book on insect matings systems has been called, "The most significant contribution to this area of biology in this century." It is clear that Professor Thornhill, along with the others of our young generation of biologists, are on their way to establishing excellence in Biology at UNM.

Dr. Randy Thornhill is Distinguished! In April 1981 he was selected by the University of Texas, Austin to participate in its "Distinguished Ecologist" program. During his 10 days on the UT campus Randy had a faculty appointment and office and gave a series of lectures to faculty and graduate students. In August 1982 he and his wife, Nancy, returned from sabbatical leave in Australia where Randy had been a Visiting Research Fellow in the Department of Zoology and the University of Melbourne. This October, Simon Fraser University in British Columbia invited Randy to participate in its "Programs of Distinction" series (see below). His seminars there elicited considerable campus interest! Finally, Randy is co-author of a soon-to-be-published (by Harvard University Press) book "The Evolution of Insect Mating Systems," but more about this later. Your achievements truly are Distinguished, Randy. Congratulations.

Simon Fraser University

F. 515

PROGRAMS OF DISTINCTION

Lectures by distinguished visitors

RANDY THORNHILL

Associate Professor of Biology
University of New Mexico

"Human Rape: An Evolutionary Analysis"

Public Lecture
Wednesday, October 6, 1982
Images Theatre, 3:30 - 5:30 p.m.

"Bittacid Scorpionflies: Systems for Understanding Female Choice"

Research Colloquium
Thursday, October 7, 1982
C9000, 3:30 - 5:30 p.m.

Dr. Thornhill's research interests lie in evolutionary and ecological aspects of animal behaviour, particularly insect and human behaviour, including mating systems and social theory in general. He has published some 25 articles; and a new book with John Alcock titled The Evolution of Insect Mating Systems is to be published by Harvard University Press.

For further information contact Dr. Charles Crawford, Department of Psychology, 291-3660/3354.

Please Post

The Evolution of Insect Mating Systems

RANDY THORNHILL AND JOHN ALCOCK

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Here is the most comprehensive evolutionary analysis of insect reproductive behavior since Darwin's Descent of Man, and Selection in Relation to Sex. As such it is a marriage of two disciplines -- entomology and modern evolutionary theory -- which have made great recent strides but in partial isolation from each other. Thornhill and Alcock, by reviewing all of insect reproductive behavior from an evolutionary perspective, show the riches to be gained from a thorough integration of theory and example.

The authors draw together an enormous body of literature to prove their central thesis: the great diversity of insect mating systems can be understood in view of the difference among the sexes in their resource investment per gamete and in view of differences between species in their ecological niches. The writing is clear and straightforward, even when explicating the most arcane theoretical points. And with nearly two hundred illustrations, the book is a visual delight.

"I could argue, then, that this is the most important discussion of the subject since Darwin's. Just as Darwin carried Lyell's new 'Geology' with him on his voyage on the Beagle, so will this book be carried along, everywhere, for any number of reasons, and constant reference."

-- James E. Lloyd

Randy Thornhill is Associate Professor of Biology, University of New Mexico. John Alcock is Professor of Zoology, Arizona State University

This is Steve Zack's second national award and he typifies the quality of graduate students presently in our program. Our students also bring credit to UNM by serving as excellent teachers and providing other services. For example, we recently hosted a group of students from St. John's College in Santa Fe who were interested in human anatomy. Mr. Colin Henderson, a Ph.D. student working with Dr. Rex Cates, hosted and lectured to the group. The response of the students was highly complimentary as you will note in the attached letter from their course instructor.

Mr. Steve Zack recently won the 1982 Marcia Brady Tucker Travel Award. This award is given annually to the graduate student who submits the best abstract of a paper to be presented at The Annual Meeting of the American Ornithologists' Union (AOU). Steve's abstract, "On becoming a sociable shrike: Comparing two tropical Lanius species with different social systems" was chosen the best of those submitted by graduate students from throughout the nation. The award of $415 paid for his transportation to the recent AOU Annual Meeting (11-14 October 1982) in Chicago. Steve is a doctoral student working with Dr. J. David Ligon in the Biology Department. This past May, Steve also won the award for the best student paper presented at the Annual Meeting of the Cooper Ornithological Society in Logan, Utah.

ST JOHN'S COLLEGE
ANNAPOLIS, MARYLAND 21404 • (301)263-2371
SANTA FE, NEW MEXICO 87501 • (505)982-3691

March 14, 1983

SANTA FE

Mr. Colin Henderson
Department of Biology
Anatomy Section
University of New Mexico Medical Center
Albuquerque NM 87131

Dear Mr. Henderson:

I would like to take this opportunity to thank you again for the wonderful presentation of human anatomy which you offered for the thirty-one persons from St. John's College on March 11, 1983. I think that you were truly remarkable with your ability to present what might have been a difficult amount of material in a humane, gentle and yet scholarly way. To a person the students considered that this presentation had been one of the major academic events of their lives. Evidence of this was the quality and quantity of discussion on the bus ride back to Santa Fe. I understand that the interest and enthusiasm continued with discussions and accounts which were given to other students who hadn't gone on the trip.

I think that the service you and the University of New Mexico offers is splendid. This opportunity has allowed St. John's to augment its rather meager budget for biology in a way which is far in excess of anything which we might reasonably attempt. I shall hope that we might be able to implement this sort of activity in the future. I shall be in contact with you about that.

Many of the students have expressed an interest in writing about their experiences last Friday. I expect to see some of these essays in about two weeks when our spring vacation is over. I shall send you copies so you will see the benefits of your work.

Thank you again.

Sincerely yours,

Jack Lincoln

Jack Lincoln
Tutor

WILL FISCHER	St. JOHN'S COLLEGE	
Kristen Baumgardner	"	
Leonard Sponaugle	"	
Mary-Anne Kinsley	"	Thanks!
Neil Handley	"	"
Scott Mallagh	"	
Chris Everson	"	"
Stan Hilton	"	"
Debbie Sauer	"	"
Josh Lincoln	"	"
Larry Diehl	"	Very Illuminating! Thanx
John Mini	St. John's College	Charming
Andrea Miller	St. John's College	Wonderful!!!
Robin Davis	"	I appreciated it.
Lucy E. Duncan	"	"
STEVE	"	
Jim Hanna	"	"
Rachel Hicks	"	"
ERIC KARABACOS	"	WOW!
Grant Henry	"	"
Neil Jacobs	"	"
Duncan Sutton	" "	I've waited for years for this!! Thank so much!
Ran Rogers	" "	excellent
BARB KEFFER	"	"
Perry Morse	"	"
Charles Whitefield	LAUREEN	THANK YOU SO MUCH!
Michael C. Savadove	ST. JOHN'S COLLEGE	EXCELLENT, + THOROUGH THANK YOU.

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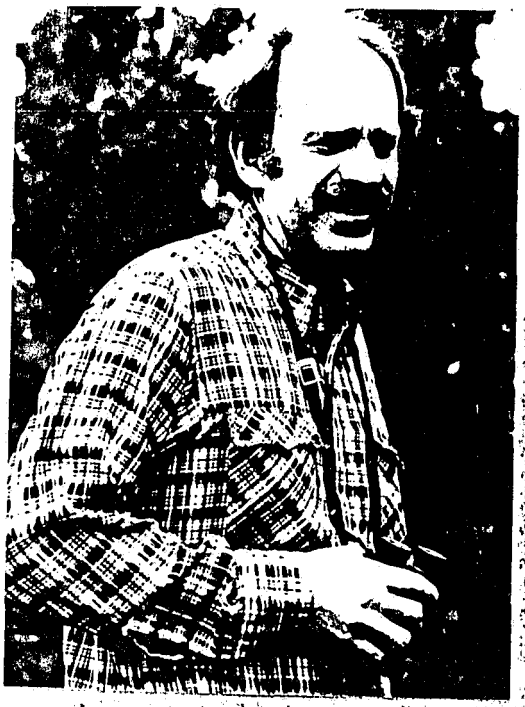
Drs. Cates and Wiens are among our most productive faculty in Biology. Dr. Cates joined the department in 1975 as an assistant professor and Dr. Wiens joined us in 1978 as our Distinguished Professor of Ecology. Since coming to UNM Rex and John have secured 23 federal grants totalling about $1.2 million to support their research activities. Both have distinguished enough careers to have served on National Science Foundation review panels.



We received word in mid-January that the National Science Foundation has granted an additional $116,088 to support the research project, "Patch Dynamics in Shrubsteppe Ecosystems and the Role of Avian Predators" under the direction of Dr. John Wiens (left) and Dr. Rex Cates (right) in our Department. This award is for the second year of a 32 month grant from the Ecosystems Program of NSF that will eventually total $447,000! Professor Wiens, our senior ecologist, has broad interests in behavioral and community ecology and Associate Professor Cates is known internationally for his work on plant-herbivore coevolution, particularly as such interaction pertains to the population dynamics of forest pests.

3/83

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Dr. Scott Altenbach is one of the few gifted people who can walk into a room of 5 people or an auditorium of 1,000 and command everyone's attention. In addition to being a superior teacher, he is a talented artist, musician, surgeon, and photographer. Scott's talents as a photographer are in high demand and the British Broadcasting Company has again asked him to shoot some high speed motion picture footage of nectar-feeding bats in the Big Bend, TX area. These bats have never been photographed on motion picture film and Scott's task will be to document how they hover, feed and fly. The work will be shown later this year in another BBC TV special. Scott also donates his time freely to public service as noted in the attached letter from Dr. Bret Snyder, veterniarian for the Albuquerque Zoo.

One of the most highly acclaimed television specials ever produced was the British Broadcasting Corporation's, Life on Earth series which recently aired for the second time on Channel 5. The success of the series was highlighted by exceptional photography, part of which was done by UNM biologist Dr. J. Scott Altenbach. In episode No. 10, The Mammals, all the high speed motion picture film on fishing bats and long-nosed bats was taken by Dr. Altenbach in his experimental flight chamber on the UNM campus. Professor Altenbach has also filmed vampire bats flying in a wind tunnel (at the University of Massachusetts) for part of a BBC educational film, Vampires in the Tropics. Scott joined the UNM faculty in 1972 and since then has been ranked consistently by students as the best teacher in the Biology Department. This is particularly remarkable since he faces a tremendously varied audience by lecturing to over 1000 students a semester. We are very fortunate indeed to have someone like Scott who can convey so well the spirit and substance of modern biology to so many students.

3/83

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

RIO GRANDE ZOOLOGICAL PARK

March 31, 1983

Donald Duszynski, Ph.D.
Chairman, Department of Biology
Castetter Hall
University of New Mexico
Albuquerque, NM 87131

Dear Don,

I am once again writing you to express my appreciation for the support given to the Zoo by another of your faculty members, Scott Altenbach. I invited Scott to show and narrate some of his film sequences on bats at the recent Zoo Conference held in Albuquerque. Scott graciously donated his time, and was of course a great representative of the academic community to interact with zoo people. Again, this kind of support by your faculty is greatly appreciated by myself and the staff of the Rio Grande Zoo.

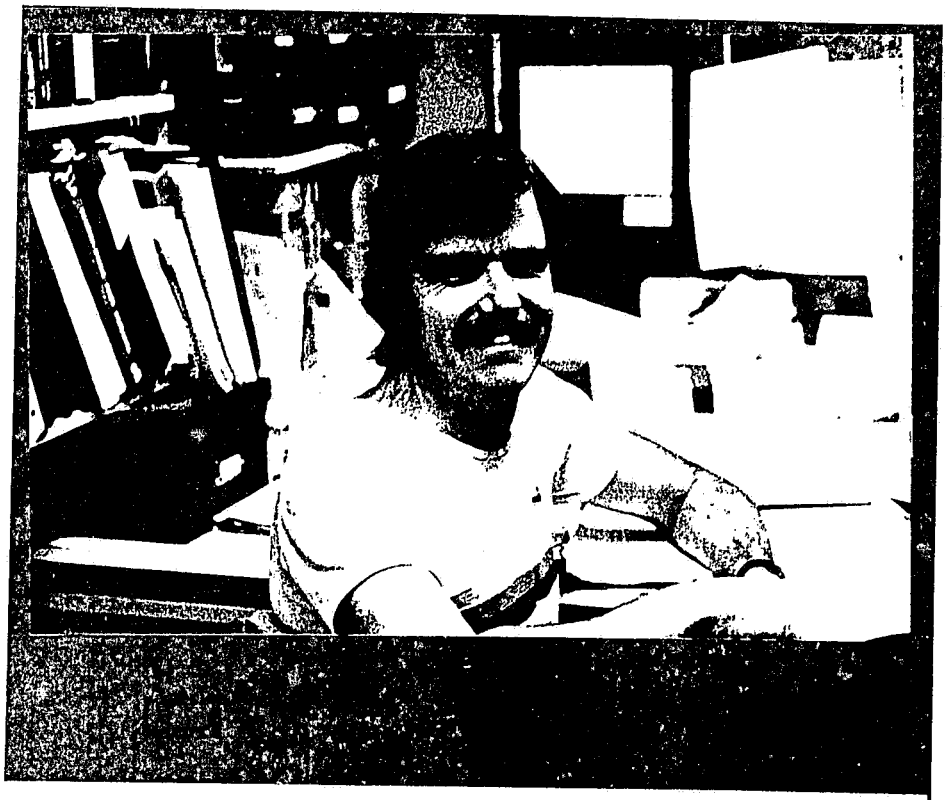
Sincerely,

Bret Snyder, D.V.M.
Zoo Veterinarian
903 - Tenth St., SW
Albuquerque, NM 87102
Tel. (505)843-7413

BS:mc

cc: Scott Altenbach, Ph.D.,
Dept. of Biology, UNM

Rich Bradley is another in the group of fine graduate students we are fortunate to have in our department at the present time. This is the fourth national award and fifth major award won by Biology graduate students this fiscal year. Rich is one of Dr. John Wiens' doctoral students and has been extremely active professionally with 14 publications in refereed journals to his credit. Rich completed all degree requirements in May.



Mr. Rich Bradley is a Ph.D. candidate working with Dr. John Wiens. In December 1982 Rich presented a paper, "Population density of the desert grassland scorpion (Paruroctonus utahensis) in relation to vegetation structure and soil penetrance" at the 63rd Annual Meeting of the Western Society of Naturalists at Long Beach, CA. The WSN is a large group (about 2000 members) of organismal biologists with interests in marine systematics and invertebrate ecology. About 600 people attended the meeting and 62 of the 200+ papers presented were by students. We were recently notified that Mr. Bradley has won the Oustanding Student Paper Award. Rich's paper summarized a portion of his dissertation research. Rich plans to graduate in May 1983.

2/83

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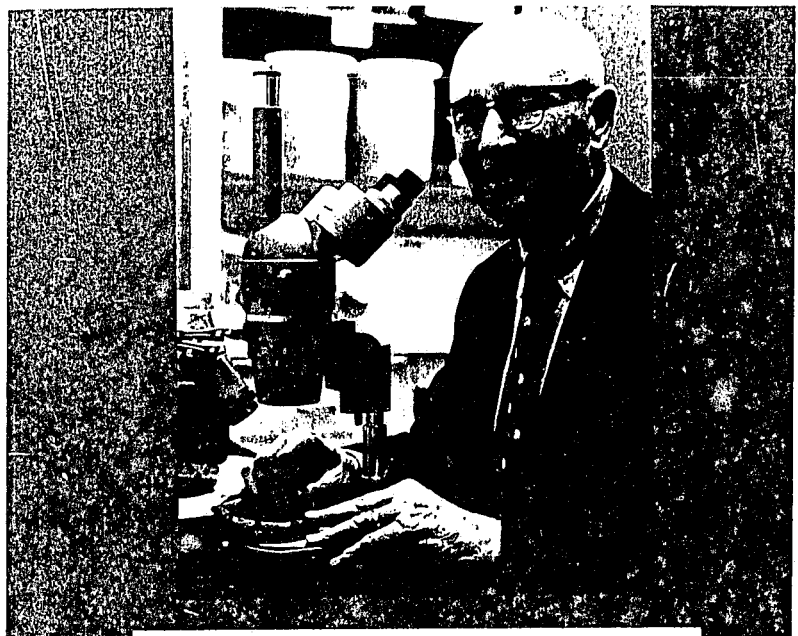
Dr. Roger Conant has been associated with the Biology Department for about nine years now and the association continues to bring credit to this University. Although over 70 years young he is still highly productive: doing research, publishing, presenting papers at national meetings and often participating as an invited speaker at symposia. His association with UNM provides him with a base of operation and a working area where he can conduct the more mechanical aspects of his research. In 1975 he donated his personal library of some 200 volumes (valued at about $20,000) to UNM and this library is rather frequently consulted by faculty and students.



Dr. Roger Conant has been invited by the Herpetologists' League to present the "Distinguished Herpetologist's Lecture" at its Annual Meeting in Salt Lake City in August 1983. The Herpetologists' League meets annually with the Society for the Study of Amphibians and Reptiles and the last meeting in Raleigh, NC attracted more than 500 persons. Dr. Conant has been an Adjunct Professor of Biology since 1973 and this association continues to bring credit to the University. Prior to his retirement in 1973 he was Curator of Reptiles at the Philadelphia Zoo for 38 years (1935-1973) and also served as Director of the Zoo from 1967-1973. Dr. Conant is one of the world's recognized authorities in the area of herpetology and he has authored more than 175 papers, including a monograph on the water snakes of Mexico, and three books, including the Field Guide to Reptiles and Amphibians of Eastern and Central America. Dr. Conant continues to do research, publish, present papers at national meetings and participate as an invited speaker at various national symposia. He has served as a member of the National Research Council of the National Academy of Sciences, is a past president of the American Association of Zoological Parks and Aquariums, the American Society of Ichthyologists and Herpetologists, and of the Museum Council of Philadelphia and he has been awarded an honorary Doctor of Science degree from the University of Colorado. We are fortunate to have such a vigorous, stimulating and helpful colleague as Dr. Conant associated with our Department.

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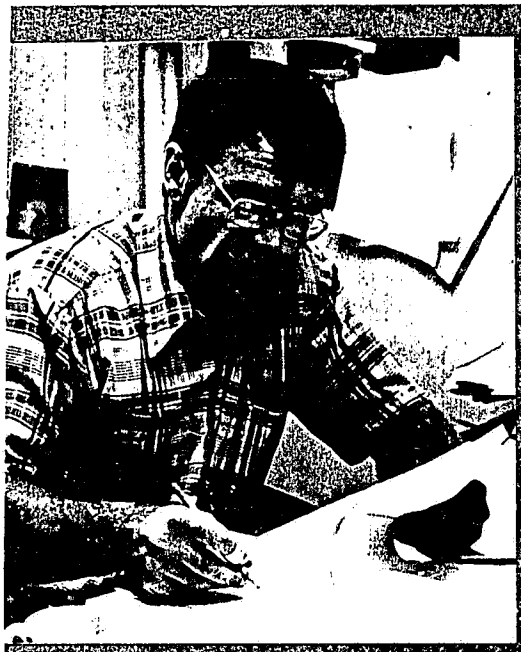
Both Drs. Gosz and Wiens are internationally known biologists whose opinions are constantly being sought on ecological/environmental matters. Both have served on National Science Foundation review panels and both have done extensive work and consultation in other countries (Gosz--New Zealand, Wiens--Scandanavia). Dr. Wiens is the Editor of the international ornithology journal, The Auk, and was recently married (March 1983) to Dr. Bea Van Horne. Dr. Gosz was recently asked by NSF to apply for the position of Director of its Ecosystems Program. Both of these individuals bring a great deal of visibility and respect to the University of New Mexico.



In April 1982, 35 researchers and managers from university, state and federal agencies were invited to meet in Cherry Hill, NJ to discuss ecological solutions to environmental management concerns for the Nation's first reserve: The Pineland National Reserve. Rutgers University's Center for Coastal and Environmental Studies, under a grant from NSF, organized this conference to develop recommendations for an organized collection of ecological and environmental information about the Pinelands. Two UNM biologists, Dr. Jim Gosz (left) and Dr. John Wiens (right) were among the 35 scientists invited to contribute to the conference. Dr. Gosz spoke on "Managing nutrient availability and dynamics in nutrient poor systems" and Dr. Wiens discussed "Landscape structure as it relates to population features." It is noteworthy that Rutgers University, The Nature Conservancy, the New Jersey Pineland Commission and other organizations rely upon insight from UNM biologists to determine how to manage the New Jersey pinelands.

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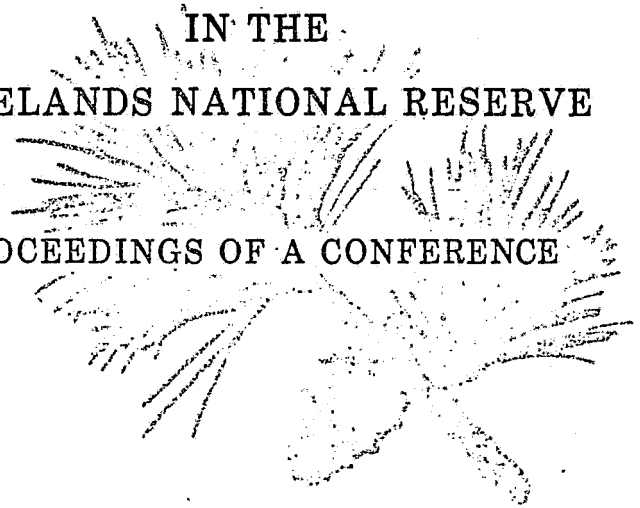
THE STATE UNIVERSITY OF NEW JERSEY
RUTGERS

ECOLOGICAL SOLUTIONS TO ENVIRONMENTAL MANAGEMENT CONCERNS IN THE PINELANDS NATIONAL RESERVE



PROCEEDINGS OF A CONFERENCE

Edited by

RALPH E. GOOD

Center for coastal and environmental studies

Division of Pinelands Research

Ecosystem Fragmentation (Session 1)

Paul G. Risser, Moderator

Robert Zampella, Land acquisition in the Pinelands: Past and present.

Robert W. Hastings, Distribution patterns of fish in the New Jersey Pine Barrens.

A.E. Schuyler, Distributional patterns of rare Pine Barrens plants.

R.T.T. Forman, Structural components of the landscape and interactions among landscape elements.

Robert L. Burgess, Methodology for measuring important characteristics of landscape elements and describing spheres of influence on the biota of the region.

John A. Wiens, Landscape structure as it relates to population features.

John Terborgh, Influence of fire on landscape structure and problems of conserving rare and local species.

Fire Management (Session II)

William A. Niering, Moderator

James A. Cumming, Prescribed burning in Middle Atlantic compact states with emphasis on the Pine Barrens.

Silas Little, Varying effects of fires in the New Jersey Pine Barrens.

Miron L. Heinselman, Fire ecology and management options in the BWCAW and Pinelands: a comparison.

William J. Platt, Temporal and spatial dynamics of plant populations: a scientific basis for management.

Richard J. Vogl, Comparison of fire in western, midwestern, and eastern pineland ecosystems.

Nutrient Dynamics (Session III)

William A. Reiners, Moderator

James B. Durand, Coastal estuaries: Pine Barrens and nitrogen.

Joan G. Ehrenfeld, Some effects of nutrient additions to Pine Barrens wetlands.

Arthur H. Johnson, Measuring elemental fluxes through a Pine Barrens forest ecosystem: 3 years of experience.

James R. Gosz, Managing nutrient availability and dynamics in nutrient poor systems.

William H. Schlesinger, Nutrient use by evergreen and deciduous shrubs in nutrient-deficient habitats.

Henry L. Gholz, Element dynamics in slash pine ecosystem-implications for forest management in the short- and long-term.

Hydrology and Water Quality (Session IV)

Orie L. Loucks, Moderator

Andrew Z. Jaworski, Comprehensive inventory of water monitoring activities in the Pinelands of New Jersey.

Richard F. Yuretich, Pinelands hydrochemistry: major elemental cycles and mass balances.

Edward C. Rhodehamel, A modern scientific program for solving the present geologic and hydrogeologic unknowns of the New Jersey Pinelands.

David L. Correll, Impacts of components of precipitation and land discharges upon wetland and receiving waters biota in the Maryland Coastal Plain.

John J. Magnuson, An approach to classifying Pineland lakes for fishing management tested on naturally acid lakes of northern Wisconsin.

Synthesis Presentations (Session V)

Paul G. Risser, Ecosystem Fragmentation

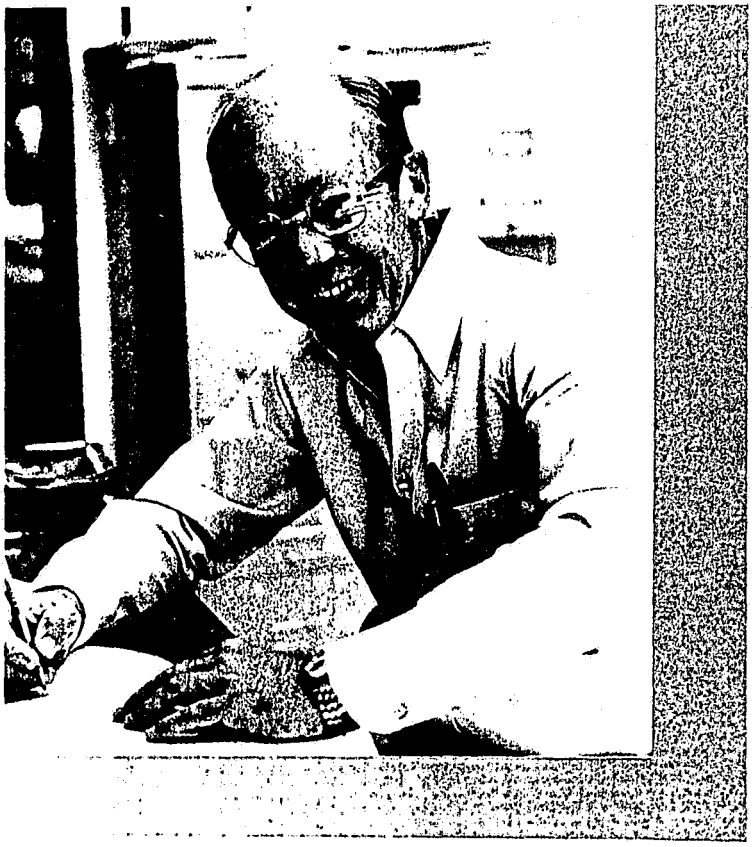
William A. Niering, Fire Management

William A. Reiners, Nutrient Dynamics

Orie L. Loucks, Hydrology and Water Quality

P.A. Buckley, Overall Summary

Although we have been very successful professionally (grants, awards, papers published, etc.) during FY 1982-83, some of our faculty make significant contributions to other aspects of our overall program, namely, helping in administration. Bill Johnson, my Assistant Chair, has been very active this year in chairing our Undergraduate Policy Committee. One of the significant activities of his Committee this past year has been the design of a new undergraduate advisement program for our estimated 400+ biology majors. This program will begin in August 1983 and should provide significant benefits to our majors. Bill also carries a heavy teaching load and is a member of the Faculty Senate.



Effective this fall, Professor William Johnson has been appointed the first Assistant Chairman of the Department of Biology. In this capacity Professor Johnson will be responsible for various administrative duties, especially those relative to our undergraduate curriculum and advisement. In addition to his extensive teaching duties (Introductory Genetics, Genetics Lab, Human Heredity, Advanced Genetics), he has served, in the past, on numerous University and departmental committees. For example, he was the first non-administrator ever to chair the University Admissions and Registration Committee which he did for five years, and he has also been a member of the Faculty Senate since 1980. Bill joined the Biology faculty in 1963.

Biology Majors To Get Advice in Fall With Help of New Counseling Program

By Janet Rivera

With the support of the biology faculty, biology majors and prospective biology majors, a formal advisement program will be implicated this fall in the biology department.

The advisement program will enable a biology major, or prospective major, to get advice on general academic matters, career options and specialized course tracks offered in the department, as well as part-time employment opportunities.

Professor William Johnson, undergraduate policy committee chairman said biology chairman Donald Duszynski's proposal for an advisement program was strongly supported by the biology faculty.

"The faculty was overwhemingly in favor of offering biology majors some type of academic and career advisement," Johnson said.

An undergraduate student questionnaire distributed to students in various biology classes, showed that 401 students said they would benefit from a more formal advisement program, compared to 35 students who said they would not benefit.

Johnson said the biology department received information on an advisement program from the geology department, which has a successful program of its own.

"Even though the number of majors is greater in biology than in geology, we nevertheless plan to incorporate some of the features that they use," Johnson said.

Johnson said another benefit of the advisement program will be that students will get to know a faculty member well enough to recieve a letter of reference in support of a job application or application for admission to a professional or graduate school.

The advisement program will begin operating this fall. To obtain advisement call or visit the biology department office in Castetter Hall after Aug.15, 1983. At that time, students will be given the name, office number, telephone number and schedule of office hours of an advisor.

John Wiens needs no introduction. He is one of our most active and dynamic professors and we are fortunate to have him. Here are some of the ways he helps to put UNM on the world map.

Dr. John Wiens spent the early part of September 1982 in Tvärminne on the Baltic coast of Finland. Taking a sauna, you ask? Possibly. But mainly because he was invited by the Nordic Council of Ecology (a consortium of ecologists sponsored by the governments of Denmark, Finland, Norway and Sweden) to speak at their Symposium on "Competition deduced from community data: Anecdotes or evidence?" Dr. Wiens presented five papers at the Symposium: 1) "Experiments are important, but..."; 2) "Pattern detection and process explanation in community ecology: reality or religion?"; 3) Is nature orderly, or do we just wish it were? Coping with a nonequilibirum world"; 4) "North American shrubsteppe birds do not compete"; 5) "Let us forget the 1.3 rule". John was one of only two U.S. scientists invited to participate in the Symposium, the Proceedings of which will be published in a special issue of Anales Zoologica Fennici. On his return from Finland, Dr. Wiens delivered two invited seminars at the University of Uppsala and at the University of Lund in Sweden. The seminars were entitled, "Patterns, processes, and paradigms in community ecology: Lessons from a nonequilibrium system" and "Myths and reality in avian community patterns: The influence of methodology." Finally, he stopped in England for a few days to visit with colleagues at the Monks Wood Experiment Station in Huntingdon and at the Edward Grey Institute in Oxford. Dr. Wiens came to UNM in August 1978 as our Distinguished Professor in Ecology. Since then he has been a driving force in bringing world class distinction to the Ecology-Evolutionary Biology program in our Department.

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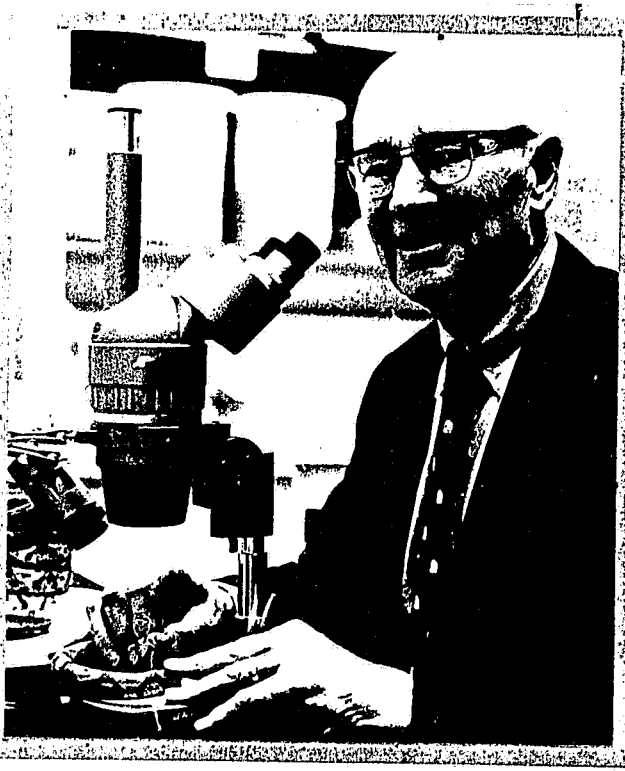
The 21 previous highlights have given a glimpse into the kinds of activities that occupy the time and minds of UNM biologists. I hope they have helped you to better understand and appreciate some of the people who make up our Department. This is a highly productive and successful group in Biology and the grants and awards and invited seminars and other exciting activities occur on a regular basis. Beginning in the Fall 1983 I will continue to keep UNM Administrators informed of the happenings that continue to bring credit to UNM through the efforts of the members of the Biology Department. Activities like those of Roger Conant noted here. Thank you for your attention.



Dr. Roger Conant, Adjunct Professor of Biology at UNM, presented the R.A. Hefner Lecture at Miami University, Oxford, Ohio on 2 March. Dr. Conant's topic, instead of being herpetological, was "African Wildlife--Decline and Recovery of the White Rhino." His talk, using color transparencies taken during his long trip to Africa in 1968, portrayed the capture of two wild white rhinos by use of darts that inject a sedative to immobolize them. The animals are then caged, injected with an antidote to counteract the sedative, and taken to a holding compound for breeding purposes. The program has been eminently successful and, as a result, the white rhino, once threatened with extinction, has made an amazing comeback. Many national parks have been restocked and surplus rhinos have been released for exhibition in zoos. Dr. Conant was the Curator of Reptiles at the Philadelphia Zoo for 38 years before coming to UNM in 1973.

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THE REPORT OF THE DEPARTMENT OF CHEMISTRY

July 1, 1982 to June 30, 1983

Riley Schaeffer, Chairman

I. General Departmental Information

A. Significant Achievements During the Academic Year 1982-83

The Department has been making considerable efforts during the last three years to develop a stronger research and graduate education base. Six new faculty will be present to start the 1983-84 academic year beyond those present at the beginning of the 1981-82 year. The Department believes that its recent success in recuiting faculty has been outstanding. It is a pleasure to be able to present one confirming piece of evidence: Dr. James Satterlee was awarded a Sloan Fellowship during the Spring. We also call attention to the considerable increase in sponsored research (detailed in Section E below) as confirming the nature of the change that has occurred.

The Second Annual Milton Kahn lecture was delivered May 6 by Dr. Charles Orth from Los Alamos. Dr. Orth received his PhD under Prof. Kahn. The lecture was well attended by both

local people and by associates of Prof. Kahn's from Los Alamos. A reception and dinner followed the lecture.

The Department received a grant from the National Science Foundation in 1981 providing matching funds for the purchase of a gas chromatograph mass spectrometer. A Finnegan Model 4510 Automated GC/MS/DS Mass Spectrometer was delivered in February 1982. Unfortunately, Room 384 where this instrument is to be installed was not ready to receive it and it was not installed until the present reporting year. It is now in routine operation.

The Department also received the good news that a grant from the NSF would be made for the purchase of a high field NMR spectrometer with matching money to be provided from the Science and Engineering Bond Fund. The grant award is expected to be made for Aug. 1, 1983. Bids have been requested and it is expected that this new instrument will be in operation early in the Fall of 1983. Purchases of this sort and the previous one, are essential to the development of the Department but at the same time present a serious problem which must be addressed. This point is developed further below in section B.

One of the most crucial activities of the Department with respect to its growth in the research and graduate education area is the recruitment of graduate students. A significant step forward has been possible through the creation of the Science and Engineering Teaching Assistantships. This has made it possible for the Department to develop a new scheme to attract better qualified teaching assistants from the national pool. Briefly, we now offer a standard stipend but with the additional provision that a small sum ($250) will be added for each of the qualifying examinations passed in the week before the semester begins. Appendix A continues our practice begun last year of listing both the number and geographical distribution of applicants to our graduate program. Twentyfive percent of those admitted are from east of the Mississippi, 37.5 percent from the west and 37.5 percent from foreign universities. (Of 127 PhD granting Chemistry Departments surveyed in the fall of 1982, 33 percent of the entering graduate students were from foreign institutions).

One of the most important activities that the Department carries out in conjunction with graduate education is the active series of seminars by which both students and faculty

are introduced to current research as carried out in both this country and abroad. Visitors to this Department during the past academic year came from other universities, as well as industrial and governmental laboratories. They came from as far as Australia and Germany and as close as Albuquerque. A list of seminar speakers is given in appendix B.

A list of the current faculty, staff and graduate students is given in Appendix C.

During the 1982-83 year eleven students were graduated with a B.S. degree in chemistry; seven of our graduates were men and four were women. Seven students graduated with a B.A. degree in Chemistry; five males and two females. In addition to the eighteen chemistry majors, twenty-nine men and twenty-seven women took a minor in chemistry. At the graduate level, five men and one woman were awarded the M.S. degree and seven men and one woman were awarded the Ph.D. in Chemistry. Students receiving degrees in Chemistry are listed below.

Students receiving the B.A. Degree in Chemistry in 1982-83

Shawn B. Baca	Kathryn S. Daniels	Philip B. Hopkins
Jerry H. Hunt	Daniel F Kinkela	John P. Melvin
Jacqueline Sharpe		

Students receiving the B.S. Degree in Chemistry in 1982-83

Brad R. Baack	John P. Barncastle	Naser F. Bizzari
Patricia Buksa	Kenneth W. Escudero	Carole Gervais
Sinclair Hunt	Scott B. Johnson	Michael Malone
Jan Mintorovitch	Janine C. Moss	

Students completing the Master's Degree in Chemistry in 1982-83

Harold D. Beeson	Susan D. Carson	Richard M. Holland
Eddie T-K Hui	William F. McNamara	John G. Wangsgaard

Students completing the Doctor of Philosophy Degree in Chemistry in 1982-83

Patrick M. Dhooge	Staff Scientist, General Technology
Lynda M. Faires	Staff Scientist, Los Alamos Nat. Labs.
Gordon Fischer	Staff Scientist, Dow Chemical Co.
Larry D. Hutchins	Staff Scientist, Sandia National Labs
William H. Rahe	Staff, Computing Center, UNM
Stanley D. Roberts	Student, UNM Medical School
Hossien Sharifian	Post Doctoral Fellow, Univ. of Toronto
William K. Wilson	Post Doctoral Fellow, Rice University

A number of the students receiving the bachelors degree will go on for advanced study. Five of these has been accepted in the Medical School at UNM, one to Harvard Medical School and one to Baylor Dental School. Two of our graduates will pursue graduate studies in this department, and one will undertake

advanced studies in Cell Biology at UNM. In addition, one student who received the Ph.D. degree in chemistry has entered the School of Medicine at UNM.

The Department of Chemistry presented the following awards for academic excellence to majors during the 1982-83 year:

Mr. Daniel Daube was named recipient of the Steven A. Bernitsky Memorial Presidential Scholarship which is awarded each year to a senior Presidential Scholar who is majoring in Chemistry.

Ms. Denise Worthen was named as recipient of the Paul Mozley Award given each year to outstanding juniors majoring in Chemistry. Ms. Carole Gervais and Mr. Scott Johnson jointly received the Leroy Gibson/Mike Millican Memorial Prize. In addition, Mr. Scott Johnson received the award sponsored by the American Institute of Chemists as the outstanding graduating senior in Chemistry. Mr. Laurence Moore was awarded the Merck Index Award. Mr. Archie Sanchez and Ms. Catherine Weaver received the John D. Clark awards in Chemistry.

Sophomores Mr. Daniel Daube, Mr. Lars Stangebye and Mr. David Johnson were named as co-recipients of the J. L. Riebsomer Memorial Prize in Chemistry. Mr. Douglas Salmi and Mr. David Stevenson received the Ann Kahn Memorial Prize in Chemistry and Mr. Chong-Hong Pyun was the recipient of the Graduate Scholarship in Chemistry Award given each year to an outstanding student in the Graduate Program.The Freshman Chemistry Achievement Award sponsored by the CRC Press was given to Ms. Ireena Erteza.

B. Significant Plans and Recommendations for the Near Future

The Department faces a number of severe problems in the near future that promise to curtail or even reverse the substantial strides it has made in the last few years. The most serious involve the need for additional laboratory space (a matter which was treated at some length in the last annual report) and the need to provide for maintenance of equipment. Listed below are major equipment acquisitions (over $10,000) in the last six years (including the expected NMR addition that will occur this fall).

Equipment Acquisitions over $10,000 since 1977

1977	Jasco Circular Dichroism Instrument	41,000
1977	Digital PDP 11 Computer	15,000
1979	Varian Fourier Transform FT80A	85,000
1979	Varian Atomic Absorption Spectrophotometer	15,200
1979	Syntex Diffractometer	151,000
1979	Matrix Printer	10,000
1980	Digital Computer w/Floppy Disc	14,000
1981	Bruker Spectrometer w/Varian Magnet	53,000
1981	Varian Spectrophotometer Model 219	22,000
1981	Jasco Model DIP 181 Polarimeter	11,000
1981	Hewlett Packard Chromatograph	14,000
1981	Lumonics Rare Gas Halide Excimer Laser	33,000
1981	Beckman Ultracentrifuge	21,000
1981	Air Products Model CSA-202E Displex System	10,000
1981	Coherent Model CR 4 UV Argon Laser System	17,000
1982	Jobin Ivon Monochromator	11,000
1982	Photochemical Research Nitrogen Laser	11,000
1982	Digital PDP 11 Computer System	16,000
1982	Quanta-Ray Model PDL-1 Tuneable Dye Laser	27,000
1982	Beckman Centrifuge	12,000
1982	Finnegan Model 4510 GC Mass Spec	182,000
1983	Coherent Model Innova 90-4UV Argon Laser	21,000
1983	Newport Optical Table w/accessories	11,000
1983	Molectron Model MV 22 Nitrogen Laser	33,000
1983	Spex Ramalog Double Spectrometer w/controller	33,000
1983	Digital PDP 11/23 Computer System	16,000
1983	Hewlett Packard UltroScan System	11,000
1983	Digital PDP 11 Computer System	31,000
1983	High Field NMR (to be added Oct. 1983)	395,000
		1,322,200

The current inventory would exceed one and a half million dollars with the addition of a single older item the XL-100 NMR spectrometer added earlier in the 1970's and probably over two million with all equipment currently in use. No, I repeat NO, provision is made in the Department's budget for maintaining

this equipment. Conventional practice in all scientific laboratories would be to estimate a 5-6% annual repair cost based on acquisition costs and that is a common figure for service costs contracts on major instruments. The Department has now reached the stage where it will become necessary to discard highly valuable equipment simply because it cannot pay to have it repaired and cannot afford the space to store nonfunctioning euipment. An excellent case in point is the XL-100 NMR spectrometer. It is an older instrument (about fifteen years old) that nevertheless could still serve a most valuable function if it were in operating condition. It would now cost about $25,000 to $40,000 to place it in good operating condition and such funds are not available within any Departmental budget. Requests for University support for this purpose have often not even been answered let alone granted. A case in point is our request submitted this spring for a new detector for the FTIR instrument. This request was forwarded through Dean Garcia to the upper administration but has simply disappeared. It should be pointed out that much of the expensive equipment in the Department has been purchased with partial support from the NSF under the specific and expressed condition that the University assume responsibility for maintaining it in good operating condition. I am sure that a similar problem faces other departments and

some University solution is essential IN THE COMING YEAR. We cannot in good conscience continue to apply for Federal support for instrument purchase if the University is in fact unwilling to accept the responsibility it has agreed to.

The need for additional laboratory space persists. It is to be hoped that this problem will be addressed by the higher administration in the coming year. If plans are not started in the immediate future, the growth of the Department planned in 1981 will not be possible. In such event, we would almost certainly regress by loss of some of the outstanding young faculty added in the last three years.

Appointments to Staff

Ms. Julie Finger joined the staff as a half time storekeeper on Dec. 15, 1983. Her schedule of work is the late afternoon and evenings so that the main storeroom can be open longer hours to accommodate our research activities. Ms. Carolyn Williams joined the staff on March 28, 1983 as an occasional employee to fill in during the absence of Ms. Mary Orr, who was granted a maternity leave of absence.

D. Separations

Prof. William Coleman left the Department in August 1982 to assume a position at Wellsely . Ms. Mary Orr returned from maternity leave and submitted her resignation effective June 10. Carolyn Williams appointment was terminated on June 30.

E. Sponsored Research

The Department has become increasingly agressive in the search for outside funds to support its research program. In the 1981-82 academic year the Department had active grants in the amount of $1,150,719. During the present reporting year this figure has risen to $1,663,254. Furthermore, grant request proposals for nearly $6,000,000 were submitted. Eighteen of the faculty submitted one or more proposals during the year (including two new faculty members who will take up their positions in August 1983) and twenty faculty had some grant support during the past year. Sixteen individuals had grants from sources outside the University of the twenty two faculty who served some or all of the 1982-83 academic year. This corresponds to nearly three quarters of the faculty with outside grants and nearly ninety percent who have some research support.

Grants Active During 1982-83

020-812-139	Bustamante	1-1-83	RAC	2,000
020-812-142	Satterlee	1-1-83	RAC	2,000
020-812-150	Ondrias	1-1-83	RAC	2,000
020-812-168	Deck	1-1-83	RAC	2,000
020-812-175	Paine	OPEN	RAC	1,600
281-009-1xx	Paine	5-14-82	Sandia	16,000
281-009-2xx	Paine	5-14-83	Sandia	17,000
281-023-1xx	Paine	8-31-82	ACS	15,000
281-040-1xx	Maple	Open	SAC-P	500
281-049-1xx	Park	7-1-83	DOE	119,969
281-057-1xx	Maple	6-30-82	ACS	10,000
281-066-1xx	Mass Spec	1-31-83	NSF	87,600
281-074-1xx	Satterlee	9-30-82	AMHA	14,883
281-078-1xx	Schaeffer	1-31-83	NSF	47,599
281-080-2xx	Maple	9-30-82	Sandia	29,000
281-080-3xx	Satterlee	9-30-82	Sandia	29,000
281-113-1xx	Daub	4-9-82	Sandia	5,197
281-140-4XX	Ondrias	12-22-82	BRSG	3,325
281-140-5XX	Bustamante	12-17-82	BRSG	3,550
281-156-1XX	Holder	9-1-82	PRF	45,000
281-170-1XX	Walters	7-21-82	AF	35,238
281-194-1XX	Satterlee	9-30-82	NIH	67,050
281-195-1XX	Satterlee	10-1-82	SURP	30,000
281-195-2XX	Maple	10-1-82	SURP	29,995
281-195-3XX	Ondrias	10-1-82	SURP	29,951
281-196-3XX	Bustamante	10-1-82	SURP	19,984
281-217-1XX	Bustamante	3/7/83	Rsch Corp	10,000
281-251-1XX	Walters	5-15-83	AFOSR	11,999
281-258-1xx	Schaeffer	6-1-83	ONR	225,931
281-278-1xx	DEPT.	OPEN	COLO. COLL.	2,085
281-537-1xx	Paine	Open	ResCorp	6,000
281-632-1xx	Papadopoulos	Open	AmCy	2,750
281-633-1xx	Holder	8-31-81	ACS	30,000
281-764-3xx	Hollstein	9-30-81	LASL	17,982
281-774-1xx	Coleman	10-1-82	USAF	107,275
281-798-1xz	Paine	Open	ResCorp	7,185
281-824-3xx	Morrow	8-31-82	HEW	34,467
281-827-1xx	Paine	5-31-82	DOE	140,718
281-827-2xx	Paine	5-31-83	DOE	64,033

Grants Active During 1982-83
(Continued)

281-871-3xx	Allen	1-31-81-83	HEW	37,586
282-611-1xx	Allen	9-31-82	MBS	12,578
282-611-2XX	Allen	9-31-83	MBS	9,402
282-618-2xx	Allen	9-31-82	MBS	20,783
282-624-1xx	Hollstein	9-31-82	MBS	13,772
282-624-2xx	Hollstein	9-31-83	MBS	10,393
282-628-1xx	Litchman	9-31-82	MBS	14,553
282-628-2xx	Litchman	9-31-83	MBS	12,008
282-631-1xx	Morrow	9-31-82	MBS	18,952
282-631-2xx	Morrow	9-1-83	MBS	12,478
282-633-1xx	Niemczyk	9-31-82	MBS	13,020
282-633-2xx	Niemczyk	9-31-83	MBS	9,415
282-635-1xx	Papadopoulos	9-31-82	MBS	12,540
282-635-2xx	Papadopoulos	9-31-83	MBS	9,342
282-636-1xx	Park	9-31-82	MBS	12,515
282-636-2xx	Park	9-31-83	MBS	9,282
282-643-1xx	Tapscott	9-31-82	MBS	20,063
282-643-2xx	Tapscott	9-31-83	MBS	14,643
283-008-1xx	Coleman	3-31-83	NSF	7,200
283-966-1xx	Coleman	12-31-81	NSF	18,912
285-245-1xx	Caton	8-14-82	LANL	47,951
				1,663,254

Proposals submitted 1982-83

ALLEN, BUSTAMANTE, ONDRIAS	6-1-83	DOD	246,450
BUSTAMANTE	9-82	RES CORP	12,590
BUSTAMANTE	8-30-83	SANDIA	29,997
BUSTAMANTE	9-1-82	PRF-ACS	15,000
BUSTAMANTE	7-1-83	NSF	474,902
BUSTAMANTE	7-1-83	NIH	362,037
BUSTAMANTE	10-1-82	SANDIA	29,982
BUSTAMANTE	10-1-82	SANDIA	19,984
CATON	8-16-82	LANL	47,951
HOLDER	5-1-83	NSF	152,306
HOLDER	6-2-83	NSF	190,833
HOLDER	9-21-82	PRF-SUPPLEMENT	4,000
LITCHMAN	9-1-83	NSF	186,794
MAPLE	1-1-83	DREYFUS	16,355
MAPLE	10-1-82	SANDIA	30,000
MORROW	10-18-82	NIH	20,848
McLAUGHLIN	8-16-83	AFOSR	185,030
NIEMCZYK	6-1-83	NSF	297,432
NIEMCZYK	11-23-82	DOE	135,750
NIEMCZYK	1-15-83	NSF	294,423
NIEMCZYK	3-1-83	DOD-ONR	135,750
OGILBY	10-10-83	SANDIA	29,995
OGILBY	8-30-83	PRF-ACS	15,000
ONDRIAS	10-1-83	SANDIA	29,991
ONDRIAS	7-82	ACS-PRF	15,000
ONDRIAS	7-1-83	NIH	180,703
ONDRIAS	7-1-83	NSF	180,703
ONDRIAS	6-7-83	RESEARCH CORP	10,380
ONDRIAS	10-1-82	SANDIA	30,000
ORTIZ	10-10-83	SANDIA	29,498
ORTIZ	8-15-83	PRF	15,000
PAINE	6-1-83	DOE	73,971
PAINE	6-8-83	SANDIA	17,029
PAINE	4-27-83	NSF	293,149
PARK	3-21-83	NSF	212,372
PARK	8-1-83	SERI	72,552
PARK	8-1-83	DOE	172,799
PARK-HOLLSTEIN	1-1-84	HEW	170,386

Proposals submitted 1982-83
(Continued)

PARK-HOLLSTEIN	6-1-83	NIH	149,558
SATTERLEE	8-31-83	PRF	52,500
SATTERLEE	10-1-82	SANDIA	30,000
SATTERLEE	8-31-83	PHS-NIH	67,050
SCHAEFFER	2-29-84	NSF	125,000
SCHAEFFER	6-1-83	ONR	225,931
SCHAEFFER-SATTERLEE	8-1-83	NSF	200,000
TAPSCOTT	6-1-83	PRF-ACS	52,500
WALTERS	1-1-83	AFOSR	11,999
WALTERS	7-1-83	SANDIA	42,945
WALTERS	10-1-83	AFORS	252,773
WALTERS	6-1-83	DOE	178,494
WALTERS	1-1-84	NSF	137,848
			5,896,966

Appendix A

Applications Received for Graduate Study in Chemistry

1983-1984

State	APP	APR	DIS	INC	ENR	State	APP	APR	DIS	INC	ENR
Alabama	2	1	1	0	0	Arizona	2	2	0	0	1
California	3	1	0	2	1	Colorado	7	5	1	1	2
Connecticut	1	0	1	0	0	Florida	2	2	0	0	2
Idaho	2	0	2	0	0	Illinois	5	1	4	0	1
Indiana	3	2	0	1	0	Louisiana	1	0	1	0	0
Massachusets	1	0	0	1	0	Michigan	2	2	0	0	2
Montana	1	1	0	0	1	Nebraska	1	0	0	1	0
New Jersey	1	0	1	0	0	New Mexico	5	5	0	0	4
New York	3	2	0	1	1	Ohio	3	0	1	2	0
Pennsylvania	4	1	0	3	0	Puerto Rico	1	0	1	0	0
Tennessee	1	1	0	0	0	Texas	4	0	2	2	0
Washington	2	0	0	2	0	Wisconsin	1	0	1	0	0
TOTALS: GRADUATES OF US SCHOOLS:							58	26	16	16	15

Chile	1	0	0	1	0	China	6	0	2	4	0
Egypt	1	1	0	0	0	France	1	0	0	1	0
Ghana	2	2	0	0	1	India	2	0	1	1	0
Korea	1	1	0	0	1	Libya	2	1	0	1	1
Malaysia	1	0	0	1	0	Nigeria	1	0	0	1	0
Peru	2	1	1	0	1	Sri Lanka	1	0	0	1	0
Syria	1	0	0	1	0	Taiwan	14	5	6	3	3
TOTALS: GRADUATES OF FOREIGN SCHOOLS:							37	11	11	15	9
NUMBER OF INCOMPLETE FILES:							15				
GRAND TOTALS							110	37	27	31	24

APP = Applied
APR = Approved
DIS = Disapproved
INC = Incomplete
ENR = Students that will enroll

Appendix B
Seminar Speakers, Fall 1982

Dr. James Mark August 5, 1982	University of Cincinnati	"Conformational Analysis of Fluxional Molecules"
Dr. Walter Moore August 17, 1982	University of Sydney Australia	"NMR Studies of Myelin Basic Protein and Encephalitogenic Peptides"
Dr. Nicholas Vanderborgh Sept. 10, 1982	Los Alamos National Lab	"A New Look at Petroleum Genesis and Migration"
Dr. Bruno Samori Sept. 17, 1982	University of Bologna Italy	"Application of Liquid Crystals to Stereochemistry
Dr. J. G. Riese Sept. 24, 1982	University of Nice, France	"New Coordination Complexes of Polycyclic Amino Phosphanes, Phosphoranes and Phosphoramides"
Dr. Thomas James October 1, 1982	Univ. of California, San Francisco	"The Motion Picture of Nuclic Acids (and Complexes) as Perceived by NMR"
Dr. Max Herberholt Oct. 6, 1982	University of Bayreuth	"Transition Metal Complexes Containing Nitrosyl, Thionitrosyl and other Acceptor Ligands"

Dr. Guilford Jones Oct. 8, 1982	Boston University	"Electron Transfer Mechanisms of Sensitization: Photochemical Energy Storage and Release"
Dr. Byron Goldstein Oct. 15, 1982	Los Alamos National Lab	"The Selective Internalization of Macromolecules by Cells and Diffusion Limited Forward Rate Constants on Cell Surfaces"
Dr. Mark Maestre Oct. 18, 1982	Lawrence Berkeley Lab	"Circular Dichroism and Differential Scattering Studies of Microscopic Samples"
Dr. P. W. Jennings Oct. 28, 1982	Montana State University	"Transition Metal Reactions with Small Carbacycles"
Dr. Don Grey Oct. 29, 1982	University of Texas-Dallas	"Neutron Scattering Studies of Fd Phaze DNA-Gene 5 Protein Complex"
Dr. Glenn Dryhurst Nov. 5, 1982	University of Oklahoma	"Applications of Electrochemistry to the Elucidation of Biological Redox Reactions"
Dr. L. J. Kline-Love Nov. 12, 1982	Seton Hall University	"Micelle-Mediated Liquid Chromatography and Luminescence Spectroscopy"

Dr. Pierre Laszlo Nov. 15, 1982	Institut de Chimie Universite de Liege Belgium	"The New Magnetic Resonance: Composition with two Quadrupolar Nuclei (^{23}Na, ^{59}Co) on Chemical and Biochemical Themes"
Dr. Kieth Pannell Nov. 19, 1982	University of Texas-ElPaso	"Activation ofπHeterocycles by Transition Metals"
Dr. Howard Hargis Dec. 10, 1982	Auburn University	"Synthetic Application of Phosphorodiamidites"

Seminar Speakers, Spring 1983

Dr. Robert Lane Jan. 21, 1983	Occidental Petroleum	"Tetravalent Metal Phosphonates as Catalyst Supports and Selective Extractants"
Mr. Landri C. Taylor Feb. 11, 1983	J. T. Baker Chemical Co.	Laboratory Safety Workshop consisting of hour-long training session focusing on labeling, storage, and spill control of hazardous substances.
Dr. Richard Fenske Feb. 16, 1983	Univ. of Wisconsin-Madison	"Carbon-13 NMR Chemical Shifts and Reaction Mechanisms in Transition Metal Complexes"
Dr. Chad A. Tolman Feb. 18, 1983	E. I. DuPont	"Olefin Hydrocyanation by Zero-Valent Nickel Complexes"

Dr. John A. Panitz Feb. 25, 1983	Sandia National Lab	"Field-Ion Tomography: A Microscope Without Lenses"
Dr. David Knaff Mar. 2, 1983	Texas Tech University	"Role of Protein: Protein Complexes in Biological Electron Transfer"
Dr. Regitze R. Vold Mar 4, 1983	Univ. of Calif-San Diego	"Deuterium Relaxation and Molecular Motion in Thermotropic Liquid Crystals"
Dr. William L. Jolly Mar. 10, 1983	Univ. of Calif.-Berkeley	"The Partnership of Core and Valance Photoelectron Spectroscopy"
Dr. George W. Kabalka Mar. 16, 1983	Univ. of Tennessee-Knoxville	"New Methods for Incorporating Isotopes into Physiologically Active Compounds using Organoboranes"
Dr. Kenneth J. Klalbunde Apr. 1, 1983	Kansas State Univ.	"Reactivity Comparisons Between Metal Atoms and Clusters at 10-150C. A Trip Across the Periodic Table"
Dr. Carl Lineberger April 8, 1983	Univ. of Colorado-Boulder	"Photoelectron Specstroscopy of Negative Ions and the Properties of the Corresponding Free Radicals"
Dr. Ernest Wenkert April 15, 1983	Univ. of Calif.-San Diego	"Novel Low-Valent Nickel-Mediated Organic Reactions"
Dr. David Micha April 22, 1983	Univ. of Florida	"Scattering of Atoms by Polyatomic Molecules and Surfaces"

Dr. Robert L. Swofford April 33, 1983	Group Leader, Quantum Chemistry and Physics	"Picosecond Transient Raman Spectroscopy: The Photoisomerization of trans-Stilbene[1]"
Dr. Charles Orth May 6, 1983	Los Alamos National Lab.	"Iridium, Large Body Earth Impacts, and Biological Crises in the Fossil Record"
Dr. John Ritchey May 5, 1983	Ft. Lewis College	"Synthesis and Reactivity of Pt(0)-SO_2 and -CS_2 Complexes Containing Bulky Phosphines"
Dr. Fred Tebbe May 31, 1983	DuPont	"The Tebbe Reagent"
Dr. Jack Williams June 14, 1983	Argonne National Lab.	"Organic Superconductors"
Dr. W. Dennis Dean	American Cyanamide Co.	"Research and Development at Lederle Labs"

APPENDIX C

FACULTY AND STAFF OF THE DEPARTMENT OF CHEMISTRY

FULL PROFESSORS:

CATON, Roy D., Ph.D., 1963, Oregon State University
DAUB, Guido H., Ph.D., 1949, University of Wisconsin
HOLLSTEIN, Ulrich, Ph.D., 1856, University of Amsterdam
SCHAEFFER, Riley, Ph.D., 1949, University of Illinois
TAPSCOTT, Robert E., Ph.D., 1968, University of Illinois
VANDER JAGT, David, Ph.D., 1967, Purdue University

ASSOCIATE PROFESSORS:

ALLEN, Fritz S., Ph.D., 1969, Universityof Illinois
HOLDER, Richard W., Ph.D., 1970, Yale University
LITCHMAN, William M., Ph.D., 1965, University of Utah
MCLAUGHLIN, Donard R., Ph.D., 1965, University of Utah
MORROW, Cary J., Ph.D., 1970, Tulane University
NIEMCZK, Thomas M., Ph.D., 1972, Michigan State Univ.
PAINE, Robert T., Ph.D., 1970, University of Michigan
PAPADOPOULOS, E. Paul, Ph.D., 1961, University of Kansas
PARK, Su-Moon, Ph.D., 1975, University of Texas, Austin
WALTERS, Edward A., Ph.D., 1966, University of Minnesota

ASSISTANT PROFESSORS:

BUSTAMANTE, Carlos J., Ph.D., 1981, University of California, Berkeley
MAPLE, Jon R., Ph.D., 1980, Northern Illinois University
ONDRIAS, Mark O, Ph.D., 1979, Michigan State University
SATTERLEE, James D., Ph.D., 1975, University of California, Davis

INSTRUCTORS:

DECK, Lorraine, M.S., 1968, University of New Mexico
MALM, Miriam, M.S., 1964, University of New Mexico

EMERITUS PROFESSORS:

KAHN, Milton, Ph.D., 1950, Washington University

ADJUNCT PROFESSORS:

ROSENBLATT, Gerd M., Ph.D., 1960, Princeton University
WHALEY, Thomas W., Ph.D., 1971, University of New Mexico

STAFF SCIENTIST:
DUESLER, Eileen, Ph.D., 1973, University of California, Berkeley

CHEMICAL ANALYST:
JU, Ruby K.Y., B.S., 1956, University of Illinois

GLASSBLOWER (AND PART-TIME LECTURER III)
ROENSCH, Arno, B.S., 1953, Highlands University

ELECTRONICS TECHNICIAN
Miller, Jay III, B.S.E.E. 1982, University of New Mexico
A.S.E.E.T, NAII, Albuquerque

EXPERIMENTAL TECHNICIAN
GEORGE, Earle, B.S.M.E., 1945, Stevens Tech

OTHER STAFF
CERECERES, Carmen, Secretary
HALLETT, Russell, Storekeeper
HILTON, Carl, Storekeeper
FINGER, Julie, Storekeeper
JOHNSON, Marlene, Editorial Asst.
KARTCHNER, Wanda, Editorial Asst.
ORTIZ, Leonard, Storekeeper
RUE, Ruth, Secretary
SCHNOEBELEN, Albert, Administrative Assistant

GRADUATE STUDENTS

		Source
ADISUWIRYO. S	TA	
BEESON, H	TA	
BLAHA, S	GA	
BONAKDAR, M	TA	
BOWEN, S	RA	DOE
CARSON, S	TA	
CAUDLE, L	RA	DOE
CONSTANTINIDIS, I	TA	
CRULL, G	TA	
DHOOGE, P	RA	DOE
DUBOIS, D	TA/RA	ACS
ELLIS, D	GA	
FAIRES, L	GA	
FINDSEN, E	TA	
FLORENCE, M	TA	
FRAATZ, R	GA	
HOLLAND, R	GA	
HONIG, C	GA	
HOOD, W	TA	
HORNUNG, S	TA	
HUI, E	TA	
HUTCHINS, L	RA	ACS
IWATA, Y	RA	NSF
JANIK, J	TA	
JESSUP, J	TA	DOE
JIANG, F	TA	
KIM, M.	TA/GA	
KOCH, C	TA	
LEON, A	TA	
MARTINEZ, D	RA	MBS
MC CABE, D	TA	
MC NAMARA, W	RA/TA	DOE
MICKOLS, W	RA/TA	HEW
MINTOROVITCH, J	TA	
NEWMAN, J	TA	
NORRIS, P	GA	
NUSSER, B	TA/RA	DOE
NUTTALL, K	GA	

PACE, C	TA	
PETRIDOU, J	TA	
PYUN, C	TA/RA	DOE
SEE, F	RA	SANDIA
SILVERMAN, I	TA	
SMITH, P	TA	
STILWELL, D	RA	DOE
THOMPSON, B	GA	
THORNBERG, S	TA/RA	SANDIA
TIKKANEN, M	GA	
TURAKHIA, R	RA	HEW
UHLAND, D	TA/RA	DOE
USSERY, D	GA/TA	SANDIA
UTAMAPANYA, S	GA	
VICKERS, M	TA	
WELLS, S	GA/TA	SANDIA
WILLIAMS, M	GA	
WOOD, G	GA	
YANG, S	TA	
YIN, I	TA	
ZHANG, C	TA	

REPORT OF THE DEPARTMENT OF COMMUNICATIVE DISORDERS
July 1, 1982 - June 30, 1983
Lloyd E. Lamb, Chairman

I. Program Achievements

A. The Department was given final approval by the university faculty and the Faculty Senate to offer a BS degree in Sign Language Interpreting. On March 12, 1983, an Open Forum on Sign Language Interpreting was held in the Kiva Lecture Hall at UNM to acquaint the deaf community and other interested parties with the planned training program and to seek input for improvement of the program. The Forum was co-sponsored by the New Mexico Association of the Deaf, the National Association of the Deaf and the Department of Communicative Disorders. Special guests were Dr. Albert Pimentel, Executive Director, National Association of the Deaf (NAD), Mr. Gary Olsen, Assistant Executive Director for State Affairs, NAD, and Mr. Herb Larson, Acting Co-Director, Center on Deafness, California State University at Northridge. The agenda for the Forum and the summary report and recommendations prepared by Dr. Pimentel are included in the appendix.

B. Our graduate enrollment in speech-language pathology and audiology in 1982-83 totaled 52. Thirteen students were awarded masters degrees. Twenty-three new students joined the Department, 18 in speech-language pathology and five in audiology.

C. We have worked to implement an Auditory Brainstem Response (ABR) test program at BCMC, using the Amplaid Mk IV ABR Unit purchased last year. We have tested several babies from the Neonatal Intensive Care Unit and several adults referred for diagnostic evaluations. We are now working to obtain normative data on latency-intensity relationships in normal hearing young adults to use for clinical comparisons.

We have also introduced a one hour (repeatable) problems course on ABR for our audiology graduate students.

D. Our new quarters at 901 Vassar, N.E., have met our expectations in terms of allowing better program coordination and improved utilization of resources. Having our facilities and personnel in one location has increased our training potential substantially. However, these facilities are in no way adequate in terms of long range needs and should not be considered as a final solution to our problems.

II. Non-University Support

A. Our U.S. Office of Education personnel preparation grant, funded for $85,000 in 1981-82, was reduced by approximately 48 percent to $44,805 for 1982-83 as part of nationwide cuts in grant support from this agency. However, we were given a supplemental award of $26,535 in September, 1982, bringing the total grant to $71,340. With this plus additional one-

time help from the University, we were able to continue support for all grant supported personnel (Patti Elledge, Judi Barnes and Judy Williams, all clinical supervisors, and Carolyn Cosentino, our secretary at BCMC), as well as to provide 15 graduate students with stipends. Our grant award for 1983-84 again is $71,340. However, we are being forced to apply almost all of the grant funds to salaries and fringe benefits for the individuals named above, leaving us support for only one graduate student. Dr. Lloyd Lamb again prepared the grant proposal and is serving as Project Director.

B. A $30,000 grant was awarded the University by the American Quarter Horse Association (AQHA) to study horseback riding as a therapeutic tool. The project, titled Therapeutic Horsemanship, is being conducted by Ruth Dismuke, M.S., Research Associate. Data from the project were presented at two national conferences last year, the American Quarter Horse Association Convention and the National Conference on Human-Animal Bonding held at the University of Minnesota. The proceedings of this conference are to be published. A literature search done at the University of Washington reveals this to be the only research of this nature reported in the world.

This project has led to the development of a computerized language program. In conjunction with Dr. William Gavin of the Institute of Logopedics in Wichita, Kansas, Ms. Dismuke has developed a computer program titled "Computer Assisted Language Assessment, Remediation and Screening Procedure." Vanderbilt University has purchased the program for further development.

The AQHA has approved another grant, this one for $25,000, for future support of the project.

III. Continuing Education

A. On July 23 and 24, 1982 the Department held a workshop on "Treatment of Neurodevelopmental Disorders." Guest instructors were Elizabeth Danella, M.O.T., O.T.R., fellow of the American Occupational Therapy Association and Rona Alexander, Ph.D., Director, Comprehensive Training Program for Infant and Young Cerebral Palsied Children, Curative Rehabilitation Center, Wauwatosa, Wisconsin. Over 70 professionals and students from throughout the state attended the workshop.

B. Michael Cevette, M.S., Coordinator of Audiology, Primary Children's Hospital, Salt Lake City, Utah, visited UNM on February 14 and 15, 1983, to consult on auditory brainstem response testing. Cevette gave several hours of lectures to our audiology students and made a

presentation at the Pediatric Grand Rounds at BCMC. He also demonstrated ABR test techniques in the high risk nursery.

C. On April 15 and 16, 1983, we presented a workshop titled "Language through Conversation: A Pragmatic Approach to Children with Delayed Language," James MacDonald, Ph.D. from the Nisonger Child Development Center, Ohio State University, was the guest instructor. The workshop was co-sponsored by the Department of Communicative Disorders, the New Mexico Speech and Hearing Association and Educational Assessment Systems, Inc. More than 70 professionals and students attended.

IV. Faculty Changes

Edward Shirkey, Ph.D., joined the faculty in January, 1983, as Assistant Professor and Coordinator of Clinical Training, Speech-Language Pathology. Dr. Shirkey replaces Sumner Blanchard. Shirkey's teaching specialties are stuttering and articulation.

V. Graduate Unit Review

This year our department underwent a graduate unit review by the Office of Graduate Studies. Dr. Lloyd Lamb prepared the review document which is on file with the University. The site visit was conducted on May 2 and 3, 1983 by a team consisting of Daniel Beasley, Ph.D., Memphis State

University (Chairman), Sheldon Stick, Ph.D., University of Nebraska, Richard Stream, Ph.D., North Texas State University and Don Flammer, Ph.D., University of New Mexico. We are awaiting the site visit report.

VI. Composite of Information Requested on Individual Biographical Supplements

A. Lloyd E. Lamb

5. (a) Childrens' Item and Order Errors in Time-Compressed, Sequenced Rhyming Words. Manuscript being typed for submission to the Journal of Auditory Research. (With Riensche, L.L.)

(b) Teenagers Performance on Time-Compressed Sentential Stimuli. Manuscription in preparation. (With Riensche, L.L.)

(c) Genatrics' Performance on a Battery of Central Auditory Measures. In progress (With Riensche, L.L.)

7. (a) Continuing Education - "The Intensive Care Infant: Survival and Sequelae" University of Texas Medical Branch, Galveston, Texas, Oct. 8-9, 1982.

(b) Audiology Consultant, ELB Associates, Chapel Hill, North Carolina. (Consultant in occupational hearing conservation)

(c) Visited Primary Children's Hospital, Salt Lake City, Utah, to study ABR Test Program.

8. (a) Chairman, Department of Communicative Disorders

(b) Director, University Speech and Hearing Center

(c) Co-Director, BCMC Center for ENT and Communicative Disorders

(d) Project Director, Office of Education Training Grant - $72,500 (Prepared grant application in October 1981)

(e) Prepared 1982-83 Office of Education Grant application (applied for $87,500)

(f) Prepared a major section of a multi-disciplinary grant application for a "Native American Rehabilitation Research and Training Center" recently submitted by UNM.

(g) Advised most non-degree and new undergraduate students in Department of Communicative Disorders as well as advising several graduate students.

(h) Currently developing auditory brainstem response (ABR) test program at BCMC to include neonatal testing in Intensive Care Unit.

(i) Assisted with development of proposal for sign language interpreters training program; assisted with public relations for program.

(j) Prepared all departmental reports, including annual reports for Arts and Sciences and annual accreditation report to Education and Training Board of American Boards of Examiners in Speech-Language Pathology and Audiology.

(k) Prepared lengthy document for UNM Graduate Unit Review.

9. (a) Board of Directors, Albuquerque Civic Light Opera Association (ACLOA)

B. Dolores Butt

1. (a) Study abroad: Study and tour of special education programs of Great Britain, London Medical School.

(b) Neurodevelopmental Treatment Course; N.M. Speech, Hearing and Language Association - Continuing Education Programs.

2. (a) Study tour of Europe; University of Georgia, 6 credits

3. (a) U.S. Department of Education: Award for Support of Excellence in Education for New Mexico, December 1, 1982.

5. (a) Papers submitted: Phonological breakdown under conditions of communication stress

   (b) Papers submitted: Reduction of self-abusive behaviors in a deaf-blind child

   (c) Work in progress: Research paper; Psycho-diagnostic profile of learning disabled Navajo students.

   (d) Work in progress: Instructional material; Procedures for establishing use of semantic relationship in severely retarded communication board users.

6. (a) Association for the Education of the Severely and Profoundly Handicapped

   (b) American Psychological Association

   (c) American Speech, Hearing and Language Association

   (d) New Mexico Speech, Hearing and Language Association

   (e) Educational Diagnosticians' Association

7. (a) Department of Linguistic, University Reading, Great Britain; guest colloquium speaker.

   (b) Guest speaker for the 1981-82 series of Albuquerque Public Schools:

   Communication Board Teaching Strategies
   Analysis of Children's Spontaneous Language Scales
   Right-Brain Activities Teaching Math and Language Concepts

8. (a) Institute of Logopedics, Wichita, Kansas: Development of computer software for the LARSP procedure (linguistic analysis and remediation of speech)

   (b) Protection and Advocay Services for New Mexicans with Developmental Disabilities

   (c) District Diagnostic Center, Albuquerque Public Schools

(d) Mental Health Branch, Indian Health Service

(e) Borrega Pass Schools

8. (a) Director: Elks' Cerebral Palsy Program

(b) Committee: Dept. of Communicative Disorders Language Comprehensive

(c) Committee Chairman: Dept. of Linguistic, Comprehensive Examinations

(d) Faculty advisor

C. Richard B. Hood

1. (a) Licensed as an Audiologist and as a Hearing Aid Dispenser, by N.M. Occupational Licensing Bureau.

5. (a) Co-author of article on hearing ability and socialization of elderly persons, accepted for publication by Journal of Gerontology in 1983.

6. (a) ASHA South Central Regional Conference, March 5-7. Received 13 hours of continuing education.

(b) NMSHA Convention, Santa Fe, April 16. Received 6 hours of continuing education

(c) NMSHA Convention, Albuquerque, October 21-22. Received 8 hours of continuing education.

(d) ASHA Annual Convention, Toronto, Nov. 18-21. Received 4 hours of continuing education (formal short course), and attended many scientific and technical sessions.

7. (a) Talk on Education of Deaf Children, Host Lions Club, Feb.

(b) Inservice to staff of Western Elder Care Center on Hearing Problems, April.

(c) Talk on Hearing Loss: Causes and Solutions, to Downtown Statesman's Club, May.

(d) Talk on Hearing Loss: Causes and Solutions, to N.E. Heights Statesman's Club, Aug.

(e) Talk on Hearing Loss: Causes & Solutions, to Rio Rancho Kiwanis, July.

(f) Talk on Hearing Problems of Senior Citizens, to Sertoma Club, Dec.

8. (a) Acting Department Chairperson, 1982-83 academic year

(b) Member, Comm. on Undergraduate Academic Affairs, Fall 1982 to ?

(c) Home Visits Volunteer (visit outstanding Albuquerque high school seniors) Office of School Relations project.

(d) Chairperson of Departmental committees on curriculum and student review.

(e) Advisor to 8 graduate students in the dept.

(f) Advisor to 8-10 undergraduate majors in the dept.

(g) Coordinator of the Audiology academic and clinical programs.

D. Linda L. Riensche

2. (a) Attended the Mid-South Conference on Communicative Disorders.

4. (a) Riensche, L.L. and Doran, P.J., Performance on Stuttering and Nonstuttering Adults Presented Time - Compressed Sentential Stimuli: The New Mexico Speech and Hearing Association Journal, Vol. 3, No. 2, pp. 6-8.

5. (a) Riensche, L.L., Orchik, D.J., and Beasley, D.S., Time-Variated Speech. In Clinical Phonetics: Investigatory Techniques in Speech Pathology. Chris Code and Martin J. Ball (Eds.). Croom Helm Ltd.: Submitted - Book to be published in 1983.

(b) Lass, N.J., Riensche, L.L., and Baseley, D.S. Applications of Time-Altered Speech in Speech-Language Pathology and Aduiology. Manuscript in preparation for publication in the Journal of Continuing Education - to be published in 1983.

(c) Linda L. Riensche, Amy Wohlert, and Bruce E. Porch, Aphasic Comprehension and Preference of Rate-Altered Speech, submitted for publication in the British Journal of Disorders of Communication.

(d) Riensche, L.L., and Clauser, P. Auditory Perceptual Abilities of Formerly Misarticulating and Normal Articulating Children. Submitted for publication in the Journal of Auditory Research.

(e) Riensche, L.L., Stahl, C., Cravens, C., and Lamb, L.E. Children's Item and Order Errors in Time-Compressed, Sequenced Rhyming Words.
Manuscript being typed for submission to the Journal of Auditory Research.

(f) Riensche, L.L., Slate, N.L., and Lamb, L.E. Teenagers Performance on Time-Compressed Sentential Stimuli. Manuscript in Preparation.

(g) Riensche, L.L., Linedu, K., Thuman, P., and Lamb, L.E. Genatrics' Performance on a Battery of Central Auditory Measures (In Progress)

(h) Masters' Thesis: Clauser, P., Auditory Perceptual Abilities of Formerly Misarticulating Children.

(i) Masters' Thesis: Doran, P., Stutter's and Nonstutterer's Performance on Time-Compressed Sentential Stimuli.

(j) Masters' Thesis: Slate, N., Performance of Normal Teenagers Presented Time-Compressed Sentential Stimuli (Defended in Nov., 1982)

(k) Masters' Thesis: Ginn, R., Application of a Multidimensional Scoring System with Time-Compressed Sentential Stimuli. (In Progress)

(l) Masters' Thesis: Curran, C., Prediction of Reading Readiness using Multidimensionally Scored, Time-Compressed Stimuli. (In Progress)

6. (a) Riensche, L.L., and Clauser, P., Auditory Perceptual Abilities of Formerly Misarticulating Children. Paper presented at the Mid-South Conference on Communicative Disorders, February, 1982.

(b) Riensche, L.L., and Clauder, P., Auditory Perceptual Abilities of Formerly Misarticulating and Normal Articulating Children. Paper presented at the American Speech-Language-Hearing Association Convention in Toronto, November, 1982.

(c) Editor, New Mexico Speech, Language and Hearing Association Journal.

8. (a) Departmental: Non-teaching University Service

(b) Departmental: Chairperson, Scholarship Committee

(c) Departmental: Chairperson, Student Review Committee (part of year)

(d) Departmental: Chairperson, Research Field Study Committee

(e) Arts and Sciences Graduate Committee

(f) Student Standards Committee, A University Standing Committee

E. Edward A. Shirkey

1. (a) Degree granted, Ph.D., 1982, Memphis State University, in Speech Pathology. "An Investigation of Speaking Rate and Emotion on Consonant -r Production of Articulatory Disordered Children"

4. (a) Manning, W.H. and E.A. Shirkey, "Fluency and the Aging Process," in Aging: Communication Processes and Disorders (D.S. Beasley and G.A. Davis, Eds.). New York: Grune and Stratton.

(b) Shirkey, E.A., Book review of Language and Social Networks, published in the Journal of the Tennessee Speech and Hearing Association.

(c) Manning, W.H. and E.A. Shirkey "Achievement of Articulatory Stability," to appear in Speech and Language: Advances in Basic Research and Practice (N.J. Lass, Ed.), Vol. IV. New York: Academic Press. (in press).

6. (a) Shirkey, E.A. and W.M. Manning "Achieving Carryover and Dismissing Misarticulating Children from Treatment;"

miniseminar presented at the Tennessee Speech and Hearing Association Convention, Nashville, Tennessee, April 15, 1982.

(b) American Speech-Language-Hearing Association

(c) American Association of Phonetic Sciences

(d) Tennessee Speech and Hearing Association

(e) International Society of Phonetic Sciences

F. Wayne E. Swisher

4. (a) "Automated Detection of Cardiac Audiometer Signals" with Charles Hawkins, submitted to IEEE Journal.

(b) Measurement and Detection of Lateral Pharyngeal Wall Position Using a Computerized Linear Ultrasound Array" with W.W. Shurtle and Charles Hawkins, Proc. Ann. Conf. of American Inst. of Ultrasound in Medicine, 1982.

5. (a) "The Use of Multi-view Videofluoroscopy in Predicting the Need for Secondary Management in Patients with Velopharyngeal Incompetency" study in progress with Michael Orgel, M.D. and Gregory Stagnone.

6. (a) "Measurement and Detection of Lateral Pharyngeal Wall Position Using a Computerized Linear Ultrasound Array" with W.W. Shurtleff and Charles Hawkins, Annual Conference of American Inst. of Ultrasound in Medicine, 1982.

7. (a) "Speech therapy and the role of hospital nurses" Workshop, St. Vincent Hospital, Santa Fe, New Mexico, 1982.

8. (a) Nancy Slate, Master's thesis committee

(b) Carol Spitz, Adviser, Master's thesis

9. (a) Del Norte Baptist Church - Deacon, Chairman-Missions Committee, Church Council

(b) Judge- Albuquerque Science Fair

G. Phyllis Wilcox

1. (a) Registry of Interpreters for the Deaf: Certified Evaluator, Oct./82

(b) Reverse Skills Certificate: Reawarded June/82.

2. (a) Conference of Interpreter Trainers: Tucson, Arizona Feb.'82

5. (a) Main author: Division of Vocational Rehabilitation "Service Expansion Project" Awarded to the New Mexico Registry of Interpreter for the Deaf, Inc. during my term as president. $100,000.00 One year duration.

(b) Submitted Bachelor of Science degree in Sign Language Interpreting to Arts and Sciences College: Adopted Dec/82

6. (a) Vice president: Mayor's Commission on the Handicapped.

(b) Linguistics Association of the Southwest: "Schema Theory of Language Interpretation: A Study of Sign Language Interpreters" Oct/82 (paper read).

(c) Attended Legal Interpreting Workshop conducted by Solow: Oct, 1982.

7. (a) White Sands Missile Range, Las Cruces: "The Deaf Employee: Communicating on the Job". Oct/82)

(b) Panel Participant: "Employment Accomodations for the Handicapped: Suggestions for Employers, Emplyees"

(c) Governor's Committee on Concerns of the Handicapped May/82.

(d) District Diagnostic Center: "National Certification Process and It's Implications for APS interpreters and School System" March/82

(e) Supervised: Interpreting Intern from Western Oregon State College. March-May/82.

9. (a) Helped generate close to $8,000 in donations and funds for NMRID last year.

   (b) Helped to initiate push to set up four-way stop signs in dangerous location near home area. They were finally set up this year, resulting in reduction of accidents in local neighborhood.

APPENDIX

New Mexico
Open Forum on Sign Language Interpreting
March 12, 1983
Kiva Lecture Hall
University of New Mexico
Albuquerque

Purpose: The Open Forum will enable members of the deaf community and other service providers for the hearing impaired to assemble together and exchange their thoughts, as well as learn of new developments and approaches in the field of working with the deaf and hearing impaired.

Communication will be the major theme, with specific emphasis covering trends in the communication field, including:

*sign language
*interpreting
*networking concepts

Sponsors: University of New Mexico
New Mexico Association of the Deaf
National Association of the Deaf

General Agenda
March 12, 1983 (Saturday)

8:00-8:30 a.m.	Coffee/Doughnuts (Get acquainted)
8:30-9:45	Welcoming Remarks University of New Mexico.....Dr. Joel Jones, Associate Provost University of New Mexico.....Dr. Lloyd Lamb, Dept. Chairman New Mexico Association of the Deaf.Mr. Clarence Falvey, President National Association of the Deaf...Dr. Albert Pimentel, Executive Director
8:45	Open Forum..Purpose & Format...Include Role and Function of State Assn. such as New Mexico Association of the Deaf.Mr. Gary W. Olsen, Assistant Exec Director for State Affairs NAD
9:00	The Need for State Wide Services as Reflected by the Deaf Citizens of New Mexico.....Mr. Olsen
9:30	New Developments & Recent Trends In the Deaf Community.....Mr. Herb Larson, Acting Co-Director of Center on Deafness at CSUN (Interpreting & Sign Language
10:30	Break
10:45	Panel (a mixed panel of participants) Sign Language Issues as Seen by Consumers, Interpreting Referral Services, General Interpreter and Sign Language Training Programs - Needs and Concerns as Perceived by Deaf Citizens.....Dr. Kenneth Brasel, Moderator
11:45	Conclusion..Salient Points
12:00	Lunch Break

1:15	A Commitment for Open Communications.....	Dr. Lamb
1:45	A Sign Language Interpreting Degree Program..	Ms. Phyllis Wilcox
2:30	Group Discussions Format-Specific Issues, Concerns, Recommendations from Consumers.....	Mr. Larson
2:45	Break	
3:00	Resume Group Discussions	
3:45	Group Reports.....	Group Leaders
4:15	Summary of Reports.....	Dr. Pimentel
4:45	Networking.....	Dr. Pimentel
5:30	Wrap Up.....	Mr. Olsen

Evening..... Gala Party..... All of Us!
Sponsored by all Organizations
Check locally for details.

NATIONAL ASSOCIATION OF THE DEAF
301-587-1788
814 THAYER AVENUE
SILVER SPRING, MARYLAND 20910

March 22, 1983

MEMORANDUM

TO: Mr. Clarence Falvey
Dr. Lloyd Lamb
Mr. Gary Olsen

FROM: Albert T. Pimentel ATP

RE: Open Forum Reports

Attached are 1) the outline of topics given to each of five group leaders, 2) their group reports edited by me, and 3) my Summary Recommendations Report. I recall that this was to be considered for the NMAD publication. Please pass this on to whomever needs it. It matters not to me how or where it might be used. I will leave that to your individual discretion.

I am guardedly optimistic that various parties gained sufficient insights into the possibilities and limitations to understand that cooperation is essential if this project is to succeed to maximum extent.

Thanks for making the project professionally satisfying to me.

ATP:bc

Attachments

The University of New Mexico has made an auspicious beginning in launching a new program for training sign language interpreters. The administrative commitment to this program is impressive. The sensitivity and support from Associate Provost Joel Jones for this program is unusually good, and speaks well for the full flourishment of this program in the years immediately ahead.

An important element in a program of this kind, with such closely-linked people-servicing characteristics, compounded by unique culturally sensitive considerations, is that a need exists to maintain open communication by the University and the communities of people impacted by the program. In this regard the remarks by Dr. Lloyd Lamb, Director of the Communications Disorders Department where this new program will be administered, are especially welcome. Dr. Lamb's commitment to dialogue between the University and the deaf community is very appropriate to a program of this special nature. At the same time, the need of any University program to operate within its own structures has to be understood.

Sometimes there are as many opinions and perspectives as there are people on issues of great sensitivity. The lack of understanding about deafness and the communication isolation that deaf people live with daily certainly generate many strongly held beliefs regarding interpreters that the University needs to appreciate. Yet, it may not be possible to meet all or even many recommendations in one small program of relatively modest size. Nonetheless, good recommendations have been articulated during this Open Forum and I am pleased to present this summary statement for the record.

Beyond the University there are four other agencies or organizations that are directly affected by the Sign Language Interpreter Training Program. There are many other agencies that have roles to play, also.

The New Mexico Association of the Deaf (NMAD) is an organization primarily comprised of deaf consumers. This organization is and should be accepted by the University as the primary consumer representative of deaf citizens in the State of New Mexico. It was recommended that the NMAD identify key individuals in various cities and towns to formally represent deaf people through the NMAD to all organizations and agencies. The University should be advised who these NMAD representatives are in the Albuquerque area and work through these individuals in the routine communication process.

The New Mexico Registry of Interpreters for the Deaf (NMRID) is the state organization seeking to promote development of a professional corps of interpreters for the state. This organization by its nature has an obvious interest in the University program. The NMRID and the NMAD should develop and maintain a working relationship that will lead to supportive and mutually agreeable relationships with other agencies

and organizations, including the University. Further, deaf people should be a formal part of NMRID, particularly holding membership on NMRID evaluation committees.

The New Mexico School for the Deaf (NMSD) at Santa Fe is a very substantial deafness resource in the State. Outdated concepts of isolated institutions solely responsible for elementary and secondary education programs for only its enrolled students need to be discarded. Today's modern center school programs supported by states throughout the nation are major resource centers involved in many endeavors in behalf of deaf people, including continuing education activities and specialized areas such as interpreters for deaf people.

The NMSD is a vital resource, continuing to update its potential through major new buildings and programs. The open forum recommended such concepts as practicum sites at NMSD and utilization of some of its human resources to enhance the University program. The presence of deaf persons with professional study needs at Santa Fe also suggests that the University programs at Santa Fe should also be used to encourage matriculation of deaf students on campus. This also suggests additional practicum/intern opportunities for interpreter students who might be able to explore living accommodations at NMSD for further exposure to Sign.

The Interpreter Referral Service (IRS) is a limited, but vital resource. This could in part be conceived as a University laboratory for the interpreter program. Agencies that have a responsibility to assure that their programs are accessible to deaf persons might be encouraged to enter into contractual relationships with the IRS so that services for deaf persons can be routinely handled without the frequent embarrassment of having to secure special authorization for payment of interpreting services and the resultant delay that this process involves. The growth and development of the IRS is a basic need for all parties concerned. Deaf citizens need the availability of these services for their own welfare and to fulfill their potential as individuals. The lack of awareness on the part of agencies that should be utilizing interpreters gives the false impression that not many interpreters need to be trained. Having always done without interpreting services, it is difficult for many consumers to clearly envision the extent and varied nature of the need.

Professionals are accustomed to isolating the problem, identifying needs and establishing goals and priorities. It can be frustrating when confronted with a situation that does not yield itself neatly to developing one aspect of a more global problem, such as preparing interpreters for deaf people. Very clearly there are global issues involved, all impacting in various ways on the University commitment to the interpreter training program. While all of these issues cannot be resolved it is important that they be understood, and that some aspects of them be addressed to the extent feasible and consistent with University responsibility.

One basic issue involves the need for deaf persons to begin to better assume responsibility for activities and programs that will affect their own general welfare. There is a general lack of opportunity for deaf persons to serve on Boards, Committees, and Councils. This deprivation also results in lack of leadership development opportunities through gradual accumulation of experience. This "Catch 22" situation then is compounded when some opportunities do surface, but appropriately qualified and experienced leaders cannot be identified. Clearly, the cycle has to be broken some place by someone.

Several groups and individuals have recommended that the University Sign Language Interpreter Training Program include an Advisory Committee. This is an excellent recommendation and the University should seriously commit itself to this recommendation for several reasons. First, there is a need to provide wider perspective beyond the limited initial faculty resources available. Secondly, acceptance of this recommendation would give substance to the University commitment to open communication. Thirdly, an advisory committee could assist with the need for a statewide deaf awareness outreach program to agencies throughout the state. And, fourthly, deaf people need to be involved and need to benefit from the leadership role in a program crucial to their welfare.

When a young person graduates from a university with a B.A. degree in psychology we do not expect that person to be ready to function as a psychologist. However, the deaf community is concerned that a holder of a B.S. degree in Sign Language Interpreting should have some minimal functional competency skills. Many individuals in the Open Forum were concerned about what levels of skills can be expected and how the University will establish some means of assuring quality. What on the surface may seem to be excessive intrusion on University responsibility in this instance, is a very real concern that graduates with a University degree, if proper minimum compentency standards are not assured, could end up badly serving deaf citizens and misrepresenting their credentials to unsuspecting and unaware outside agencies. Institution of some provisional criteria in the area of interpreting skills is then appropriate to the circumstances, although likely contrary to usual University practices. This should be most carefully considered.

Lastly, the Open Forum saw this initial University thrust in the area of deafness as a point of activity from which other programs and activities could spinoff. The area of continuing education for interpreters is one obvious extension of the basic program. Like all other professionals, interpreters have an endless need for continued education and training. There is a need to take continuing education for interpreters to other parts of the state, both for the purpose of outreach to interpreter personnel and to orient agencies that need to use interpreting services. There is a need for cross-cultural and for bi- and tri-lingual research into the interpretihg processes. The University linguistic professionals should become involved, also.

The curriculum for the Sign Language Interpreter Training Program should be structured so that allied professionals in helping professions

can take selected courses for orientation to deafness purposes. The market for such a program is a latent one. Once developed it becomes a steady demand for courses. Undeveloped, there is a tendency to overlook the market potential and the extent to which the human service environment can be opened up to deaf people.

Deaf citizens, interpreter professionals, and the University of New Mexico have freely and openly communicated through this Open Forum. Even with limited initial resources it is clear that a beginning can be made to meet some vital needs of deaf people. Deaf citizens of New Mexico should be justly proud of encouraging this open communication environment. At the same time deaf people, through the New Mexico Association of the Deaf need to accept responsibility for maintaining a positive working relationship as this Program and the University response unfolds. From the good level of participation and interest demonstrated during the Open Forum, I am confident that this responsibility will be fulfilled.

TOPIC AREAS FOR GROUP DISCUSSION
BASED ON PRESENTATIONS FROM PANELISTS

I. Curriculum: Assuring sufficient consumer contact, i.e.

   A. Social and professional experiences with deaf
   B. Consumer input
      1. Knowledge of deaf children and adults
      2. Knowledge of various educational experiences of deaf people
      3. Ethics
      4. Insight into deafness
         a. Its culture
         b. Its expectations
         c. Its dislikes/distrusts, etc.
      5. Interpreter support for deaf students at UNM

II. Public education and statewide needs of the deaf citizens

   A. UNM's role
   B. NMRID's role
   C. NMAD's role

III. Training for consumers on how to use interpreters

   A. UNM's role
   B. NMAD's role
   C. NMRID's role

IV. Involvement of consumers in the evaluation component

   A. University role and responsibility
      1. Traditional in role/responsibility
      2. Need to assure consumer of quality process (direct and indirect consumer input)
   B. RID - Professional level certification
   C. State certification

V. Curriculum issues on skill development and practicum experiences

   A. Continuing education for inservice interpreters
   B. Communication skill development for other disciplines
   C. Nondegree or A.A. level opportunity within the degree program

Group I - Curriculum: Assuring Sufficient Consumer Contact

A. The Group recommended the formation of an advisory committee for the Sign Language Interpreter Program. The composition of the advisory committee would include consideration of ethnic backgrounds, cultural differentiations, educational attainments, state geography and income levels.

B. Curriculum needs to reflect cultural variations, particularly.

C. Interpreter training needs to reflect emphatically that interpreters are supportive to deaf people, not people who cause deaf persons to fall into the background, and no longer have direct contact with agencies, etc. Deaf persons should be enhanced through interpreter support, being able to assume more active roles.

D. Interpreters need to be broadly educated persons, being able to adjust to and cope with a wide variety of situations. Both broad education and practicum needs to assure exposure to and readiness for a wide variety of life situations in which deaf people may be found.

E. The curriculum and program should assure availability of interpreters on campus for deaf students. Availability of interpreting services will attract deaf students to the campus.

Group II - The Education of the Public about Deafness and Interpreters and the Statewide Needs of Deaf Citizens

A. The role of the New Mexico Association of the Deaf

1. Specific designation of NMAD representatives in each large city or town needs to be made.
2. Such designated representatives must make themselves known to agencies and organizations in their area.
3. These representatives should accumulate and offer to share information that is needed and otherwise serve as a resource for their areas.

B. The role of the New Mexico Registry of Interpreters for the Deaf

1. The NMRID by its referral work can expect to have numerous contacts with schools and agencies.
2. Each interpreter referral generates improved awareness.
3. NMRID and NMAD should program themselves to work together, dividing responsibility as it seems appropriate in different geographical and functional areas.
4. NMRID should refer hearing people to deaf people for certain kinds of information, perspectives, etc.

C. Public education of deaf people and their needs should include use of the State Department of Education, Department of Health and Environment, and the New Mexico School for the Deaf.

The above agencies and both NMAD and NMRID could combine resources and information into a new brochure of all available services for statewide distribution to agencies and professional personnel.

D. Public education will also occur at the University through greater availability of interpreters on campus for deaf students.

E. Since public education occurs whenever interpreters are utilized, the University curriculum should reflect this, by assigning interpreter students to do deaf awareness survey work with agencies as part of their course work requirements.

F. The University could provide workshops on orientation to deafness and interpreter utilization for outside agencies.

Group III - Training For Deaf People on How to Use Interpreters

A. The Sign Language Interpreter Training curriculum, mostly for hearing people should include training for hearing persons on how to orient deaf persons to the use of interpreters. This training of hearing persons does not mean that hearing persons have full responsibility to orient deaf persons to interpreter use. It means that hearing persons need to learn that deaf persons need orientation. The actual process of orienting deaf persons to interpreter use should include both hearing interpreters and deaf persons already skilled in utilizing interpreter services.

B. Orientation for deaf persons on use of interpreters can take place in University sponsored workshops; in NMAD Conventions and meetings; in NMRID sponsored workshops; and in various combinations of the above with groups working together.

C. Both interpreters and deaf citizens need to teach agencies on how to use interpreter services properly.

D. Orientation to use of interpreters by deaf persons need to include information for deaf people on their rights to interpreter services; such as Section 504 of the Rehabilitation Act and other civil right provisions.

Group IV - Involvement of Consumers In the Evaluation Component

A. It is recognized that Universities have traditional responsibilities for their own programs, including the responsibility of quality assurance of their graduates. The following recommendations were made for University consideration for the B.S. in Interpreting Degree.

1. The university should establish an evaluation group comprised of five persons, three of whom shall be deaf persons. One of the panelists should be from out of state. This group would evaluate students in the program to provide independent objective guidance for decisions by the Interpreter Program Director.
2. The program should have films of deaf persons signing, to be used only for evaluation purposes. This would be especially useful for evaluating reading the Signs of deaf persons and voicing what a deaf person is communicating.

B. There needs to be clear evaluation and certification steps and roles spelled out specifying the initial responsibility of the University in assuring initial competency levels of its graduates, leading steadily to improved competencies with experience and additional training. The professional certification roles of RID and state agency certification, if desired, need to be determined so that all can have confidence in the process.

This group stresses, particularly, that some minimal competency standard, possibly provisional certification, needs to be considered for degree candidates. The public relations problem and potential misunderstandings could be large if no evaluation is built into the program.

Group V - Skill Development and Practicum Experiences in the Curriculum

A. Direct interpreting skill development, as opposed to skill in interpersonal relationships or in handling questions from agencies, requires exposure to several faculty members in the program who are themselves skills interpreters. While the University program will start slowly, it must expand in the number of faculty positions for quality skill development to be assured. A hearing faculty person is essential for skill in sign to voice interpreting to be monitored and developed. Deaf faculty members can be helpful in this Sign to voice development, also.

B. Group members were interested in the number of clock hours that each course or major activity would require. Implied was concern that adequate time is necessary to permit skills to be acquired.

C. Skill development is not satisfactory if it covers only one area, such as public school interpreting. Interpreters need assurance that the curriculum will include skill development in a variety of areas of life, and in various levels of communication usage by deaf persons.

D. The Interpreter Referral Center could provide a variety of practicum opportunities. To take maximum advantage of such a practicum site, it would be very helpful for the Center to be open on a 24-hours basis, providing in the process some real life emergency kinds of interpreting situations that are vital to the well being of deaf citizens.

E. To the extent that resources permit, deaf persons should be utilized as paid guest lecturers to provide the variety and perspectives that interpreter students need.

F. The University should explore practicum options, including dormitory living assignments at the NMSD and support services for deaf students on the University campus. Interpreter students, however, also need to take the initiative to maximize familiarity with a variety of life styles and communication skills of deaf persons.

THE REPORT OF THE DEPARTMENT OF ECONOMICS
July 1, 1982 - June 30, 1983
Alfred L. Parker, Chairman

I. General Departmental Information

A member of the Economics Faculty was singled out for special recognition this past year. The Association for Evolutionary Economics voted the prestigious "Veblen - Commons Award for 1982" to UNM economics professor David B. Hamilton, Jr. This distinguished award was presented in recognition of

> "... outstanding contributions made in the field of evolutionary economics ... and acknowledges exemplary standards of scholarship, teaching, public service, and cogent research in the broad spectrum of social and institutional economics."

The award was presented at a luncheon in his honor on December 18, 1982 in New York City. Past recipients of this award have included such internationally known economists as John Kenneth Galbrath of Harvard University, Gunnar Myrdal of Sweden, and Gardiner Means a government economist.

The significant cut in research funds available from NSF, DOE, EPA, Los Alamos National Laboratories and others has impacted the UNM Department of Economics in several significant ways.

Research projects funded by these agencies had been the major source of release-time monies for this department. Over the past seven or eight years these funds have provided support in a number of critical areas of the department's undergraduate and graduate

programs. Release-time monies have provided badly needed funds in the following specific areas:

- Support for "Special" teaching assistants needed to staff discussion sections of introductory level economics courses.
- Funds to assist faculty to in covering expenses incurred in travel to regional and national professional meetings.
- Financial support for masters theses and doctoral dissertations.
- Funds for secretarial staff used in support of both research and academic activity.
- Funds for travel, long distance phone calls and other expenses directly related to the pursuit of funded research.
- Funds for research assistants who were used to assist faculty with unsponsored research activity.

Efforts to find alternative sources of funding are continuing with some success. One example of such success is the research program undertaken by Professor Lee Brown under the sponsorship of the John Muir Institute. This project which involves consulting assistance to the development of the water program of the John Muir Institute is moving into its third year of support.

In addition to the specific areas listed above, reduced research funding also impacted on the Economics Department's undergraduate and graduate enrollment. As indicated in Table 1, total enrollment in Economics Department courses declined in both the fall and spring semesters. Reduced flexibility in scheduling and the increased use of TAs to teach lower division courses contributed to this decline in enrollment.

Reduced funding has similarly contributed to the decline in

graduate enrollment reflected in Table 2. The funding problems outlined above have also contributed to a significant decline in the overall quality of the graduate enrollment. This problem results from our inability to offer teaching and/or research assistantships in a timely fashion. For the past several years it has been late June before we have become confident that funding for "special" TA's or RA's was going to be available. By this time the strongest candidates for these positions have accepted similar positions at other institutions. As a result we have been forced (in order to staff lab or discussion sections for Econ 200 and Econ 201) to provide financial assistance to applicants that are less well qualified for graduate work. This is not a new problem, but the problem has been aggravated by the decline in availability of research money.

Efforts to recruit students into our undergraduate program initiated this year appear to have been somewhat successful. The fact that the number of economics majors increased slightly during the 1982-83 academic year as shown in Table 3 supports this conclusion. The department's program to recruit undergraduate students included the following elements:

- a brochure detailing employment opportunities for economics majors.
- the introduction of three new courses designed to promote studuent interest in the undergraduate program (Econ 304 - Topics in Micro Economics Econ 309 - Introduction to Econometrics; and Econ 395 - Undergraduate Seminar).
- activation (through regularly scheduled monthly meetings) of the Economics Student Council.

- preparation by the Economics Student Council of a brochure describing in detail undergraduate course offerings for the fall semester of 1983.

Very large enrollments in a growing number of upper division economics courses continues to be a serious problem in the undergraduate economics program. During the 1982-83 academic year the following enrollments were experienced in the upper division courses taught by economics faculty:

Fall Semester 1982

Econ	300.001	53	students	(Gisser)
	300.002	70	students	(Gregory)
	300.003	60	students	(Church)
	300.004	50	students	(Jonas)
	300.005	60	students	(Church)
Econ	315.001	125	students	(Parker)
	315.002	101	students	(Chung)

Spring Semester 1983

Econ	300.001	66	students	(Gisser)
	300.002	52	students	(Jonas)
	300.003	69	students	(Gregory)
	300.004	47	students	(Reynis)
	300.005	48	students	(Oslund)
Econ	315.001	113	students	(Parker)
	315.002	62	students	(Chung)
	315.003	70	students	(Chung)
	330.001	51	students	(Hamilton)
	332.001	49	students	(Parker)

These enrollment figures clearly indicate the need for eight (8) additional sections in the fall semester and seven (7) additional sections in the spring semester.

The UNM Economics Newsletter initiated in April 1981 continues to receive favorable comments and to provide an effective vehicle for keeping the public informed about the professional activities of the members of this department. The mailing list has

grown to 246 -- an impressive number including people in government, business and academia. The newsletter goes to eleven states and the District of Columbia.

The subscription list for the Southwestern Review of Management and Economics continues to grow. There are currently 201 subscribers and nine sponsors are contributing to the journal. The sponsors for 1982 were the following:

Anderson Schools of Management
ARCO Solar
The Diamond A Cattle Company
First Interstate Bank of Albuquerque
Henry E. LeVine
Lincoln Institute of Land Policy
Robert Michael
Plateau, Inc.
Skaggs Companies, Inc.
UNM Foundation, Inc.

Under the supervision of co-editors Professor Roger Norton (Department of Economics) and Professor William Peters (Anderson Schools of Management) four issues of the journal were published last year. Under the format established for the journal a major theme has been selected for the articles appearing in these issues. The major themes selected for the four issues published during the 1982-83 academic year were "The Mexican Economy," "The Ogallala Aquifer," "Governmental Issues in the Southwest," and "Regional Economic Forecasts."

Members of the Economics Department continue to be active in research, publication and related prfessional activity. The eighteen (nineteen second semester) full time faculty members published twenty-six (26) articles, presented fifteen (15) papers at

professional meetings, published two (2) new books and prepared ten (10) research reports during this past calendar year. The department continues to be active on university, college, and departmental committees and to be involved in a wide range of community activities (see appendix for details).

Appointment to Staff

Assistant Professor Tom Goodwin joined the UNM Economics Department in January of 1983. Professor Goodwin received his Ph.D. from the University of California, Davis. His major fields of interest are public finance and econometrics.

Separation from Staff

Assistant Professor Roger Andreae requested leave-without-pay for the 1983-84 academic year.

Sponsored Research or Other Projects

Six of the department's eighteen (18) full-time faculty submitted proposals to outside agencies. This represents 33% of the full-time faculty of this department.

Three (3) faculty members who submitted proposals to outside agencies were sucessful in obtaining awards. A listing of projects funded during the 1982-83 academic year is provided in Table 4.

TABLE 1

ECONOMICS DEPARTMENT STUDENT ENROLLMENT FIGURES

	Fall 1976-77	Fall 1977-78	Fall 1978-79	Fall 1979-80	Fall 1980-81	Fall 1981-82	Fall 1982-83	
ECON 100	-	-	-	(1) 63	(1) 68	(1) 60	(1) 60	
101	(2)* 241	(2) 269	(2) 228	(2) 196	(2) 254	(2) 207	(2) 214	
200	(5) 572	(5) 755	(4) 690	(6) 816	(6) 859	(7) 788	(7) 687	
201	(3) 304	(3) 435	(4) 480	(7) 549	(6) 529	(6) 513	(7) 537	
212	-	-	-	-	-	(1) 14	(1) 27	
239	-	-	-	-	(1) 12	-	(1) 13	*
TOTAL 100 & 200 LEVEL	(10) 1117	(10) 1459	(11) 1412	(16) 1624	(16) 1722	(17) 1582	(19) 1538	
ECON 300	(3) 189	(6) 222	(3) 236	(3) 245	(4) 304	(5) 309	(6) 317	
303	(2) 86	(2) 81	(3) 90	(4) 109	(4) 102	(4) 83	(3) 78	
315	(2) 126	(1) 154	(2) 229	(2) 221	(2) 289	(3) 265	(3) 242	
OTHER 300 & 400 LEVEL+	(17) 289	(19) 331	(21) 365	(18) 405	(16) 407	(17) 326	(15) 308	
ECON 500-699**	(11) 74	(7) 39	(9) 50	(11) 77	(10) 87	(24) 109	(16) 71	
TOTAL	1881	2286 (+21.5%)	2382 (+4.2%)	2681 (+12.6%)	2911 (+8.6%)	2674 (-8.1%)	2554 (-4.5%)	

	Spring 1976-77	Spring 1977-78	Spring 1978-79	Spring 1979-80	Spring 1980-81	Spring 1981-82	Spring 1982-83	
ECON 100	-	-	-	(1) 53	(1) 40	(1) 20	-	
101	(2) 234	(1) 120	(1) 124	(1) 173	(1) 139	(1) 137	(1) 134	
200	(3) 537	(5) 657	(6) 737	(6) 807	(6) 896	(6) 826	(7) 769	
201	(5) 435	(5) 419	(6) 490	(5) 492	(6) 512	(6) 487	(6) 456	
TOTAL 100 & 200 LEVEL	(10) 1206	(11) 1196	(13) 1351	(15) 1566	(14) 1587	(14) 1470	(14) 1359	-7.5
ECON 300	(3) 178	(3) 197	(4) 216	(4) 269	(5) 260	(5) 253	(6) 264	
303	(2) 64	(4) 115	(3) 95	(3) 89	(5) 121	(4) 96	(3) 92	
315	(1) 131	(2) 190	(3) 251	(2) 248	(3) 241	(3) 262	(3) 229	
OTHER 300 & 400 LEVEL+	(17) 332	(14) 282	(19) 359	(20) 483	(20) 406	(16) 347	(19) 321	
ECON 500-699**	(13) 88	(9) 49	(9) 64	(11) 78	(11) 71	(25) 66	(10) 50	
TOTAL	1990	2030 (+2.0%)	2336 (+15.1%)	2733 (+17.0%)	2676 (-2.1%)	2494 (-6.8%)	2315 (-7.2%)	-179
TOTAL ACADEMIC YEAR	3871	4316 (+11.5%)	4718 (+9.3%)	5414 (+14.8%)	5586 (+3.2%)	5164 (-7.6%)	4869 (-5.7%)	-295

* Number in ( ) indicates number of sections offered.
\+ Includes 451 and 452 Problems, 497-498 Readings for Honors and 499 Senior Honors Thesis.
** Includes 551 and 552 Problems, 599 Masters Thesis and 699 Dissertation.
Percentage figures for Fall Semester indicate increase over preceding Fall Semester.
Percentage figures for Spring Semester indicate increase over preceding Spring Semester.

TABLE 2

Graduate Student

Enrollment

Fall	Enrollment	Spring	Enrollment
1974	50	1975	51
1975	62	1976	59
1976	49	1977	42
1977	35	1978	37
1978	37	1979	41
1979	50	1980	51
1980	54	1981	53
1981	59	1982	51
1982	53	1983	48

TABLE 3

Economics Majors

Academic Year	Fall Semester	Spring Semester
1976-77	49	74
1977-78	65	68
1978-79	86	106
1979-80	114	141
1980-81	195	212
1981-82	195	178
1982-83	195	191

Table 4

Funded Research

Department of Economics

Principal Investigator	Project Title	Grant Amount
Brown	Consultant to Legislative Finance Committee	$ 2,115.05
Brown	Assistant to Water Program of John Muir Institute	35,869.00
Norton	Stanford University Binational Agricultural Workshop	10,227.00
Parker	Public Service Company of New Nexico, Time-of-Use Study	9,380.00

II. Composite of information requested on individual biographical Supplements.

1. Advanced Study.

Oslund, Patricia C.	Worked on dissertation, University of Kansas.
Goodwin, Thomas	Ph.D. University of California, Davis, 1982. Dissertation title: Inflation Expectations, Uncertainty and Disequilibrium in the Housing and Mortgage Markets."

2. Sabbaticals, leaves of absence, summer teaching elsewhere, travel, etc., during the period.

Cummings, Ronald	Sabbatical, 2nd semester, 1982.
Cummings, Ronald	Travel to Iztapa, Mexico, continued on International Groundwater Treaties.
Jonas, Paul	Travel in Africa: Senegal, Kenya, Gabon, Cameroon (lectures for International Communication Agency) Summer course: Soviet Type Economic Systems: National Laboratory: Los Alamos, NM.
Tailby, Donald	Summer teaching: Program Director in UNM Summer Program and taught at the Autonomous University of Guadalajara, Jalisco, Mexico.

3. New scholastic honors, fellowships, etc.

Hamilton, David	1982 Veblen-Commons awardee, an award given by the Association for Evolutionary Economics.

4. Publications during the period.

Brown, P. Lee, Professor

"Water Reallocation, Market Proficiency, and Conflicting Social Values" Lee Brown, Brian McDonald, John Tysseling, and Charles DuMars in Water and Agriculture in the Western U.S.: Conservation, Reallocation, and Markets, pp. 191-245, Westview Press Boulder, Colorado, June, 1982.

"Changing Western Water Institutions: Energy's Role" by Lee Brown and Fred Roach in Proceedings of the Conference on Water and Energy Technical and Policy Issues, edited by Fritz Kilpatrick and Donald Matchett, pp. 467-571, American Society of Civil Engineers, 345 East 47th St., New York, NY, June 1982.

Burness, H. Stuart, Professor

"Implementing Multiple Purpose Planning for Water Reclamation Projects in Developing Countries: Some Perspectives from the U.S. Experience," in Managing Renewable Resources in Developing Countries, Chuck Howe, editor, Westview Press, 1982.

The "New " Arizona vs. California: Practicably Irrigable Acreage and Economic Feasibility, Natural Resources Journal, 22, 3, June-July 1982.

"Practicably Irrigable Acreage and Economic Feasibility: The Role of Time, Ethics, and Discounting," to appear in Natural Resources Journal, Vol. 23, No. 2, April 1983.

"Evaluating Environmental Risk: The Case of Toxic Waste Disposal," to appear in Natural Resources Journal.

4. Publications (continued)

Burness, H. Stuart, Professor

"Optimal Water Storage Policy and Reservoir Management," to appear in Water: Economics and Legal Perspectives, E. Jane Arnault, editor. Praeger Press.

"Scale Economics and Reliability in the Electric Generating Industry," under review by the Energy Journal.

Chung, Pham, Professor

"Static and Dynamic Stochastic Optimal Monetary Control," Journal of Economics, Fall 1982 (Refereed Proceedings of MVEA Conference).

"Regulatory Costs, Factor-Augmenting Cum Factor-Absorbing Technical Change, and Economic Growth: an Estimation Model," Journal of Economics, Fall 1982 (Referred Proceedings of MVEA Conference).

Church, Albert M., III, Professor

Conflicts Over Resource Ownership, Lexington Books, 1982, 243 pp. "Taxation: Effects on Materials Policy," in Encyclopedia of Materials Science and Engineering, Pergaman Press, 1982.

"Comments on Taxation of Energy Resources: Implications for Intergovernmental Relations and "Urban Form and Air Pollution: The Case of Albuquerque," The Southwestern Review of Economics and Management, 1 (1981) 139-152.

"Economic Rent, Economic Efficiency and The Distribution of Natural Resource Tax Burdens: Copper and Coal," Natural Resources Journal, 22 (July, 1982), 559-595.

Cummings, Ronald G., Professor

"Implementing Planning for Multiple Purpose Water Reclamation Projects in Developing Countries: Some Perspectives from the U.S. Experience," published in Managing Renewable Natural Resources in Developing Countries, C.W. Howe (editor), Westview Press, Boulder, CO., 1982.

"Hedonic vs. Contingent Valuation Methods for Valuing Municiple Infrastructure," under review for publication with Land Economics.

"The Use of Contingent Valuation Methods for Valuing EPA Regulations on Hazardous Waste Disposal;" presented at the winter meetings of the American Economics Assoc. and accepted for publication in a special symposium issue of the Natural Resources Journal.

"The 'New' Arizona vs. California: Practicably Irrigable Acreage and Economic Feasibility," Natural Resources Journal, 22, 3, June-July, 1982.

"Practicably Irrigable Acreage and Economic Feasibility: The Role of Time, Ethics and Discounting," Natural Resources Journal, Vol. 23, No. 2, April 1983.

"The Use of Hot Dry Rock Geothermal Resources for Space Heating: A Case Study," LA-9541-MS, Los Alamos National Laboratory, September, 1982.

"Investments for Municiple Infrastructure In Energy-Impacted Communities," Chapter 13 in J. Quirk, et.al. (editors), Coal Models and Their Use in Government Planning Praeger Press, 1982.

4. Publications (continued)

Gisser, Micha, Professor

"Welfare Implications of Oligopoly in U.S. Food Manufacturing," American Journal of Agricultural Economics, Vol. 64, No. 4, November 1982, pp. 616-624.

Gregory, Peter, Professor

"The Mexican Labor Market, 1940-80," In Comparative Development Perspective -- Essays in Honor of Lloyd Reynolds, G. Ranis, R. West, M. Leiserson, eds. (Westview Press: forthcoming Book Review, The Economy of Socialist Cuba: A Two Decade Appraisal by Carmelo Mesa-Lago, in Hispanic American Review 62:3 (August 1982), pp. 505-507.

Hamilton, David, Professor

Review of Cultural Economics by Richard Brinkman in The Journal of Economics Issues. December 1982.

Jonas, Paul, Professor

"A Model for Import Substitution in India," Sankhya: The Indian Journal of Statistics Vol. 49, Parts 3&4 1982.; "Intersectoral Balance in the Indian Sixth Plan" Economic and Political Weekly (New Delhi, September 12, 1982, 327-329).

Norton, Roger D., Professor

The Book of CHA: Programming Studies for Mexican Agriculture, Johns Hopkins University Press (co-edited with Leopoldo Solis).

"Operations Research Methods in Agricultural Policy Analysis," European Journal of Operational Research, Vol. 10, August 1982, pp. 333-345 (co-authored with G. Kutcher).

"Crop Insurance as Public Policy toward Agriculture: An Analysis of the Mexican Experience," accepted for publication in Crop Insurance in Agricultural Development, P.B.R. Hazell and C. Pomareda, eds., forthcoming (co-authored with L.M. Bassoco and C. Cartas).

"Nutrition in Farm Models," accepted for publication with revisions in American Journal of Agricultural Economics (co-authored with D. Salcedo).

Parker, Alfred L, Professor and Chairman

"Evaluating Economic Impacts," Starting a Local Conservation and Passive Solar Retrofit Program. An Energy Planning Sourcebook, LA-8992-EPS, UC-580 Issued: February 1982 by Los Alamos National Laboratories, pp. 41-54.

"The Impact of Solar Energy Development: The Aggregate Impact on Basic Economic Objectives," with Fred Roach, Proceedings 1982 Annual Meeting of the American Section of the International Solar Energy Society, Houston, Texas, June 1-5, 1982, p.6.

5. Other research projects or creative work in progress or completed during the period.

Boyle, Gerald, Professor

Completed "Projection of New Mexico Economy by Major Sectors: 1980-2000," December 1982; 30 pages. Appropriation for Governors Council of Economic Advisors: 2 years project @ $40,000. (Supported 4 graduate students).

5. Other research projects or creative work in progress or completed during the period. (continued).

Ben-David, Shaul, Professor

"Benefit Cost Analysis, Ethics, and Strategic Public Decisions" final report for the National Science Foundation Award No. OSS-8014729, (with Allen V. Kneese and William D. Schulze), January 1982.

"Air Pollution and Disease: An Evaluation of the NAS Twins," report to the Office of Research and Development, U.S. Environmental Protection Agency, Contract #CR-808892-01 (with Ralph D'Arge, Susan B. Kask, James C. Case, Larry Eubanks and Curtis Anderson), June 1982.

"The DOD Energy Optimization Model Vol. I: An Executive Summary and Vol. II: A Technical Completion Report" final report prepared for U.S. Air Force, U.S. Army, and U.S. Navy, LA-DOD-2, (with Fred Roach, Christina Kirschner, Richard Lotspeich, Richard Salmon, John Baumgartel, and Ann Zinn), September 1982.

"The Navy Energy Optimization Model: An Application to Three Navy Installations" report prepared for the U.S. Navy, LA-DOD-3, (with Fred Roach, Christina Kirschner, Richard Lotspeich and Richard Salmon), November 1982.

Brown, F. Lee, Professor

"Assistance to the John Muir Institute in developing and conducting an interdisciplinary, inter-university research program," $46,738 to date and continuing.

Burness, H. Stuart, Professor

DOT: Management of Toxic Waste Transport (not approved).

State of New Mexico: Management of Toxic Waste Transport (not approved).

New Mexico Energy Research Institute: Socio-Economic Impact From Energy Related Industries in the State of New Mexico: A Case Study ($81,599) .. (under review).

EPA: Feasibility Analysis Concerning Toxic Waste Disposal Regulations (in process).

Chung, Pham, Professor

Works completed: 1) "An Optimal Yield Model of Monetary Control."
2) "The Demand-for-money- Function, The Federal Deficit, and the Method of Financing: a Theoretical Model."

Works in Progress: 1) "Money as a Producer's Good: A Theoretical and Estimation Model
2) "More on Exports as a Tool of Foreign Policy: an Analytical Model."

Church, Albert M., III

Grant proposal with the Law School (Al Utton) made to Lincoln Institute of Land Policy to establish a Southwest Center ($971,400), (pending review).

Cohen, Sanford, Professor

"The Outlook for Organization Labor in New Mexico," concluding chapter in R. Kern (ed.) Labor in New Mexico, forthcoming, UNM Press, 1983.

"The Southwestern Council of Industrial Workers," chapter in R. Kern (ed.) History of the Carpenter's Union in New Mexico, probably 1984 publication date.

5. Other research projects or creative work in progress or completed during the period (continued).

Cummings, Ronald G., Professor

"Regulatory Impact Analyses: Guidance on The Appropriate Rate of Discount."

"Valuing Public Goods: Hedonic vs. Survey Methods."

"Ethical Implications of Benefit-Cost Analyses."

Gregory, Peter, Professor

Completed Book-length manuscript, "Economic Development and the Labor Market in Mexico" currently being reviewed for publication. Sponsored by The World Bank.

Hamilton, David, Professor

Chapter entitled "How Carpenters Fared" completed for a history of the Carpenters Union edited by Robert Kern -- ms. now in review at Cornell U. Press.

Review of Jay Weinstein Sociology/Technology: Foundations of Postacademic Social Science for The Social Science Quarterly (pending publication).

"The Cure May Be The Cancer," comments given in New York at Veblen-Commons award luncheon, to be published in The Journal of Economic Issues, June 1983.

Jonas, Paul, Professor

Acted as chairman of the dissertation committee for N. Durairaj "A Study of Marine Fishing Industry in Thanjavur District" Maduraj Kamaraj University (India); Member of dissertation committee: Pichaimuthu Economic Development of the Twin Towns: Virudhunagar and Sivakasi" Maduraj Kamarj University (India).

Edited book in preparation (with Bela K. Kiraly) to be published by Columbia University Press about the East Central Eurpean Economy.

Parker, Alfred L., Professor and Chairman

Principal Investigator, "Public Service Company of New Mexico Time-of-Use Study," funded by PNM, May-December 1982, $9,380.

6. Activities in learned and professional societies (meetings attended, etc.).

Ben-David, Shaul, Professor

"The Economic Impact of the Declining Water Table in Eastern New Mexico," paper presented at the Western Social Science Association Arid Land Studies Section, Denver, Colorado, (with Robert R. Lansford), April 22, 1982.

Brown, F. Lee, Professor

"The Role of Water in Energy Development" by David Abbey, F. Lee Brown, and Fred Roach, paper presented at 148th National Meeting of the American Association for the Advancement of Science, January 5, 1982 (to be published by Westview Press).

6. Activities in learned and professional societies (meetings attended, etc.). (continued)

Brown, F. Lee, Professor

"The Prospects for Transferring Water from Irrigated Agriculture" by F. Lee Brown and Charles DuMars, paper presented at the Conference on "Impacts of Limited Water for Irrigated Agriculture in the Arid West held at Asilomar, California, September 27 - October 1, 1982 (to be published by the University of California Press).

Burness, H. Stuart, Professor

Invited paper presented at A.E.A. meetings, New York, NY, 12/30/82. "Evaluating Environmental Risk: The Case of Toxic Waste Disposal" (unable to attend due to weather).

Church, Albert M., III, Professor

National Tax Association - State Income and Business Taxation Committee.

Secretary/Treasurer of Western Tax Association.

Cohen, Sanford, Professor

Chairman, session on arbitration procedure, National Academy of Arbitrators, Annual meeting, Washington, D.C., May, 1982.

National Academy of Arbitrators, seminar, Bermuda, December 1982.

Cummings, Ronald G, Professor

President, American Association of Environmental Resource Economics (President elect until December 27, 1982).

Editorial Board, Land Economics

Co-ordinating Editor, Natural Resources Journal.

Editorial Board, Southwestern Review of Economics and Management.

Managing Board of Directors, American Agricultural Economics Association.

Paper read at professional association, "Ethical Implications of Benefit-Cost Analyses."

Gregory, Peter, Professor

Paper delivered at "Workshop on Labor Markets in Less Developed Countries, "Policy Implications of Labor Market Performance in Mexico," December 14, 1982, Washington, D.C.

Hamilton, David, Professor

"Technology as Process," paper read at Southwestern Social Science Association, San Antonio, Texas, March 19, 1982.

6. Activities in learned and professional societies (meetings attended, etc.). (Continued)

Hamilton, David, Professor

Participated in round-table discussion of Richard Brinkman's Cultural Economics," at Western Social Science Association Meeting, Denver, Colorado, April 23, 1982.

Jonas, Paul, Professor

Discussant in the session of economic development (American Economic Association, New York, December 28, 1982).

Seminar on Foreign Trade, University of Illinois, Urbana-Chaimplain, July 16 - August 2, 1982.

"The Hungarian Economy in Transition", University of Ohio, August 23, 1982.

Parker, Alfred L., Professor

"The Impact of Price Affirmation on Retail Prices of Alcoholic Beverages," paper presented at Eastern Economic Association Meetings, Washington, D.C., April 30, 1982, 27 pages.

7. Other Professional Activities (exhibits, concerts, etc.)

Boyle, Gerald, Professor

Completed four years as Chairman of Governor's C.E.A.

Reappointed to Policy Advisory Committee of the Human Services Department.

Ben-David, Shaul, Professor

Energy Economics Consultant, Los Alamos National Laboratory, Los Alamos, NM.

Brown, F. Lee, Professor

Appearance on "Illustrated Daily" on the economic outlook for New Mexico.

Consultant to New Mexico Interstate Stream Commission concerning El Paso v. Reynolds et.al Court suit.

Burness, H. Stuart, Professor

Regular Reviewer for: AER, JEEM, IER, and SEJ.

Preparation of Testimony regarding Indian Water Rights Quantification.

Research report prepared for EPA regarding Toxic Waste Disposal.

Preparation of "A Methods Handbook for Valuing Environmental Impacts of Small Power Plants," for NERO and Associates, Portland, Oregon.

Paper cited by the U.S. Supreme Court Special Master, Elbert P. Tuttle in Arizona v. California, February 1982.

7. Other Professional Activities (exhibits, concerts, etc.)

Burness, H. Stuart, Professor

"U.S. Reclamation Policy and Indian Water Rights," Natural Resources Journal, (with R.G. Cummings, et.al.), Fall, 1980.

Cohen, Sanford, Professor

Luncheon Speaker, American Federation of Government Employees, Regional Meeting, Albuquerque, NM, August 8, 1982.

Labor arbitration activities in New Mexico, Arizona, Texas, Colorado, Utah, Oklahoma, and Arkansas.

Cummings, Ronald G., Professor

Consultant, U.S. Department of the Interior, Bureau of Reclamation and Office of Water Policy, Summer 1982.

Gregory, Peter, Professor

Guest scholar, Ohio Wesleyan University, addressed seminar on labor markets in developing countries. Advised students on current research projects. November 4-5, 1982.

Referee for Economic Development and Cultural Change.

Consultant to The World Bank.

Hamilton, David, Professor

Read paper on "Louis Junker's Contributions to Theoretical Institutional Economics," at Western Social Science Association Meeting, Denver, Colorado, April 24, 1982.

Referee for paper for Journal of Anthropological Research.

Refereed three papers for The Social Science Journal.

Refereed one paper for The Journal of Economic Issues.

Jonas, Paul, Professor

Consultant, National Laboratory, Los Alamos, NM from June 10 - December 1, 1982.

Around 15 off-campus talk to Civic Societies.

Norton, Roger, Professor

Co-Editor, The Southwestern Review of Management and Economics.

Advisor to: The Secretariat for Economic Integration in Central America on model for aiding in the design of nutritional policies in Honduras.

7. Other Professional Activities (exhibits, concerts, etc.) (Continued)

Norton, Roger, Professor

Advisor to: The Nigerian government on agricultural policy.

Advisor to: The Egyptian government on irrigation programs.

Research proposals submitted: "A Framework for Aggregate Wilderness Evaluations," to the U.S. Forest Service (previously submitted to the U.S. Bureau of Land Management)

Research proposals submitted: "Effects of Deregualtion and the Recent Recession on Thrift Institutions," to the Federal Home Loan Bank Board.

Parker, Alfred L., Professor and Chairman

Consultant to Office of Attorney General, State of New Mexico (Southern Union Company Realignment, Due-On-Sale Clause and Antitrust).

Levi Strauss and Co., (Antitrust).

Jicarilla Apache Tribe (Oil and Gas tax and royalty issues).

Shoshone-Arapahoe Tribes (Oil and Gas issues).

U.S. Attorney (Oil and Gas relating to WIPP Site).

PNM (Retained Economic Interest Issue Natural Gas Prices 1982-2000 and Natural Gas Price to Electric Utilities).

New Mexico Department of Taxation and Revenue (Liquor Control Act).

New Mexico Public Service Commission (Regulatory Issues in Electric and Gas Utility).

Tailby, Donald G., Associate Professor

Talk to the Albuqerque Philosophers' Club, on Current Economic Dilemmas, November 4, 1982.

8. Non-teaching University service (administrative, committee work, faculty advisor, etc.)

Boyle, Gerald, Professor

Chairman, A&S (social science) promotion Committee Member.

A&S tenure Committee.

Ben-David, Shaul, Professor

Computer Use Committee.

UNM Delegate to The Universities Council on Water Resources.

8. Non-teaching University service (administrative, committee work, faculty advisor, etc.) (continued)

Burness, H. Stuart, Professor

Graduate Curriculum Committee.

Graduate Microeconomic Comprehensive Examination Committee.

Chung, Pham, Professor

Chairman, MA and Ph.D. macro Committees.

Church, Albert M., III, Professor

Faculty advisor to Omicron Delta Epsilon.

Faculty advisor to UNM Windsurfing.

Cohen, Sanford, Professor

Graduate student advisement.

A&S Graduate Committee.

American Studies Advisory Committee.

Special grievance hearing panel, non-union staff, UNM.

Cummings, Ronald G., Professor

Major Advisor, 2 Ph.D. students.

Dissertation Committees: Five students.

Gregory, Peter, Professor

President, Latin American Faculty Concilium.

Chairman, Policy Committee, Latin American Institute.

Chairman, Budget Committee, Latin American Institute.

Member, A&S Dean's Advisory Committee on Latin America and I.

Hamilton, David, Professor

Served in senate in fall term, 1982.

Member of Senate Operations Committee.

Member of A&S Task Force on the Liberal Arts Core Curriculum, Fall, 1982.

8. Non-teaching University service (administrative, committee work faculty advisor, etc.) (continued).

Jonas, Paul, Professor

Member: European Committee, A&S.

Asian Committee, A&S.

Russian Committee, A&S.

Advisory Council for the Dean, University College, UNM.

Norton, Roger, Professor

Dissertation advisor for Vera Aragon, Keith Willett, Linda Zimmerman, Vic Brajer, Jim R. Thomas, Shirley Wozniak.

Member of the University's Library Committee.

Oslund, Patricia C., Lecturer II

Worked on pamphlet about women in the NM labor force for NM PIRG.

Tailby, Donald G., Associate Professor

Several departmental MA and Ph.D. Committees.

9. Public service (church activities, Community Chest, Boy Scouts, etc.)

Burness, H. Stuart, Professor

Coach for boy's basketball, Corrales Elementary School Basketball Club.

Church, Albert M., III

Board member of Villa de San Martin.

Cohen, Sanford, Professor

Executive Board, Rio Grande Planned Parenthood Federation.

Gisser, Micha, Professor

Vice President, Experiment in Jewish Learning.

Hamilton, David, Professor

Member of the New Mexico State Labor and Industrial Commission.

Member City of Albuquerque Campaign Practices and Ethics Board.

Member of City of Albuquerque Labor Relations Board (fall 1982)

9. Public service (church activities, Community Chest, Boy Scouts, etc.)

Hamilton, David, Professor

Member of Educational Advisory Board of Consumers Union.

Norton, Roger, Professor

President, Guadalupe Pony Club.

External Ph.D. advisor to Nicole Ballenger, University of California at Davis.

Tailby, Donald G., Associate Professor

Chairman and Board member, Outing, New Mexico Mountain Club.

The Report of the Department of English
July 1, 1982 - June 30, 1983
Hamlin Hill, Chairman

I. GENERAL INFORMATION

A. Honors. During 1982-83, members of the Department garnered a number of honors. Patricia Smith was a recipient of a Rockefeller Foundation grant; Hugh Witemeyer received a Fulbright Grant for his exchange at the University of Würzburg for the Spring of 1984; and David Dunaway received the Deems Taylor Award for the outstanding book on music for 1982. Rudy Anaya participated in an exchange with Quebec and Jim Thorson was our Department's exchange professor at the University of Würzburg. Bill Dowling spent the year in Scotland on a Guggenheim Fellowship.

B. Personnel. Alfred Hornung was a visitor for the Spring semester, from Würzburg, and noted author Wolf Mankowitz began teaching a course in TV script writing for English and Theatre Arts. Marta Weigle was promoted to Professor, and Peter White to Associate Professor. Peter and Tony Marquez were awarded tenure during the year.

C. Curriculum. As the Committee reports indicate, enrollments showed a significant increase at all levels. The Professional Writing Minor and the Period Minor both passed the administrative hurdles and become realities next Fall. In a year plagued by budget restrictions, numerous revisions of the Summer Session schedule, and an unsympathetic attitude on the part of the State Legislature, it's a joy that the English Department remained healthy.

II. REPORTS OF STANDING COMMITTEES

A. Freshman English Program
Director: Michael Hogan
Assistant Director: Peter Page
Freshman English Committee: Michael Hogan, Chair, Peter Page, Lynn Beene, Rick Eden, Joe Zavadil, John Capute, Robin Thevenet, Joyce Emert (General College), Greg Candela (branch campuses).

Notable events within the Freshman English Program during the 1982-83 academic year include the following items. First, the formal shift of English 100 from our department to the General College was begun. While the Freshman English office yet supervises curriculum and most staffing, the course is now officially offered by the General College. The results of this move include greater coordination of effort between English 100 and the other Basic Skills courses and the creation of several positions in the General College for full-time specialists in basic writing.

Second, after several years of study and debate, the University Faculty Senate passed a resolution making English 102 (or an equivalent score on a national exam) a requirement for all students at UNM. Some colleges will use the course as an entrance requirement, and others as an exit requirement. In a related development, the number of students eligible to satisfy this writing-proficiency requirement by passing the CST was reduced to those who had completed a course comparable to English 102 before transferring to UNM. Thus after five years and more of planning and persuasion, we have generally succeeded in drawing together coursework in freshman English and writing proficiency requirements of UNM's various colleges.

Third, our training program for beginning MA-level Teaching Assistants was expanded last year. A significant part of English 537 now includes the new MA student working with an experienced writing teacher. In

particular, in exchange for having to teach only one section in the Fall term, new MA-level TAs are assigned to visit the class meetings of and be observed by one of our experienced freshman English teachers. This new scheme gives the beginning teacher practical help in his or her first term of teaching and also allows the student to better adapt to the demands of a first semester of graduate school.

Finally, JoAnne Altrichter, the present Freshman English secretary, has begun the massive job of cleaning out the files in the FE office.

B. Undergraduate Studies
Director: Paul Davis
Undergraduate Committee: Paul Davis, Chair, Michael Fischer, Lee Bartlett, David Dunaway, Fred Warner, Joseph Zavadil, Mary Bess Whidden.

The good news of 1982-83 is that our major program has passed the crisis and is on the way to recovery. In the past year we have increased the number of majors by 27.5%, from 177 in the Spring of 1982 to 226 in Spring 1983.

This increase is largely due to the track system and to better student advisement. The major tracks have encouraged some students who might not have considered English as a route to the professions if the major were simply identified as English. We have also recruited a significant number of new majors and minors from the letters written to good students in freshman and sophomore classes.

All of the major tracks, except comparative literature, are attracting interested students. Most heartening, perhaps, is the fact that several majors who began as pre-law and pre-business majors have shifted into the liberal arts and pre-graduate tracks as their interest in literature has grown. The track system has had the overall effect, I think, of strengthening the liberal arts mission of the department.

Two new minor programs were approved by the Faculty Senate and will go into operation in the Fall. Medieval studies will offer an interdisciplinary period study linking courses in English with related courses in history, art, music and philosophy. Helen Damico will oversee this new program. The Professional Writing Minor, which has already generated a great deal of public and student interest, will be coordinated for the time being by Peter White.

Our departmental honors program also grew during the year. We had only one honors graduate in 1981-82. Four students earned honors this year: Peter Goss, magna cum laude, worked on the poetry of Yeats with Jim Thorson and Mary Power; Roma Kempe, magna cum laude, did an oral history of an Oklahoma family under the direction of David Dunaway; Leah Mogford, cum laude, worked on Edmund Spenser with Cheryl Fresch; and Joseph Rippen, cum laude, wrote on opera and Shakespeare with Cheryl Fresch. A provocative critique of our honors program by Joe Rippen provides us with an agenda for considering ways to improve the program and for encouraging more students to participate in it.

The bad news of 1982-83 is the continuing weakness in the general literature program. The significant gains in our major and minor programs have not been matched by similar gains in sophomore literature. The number of students in 200-level general literature courses has dwindled from a high of 1453 in Fall 1970 to a low of 340 in Fall 1980. In 1970 sophomore literature represented 23.2% of our departmental effort as measured in student enrollment. In 1980 it represented only 6.3%. Last Fall, the 420 students in sophomore literature represented 6.8% of departmental effort.

The weakness in sophomore literature reflects more than the national desertion of the humanities. Changes in the requirement structure at UNM

over the years have also contributed to the decline. Most notable, perhaps, is the fact that most Arts and Sciences students satisfy the humanities group requirement by taking philosophy and history rather than English. This trend seems to be partly due to our prerequisites which require English 102 before taking sophomore literature. Neither history nor philosophy has prerequisites for their introductory courses. The undergraduate committee believes that we could significantly improve our enrollments in general literature by allowing students to take introductory literature courses without prerequisites.

Of more fundamental concern than the numbers is the lack of literature as part of most UNM students' general education. The low enrollments in general literature classes and the elimination of literature from the 102 curriculum are clearly contributing to the cultural illiteracy of many UNM graduates. In the coming year I think we need to reconsider our general literature program, the content of our introductory literature courses, and how they contribute or fail to contribute to the University's mission in general education.

s/Paul Davis
Associate Professor of English
Director, Undergraduate Studies

C. Creative Writing Program

Director: Gene Frumkin (Fall, 1982)
Lee Bartlett (Spring, 1983)
Creative Writing Committee: Rudy Anaya, Sharon Barba, Tony Hillerman, David Johnson, Tom Mayer, Harvena Richter, Pat Smith

This has been a very lively and productive year for the Creative Writing Program. The major changes in the graduate program approved by the full faculty in the Spring of 1982 (elimination of the two-day comprehensive exam, addition of an oral exam following approval of thesis and a required coursed in the theory of fiction or poetics) went

into effect in September; by the spring semester, the number of students enrolled in the creative writing graduate program climbed from 14 to 22. A new 6-page brochure describing the revised structure of the program, as well as giving information about faculty and course requirements, was completed in February, and by the end of spring semester we had already admitted about 10 first-rate graduate students to the program for Fall, 83. Of those ten, six were awarded teaching assistantships.

Due to the rather quick expansion of the Creative Writing Program (the increase in both graduate and undergraduate applicants, the enormous increase in submissions for the D.H. Lawrence Fellowship, our taking over workshop scheduling, etc.) faculty members voted to establish more formal organization, setting up standing committees:

1. The creative writing committee: composed of all members of the creative writing faculty, as well as two creative writing graduate students and one undergraduate;
2. Reading committee: in charge of scheduling readings by visiting writers. This committee is currently composed of five members--Robin Tawney, Mary Bartlett, Gene Frumkin, Chris Leche, and Lee Bartlett, chair;
3. Committee on publications: currently pursuing two major projects--the possibility of devoting an issue a year of New America to the creative writing section (we will solicit and edit work, produce the magazine, then use it as a text in workshops) and the feasibility of the underwriting of an annual poetry and fiction series by UNM Press; members include Rudy Anaya, Pat Smith, Lee Bartlett, and a graduate student, with David Johnson as chair;
4. Funding committee: looking for ways to raise money to fund our

various prizes and graduate and undergraduate scholarships, the committee includes Rudy Anaya and two graduate students with Tom Mayer as chair.

Jon Bentley, Gene Booth, and Jeanne Shannon finished their M.A. work in Creative Writing this year; additionally six undergraduates finished theses for the major in Creative Writing.

Under the sponsorship of the English Department, the Creative Writing Program, and the Graduate Student Association, the reading committee offered a successful reading series this year; besides a number of noon readings by both faculty members and graduate students, readers included Shirley Kaufman, Donald Eulert, Ruth Stone, Michael Gregory, Nathaniel Tarn, Jeanne Lance, Floyce Alexander, and Leo Romero. Further, the committee undertook a massive campaign for funds from ASUNM and GSA for next year's series--GSA agreed to contribute their largest grant ever for the series ($1,000), while ASUNM (which hadn't contributed funds for a number of years) agreed to give $2,000 to the program.

This year the D.H. Lawrence Fellowship went to Lillian Robinson; the competition drew over six-hundred letters of inquiry and 220 applications/manuscripts. Gene Frumkin, Mary Power, Pat Smith, and Lee Bartlett served on the selection committee.

The Native American/Chicano Creative Writing Fellowship was divided between two new graduate students, Luci Tapahanso and Gil Marin. Sharon Lewis won the Academy of American Poets contest, which was judged by Floyce Alexander. Neither the Lena M. Todd Memorial prize nor the Creative Writing Fellowship were awarded this year, due to lack of funds; we expect to be able to award these prizes next year.

While individual faculty member's achievements are outlined in another section of this report, I'd like to note that Pat Smith won a

Rockefeller Grant and Rudy Anaya continues to be sponsored by the Kellogg Foundation; further, of the top six English Department faculty members on the "point rating scale," three were members of the Creative Writing Faculty.

In April, the first issue of Penguin Dust appeared; it is the new Creative Writing newsletter produced by Elida Lechuga which will appear twice a semester in an attempt to keep both faculty members and graduate students informed of departmental news and publishers seeking manuscripts.

D. Graduate Program

Graduate Director: James Barbour
Graduate Committee: Lee Bartlett, Peter Chase, Robert Fleming, Barry Gaines, Pat Gallacher (addition to the Examining Committee: Ivan Melada).

In 1982-83 there were 77 students enrolled for graduate courses in the fall semester and 73 enrolled for the spring semester. Five doctoral candidates completed their dissertations during the year:

Bernadette Flynn Low, Character as Person and Function: A Study of the Ways Character Contributes to the Meaning and Artifice of Three Plays by Shakespeare (June 1982)

Michael Shearer, Dorothy Parker and Her Poetry (August 1982)

Wayne Erickson, Mapping the Faerie Queene: Quest Structures and the World of the Poem (August 1982)

Kris Lackey, "Dark Sentences": Melville's Use of the Bible in the Early Novels (November 1982)

Mark Facknitz, Henry Greene and the Craft of Fiction (April 1983)

A number of our candidates also got jobs: Jim Wilson, who received his degree in 1981, was hired by the University of Cincinnati; Michael Shearer went to the University of Connecticut; Kris Lackey is teaching at the University of Texas at the Permian Basin; and Mark Facknitz was hired by James Madison University.

Four candidates passed their doctoral comprehensives this year: Denise Warren and Sharon Hileman in the fall, and Jose Morales and Cindy Lewiecki in the spring. There were also some impressive performances on the M.A. exam and the following received degrees: Gayle Keenan and George Hartley in the fall, and James Padilla (high pass), Barbara Jameson, and Elizabeth Matarazzo in the spring. In Creative Writing, Sam Gauny, Jean Shannon and Imogene Booth completed their theses and received their degrees. Certain achievements should also be mentioned. Luci Tapahonso had a book of poems published, Seasonal Woman, and she was also published in national journals including Sinister Wisdom and Greenfield Review; Jon Tuttle's play Remembering Us, was presented at the Vortex Theatre and received good reviews; and the creative writing newsletter Penguin Dust (or perhaps it is the Dusty Penguin or Penguin Droppings) indicates other awards for our graduate students: Sharon Lewis won the UNM Academy of American Poets contest, Gail Gilliland had a long poem accepted in American Poetry Review, and Mary Bartlett had a poem in Century. Other students had articles accepted by some of the top literary journals: Barbara Guth had an article on The Mill on the Floss accepted by Studies in the Novel, Nina Galen's article on Joseph Conrad and Stephen Crane was accepted by Nineteenth-Century Fiction; and Kris Lackey's map of Mardi was accepted by Extracts. There were undoubtedly others of which we were not informed. In recognition of their achievements, the names of Tapahonso, Tuttle, and Lewis were passed on to the Graduate Committee that awards University Fellowships.

A significant change was made in the foreign language requirement. The English Department will now recognize a B or better in the second semester of the 365-366: Readings for Graduates courses offered by the

Modern and Classical Languages Department as satisfying the graduate foreign language requirement. The GSFLT, previously the only means of satisfying the requirement, will now be used as a challenge exam. This change offers us greater flexibility and means that our graduate students can now receive credit for two semester of study with the demonstration of adequate translation skills. Our thanks to Professor Ed Benson from Modern and Classical Languages who worked with us on the program and to the Policy and Personnel Committee for passing the resolution.

Another new item that was printed for our graduate students is the Guide to a Successful Job Search, a ten-page calendar that takes the job candidate from the summer before he or she applies for the job through the interview and the follow-up. The Guide informs the candidate what to do and when to do it; it also contains examples of letters applying for positions and numerous vitas. A meeting was held in October to review the do's and don'ts and to inform candidates of how to set up their folder and how to prepare for the interview. Thanks should go to Rick Eden who was instrumental in printing the Guide and in setting up the meeting. The meeting was helpful and deserves repeating.

The Graduate Committee decided in its final meeting of the year to award two prizes through the Department: the George Arms and the Edith Buchanan Awards given to a graduate student in American and English Literature at the post-comprehensive level. These will be cash awards of $100 with the recipients to be selected by the Graduate Committee. We felt that this was an appropriate way to honor two outstanding professors who spent their careers at the University of New Mexico. It also attempts to recognize excellence within the program. We are currently in the process of soliciting funds for the awards.

While talking about money, it should be noted that the Teaching Assistants and Teaching Associates suffered the same fate as the Faculty: there were no raises for the coming year. This means the University of New Mexico will fall further behind in salaries for graduate teaching assistants. The good news is that we are so far behind already that we will hardly notice the fall. The survey conducted in the fall (see the attached sheets for the salary survey and the language requirement survey) indicates that we rank 18 out of 21 Ph.D. granting institutions in the stipend paid per course, and we rank lowest among the schools in the Southwest.

The administration provided $1500 to fund the proposed journal that the Department has wanted to publish since the old New Mexico Quarterly was taken away fourteen years ago. Fortunately McFarland Publishing of Chapel Hill, North Carolina, agreed to pay the remaining costs and, as a result, the first issue of American Poetry will be published in October. The journal has outstanding contributors and fills a current void in American literature periodicals--it should be in for a long run. This is the result of a lot of work by the editors, Lee Bartlett and Peter White. For our graduate students, it means they can gain valuable publishing experience working with Bartlett and White. (They can also learn to curse in a drawl and be kinky in their spare time.)

The year was saddened by the passing of Leon Howard. Leon was a father to some and a friend to many, both graduate students and faculty. He was an internationally known scholar, one of the few recipients of the Jay B. Hubbell Award, the highest honor given by the American Literature section of the MLA. Leon was one of the last of the American literature scholars with an encyclopaedic knowledge of literature. To us, however, he was

friend, companion, the Gatsby of Friday afternoons and the Marlow of the evenings, raconteur, advisor, consoler, a man of wisdom and independence and courage; a Houyhnhnm among Gullivers, he had little patience with fools until there were only us fools left. He was loved by many and will be missed by his friends around the world.

Barry Gaines will be the Graduate Director next year. Before leaving, I would like to thank everyone for their cooperation: the proctors the Graduate Committee, Hogan, Davis, Carol, my beautiful secretary who believes in "sweetness," and even Ham who upon occasion has been understanding but who has always been sweet. I am going back to teaching. As Mark Twain's little girl said when her family was moving to Missouri, "Good-bye, God, I'm moving to Missouri." (Or did she say, "Good, by God, I'm moving to Missouri"?)

TEACHING ASSISTANT SALARIES

University	Degrees Offered	Term	Courses Taught Per Year	Salary	Tuition Waiver (Cost)	Salary Average, Minus Tuition	Salary Adjusted
U. OF WYOMING	M.A.	Semester	4	$5,525	Yes	$5,525	$5,525
U. CAL--DAVIS	M.A./Ph.D.	Quarter	3	$7,299	No[1] ($1,300)	$5,999	$7,978
U. OF WASHINGTON	M.A./Ph.D.	Quarter	3	$7,035 (pre-M.A.) $7,458 (post-M.A.)	No[2] ($1,701)	$5,545	$7,375
U. OF IOWA	M.A./Ph.D.	Semester	3	$7,620	No[3] ($1,200)	$6,420	$8,538
U. OF INDIANA	M.A./Ph.D.	Semester	3	$4,602[4] 4,752 4,902 5,052	No ($282)	$4,545	$6,045
U. OF UTAH	M.A./Ph.D.	Quarter	3	$4,600 (pre-M.A.) $5,200 (post-M.A.)	Yes	$4,900	$6,517
U.C.L.A.	M.A./Ph.D.	Quarter	3	$7,299 (pre-M.A.) 8,142-8,559 (post-M.A.)	No[5] ($1,200)	$6,625	$8,612
MONTANA STATE	NO PROGRAM						

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University	Degrees Offered	Term	Courses Taught Per Year	Salary	Tuition Waiver (Cost)	Salary Average Minus Tuition	Salary Adjusted
U. OF IDAHO	M.A.	Semester	3	$5,492	No ($871)	$4,621	$6,146
OREGON STATE	NO M.A. IN ENGLISH						
U. OF NEBRASKA	M.A./Ph.D.	Semester	4	$6,600 (post-M.A.)	Yes	$6,600	$6,600
OKLAHOMA STATE	M.A./Ph.D.	Semester	4	$4,950 (pre-M.A.) 5,850 (post-M.A.)	No[12] ($270)	$5,130	$5,130
U. OF ILLINOIS	M.A./Ph.D.	Semester	4	$6,864-7,223 (pre-M.A.) 7,380-7,702 (post-M.A.)	Yes	$7,292	$7,292
WASHINGTON STATE	M.A./Ph.D.	Semester	3	$6,354 (pre-M.A.) 6,741 (post-M.A.)	No[2] ($1,701)	$4,846	$6,446
U. OF COLORADO	M.A./Ph.D.	Semester	4	$5,500 (pre-M.A.) 6,700 (post-M.A.)	Yes	$6,100	$6,100
U. OF OKLAHOMA	M.A./Ph.D.	Semester	4	$5,040 (pre-M.A.) 5,700 (post-M.A.) 6,000 (abd)	No[13] ($282)	$5,298	$5,298

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University	Degrees Offered	Term	Courses Taught Per Year	Salary	Tuition Waiver (Cost)	Salary Average Minus Tuition	Salary Adjusted
KANSAS ST.	M.A./Ph.D.	Semester	4	$4,905 (pre-M.A thru post-M.A.)[5] 5,595 (abd)[6]	No ($68)	$5,182	$5,182
U. OF OREGON	M.A./Ph.D.	Quarter	3	$4,420-4,706 (pre-M.A.) 4,991-5,276 (post-M.A.)	Yes	$4,848	$6,448
U. OF KANSAS	M.A./Ph.D.	Semester	4	$5,200 (pre-M.A.) 5,400 (post-M.A.)	Yes[7]	$5,300	$5,300
COLORADO STATE	M.A.	Semester	4[8]	$4,070 (1st year) 4,300 (2nd year)	Yes	$4,185	$4,185
U. OF TEXAS	M.A./Ph.D.	Semester	3	$4,500-6,500 (pre-M.A.) 6,000-7,000 (post-M.A.)	No[9] ($100)	$5,900	$7,847
U. OF CAL--BERKELEY	M.A./Ph.D.	Quarter	2[10]	$7,300 (post-M.A.)	No[11] ($1,230)	$6,070	$12,140
ARIZONA STATE	M.A./Ph.D.	Semester	4	$6,150 (pre-M.A.) 6,550 (post-M.A.)	Yes	$6,350	$6,350

University	Degrees Offered	Term	Courses TAught Per Year	Salary	Tuition Waiver (Cost)	Salary Average Minus Tuition	Salary Adjusted
U. OF MISSOURI	M.A./Ph.D.	Semester	4	$5,088 (pre-M.A.) 5,512 (post-M.A.)	No[14] ($561)	$4,739	$4,739
U.N.L.V.	M.A.	Semester	4	$5,000 (pre-M.A.)	Yes	$5,000	$5,000
U. OF HOUSTON	M.A./Ph.D.	Semester	4	$4,725 (pre-M.A.) 5,185 (2nd pre-M.A.) 5,870 (post-M.A.) 6,165 (2nd post-M.A.) 6,460 (abd)	No[15] ($274)	$5,407	$5,407
U. OF NEW MEXICO	M.A./Ph.D.	Semester	4[16]	$4,750 (pre-M.A.) 5,150 (2nd pre-M.A.) 6,000 (post-M.A.) 6,300 (Master Teacher)	Yes for pre-M.A. No[17] ($740) for post-M.A.	$5,180	$5,180

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UNIVERSITY RANKINGS

Average Salary

1.	U. OF ILLINOIS	$7,292
2.	U.C.L.A.	6,625
3.	U. OF NEBRASKA	6,600
4.	U. OF IOWA	6,420
5.	ARIZONA STATE	6,350
6.	U. OF COLORADO	6,100
7.	U. CAL--BERKELEY	6,070
8.	U. CAL--DAVIS	5,999
9.	U. OF TEXAS	5,900
10.	U. OF WASHINGTON	5,545
11.	U. OF WYOMING	5,525
12.	U. OF HOUSTON	5,407
13.	U. OF KANSAS	5,300
14.	U. OF OKLAHOMA	5,298
15.	KANSAS STATE	5,182
16.	U. OF NEW MEXICO	5,180
17.	OKLAHOMA STATE	5,130
18.	U.N.L.V.	5,000
19.	U. OF UTAH	4,900
20.	U. OF OREGON	4,848
21.	WASHINGTON STATE	4,846
22.	U. OF MISSOURI	4,739
23.	U. OF IDAHO	4,621
24.	U. OF INDIANA	4,545
25.	COLORADO STATE	4,185

Adjusted Salary (Stipend per Course)

1.	U. CAL--BERKELEY	$12,140	(3,035)
2.	U.C.L.A.	8,612	(2,208)
3.	U. OF IOWA	8,538	(2,140)
4.	U. CAL--DAVIS	7,978	(2,000)
5.	U. OF TEXAS	7,847	(1,967)
6.	U. OF WASHINGTON	7,375	(1,848)
7.	U. OF ILLINOIS	7,292	(1,823)
8.	U. OF NEBRASKA	6,600	(1,650)
9.	U. OF UTAH	6,517	(1,633)
10.	U. OF OREGON	6,448	(1,616)
11.	WASHINGTON STATE	6,446	(1,615)
12.	ARIZONA STATE	6,350	(1,587)
13.	U. OF IDAHO	6,146	(1,540)
14.	U. OF COLORADO	6,100	(1,525)
15.	U. OF INDIANA	6,045	(1,515)
16.	U. OF WYOMING	5,525	(1,381)
17.	U. OF HOUSTON	5,407	(1,352)
18.	U. OF KANSAS	5,300	(1,325)
19.	U. OF OKLAHOMA	5,298	(1,324)
20.	KANSAS STATE	5,182	(1,295)
20.	U. OF NEW MEXICO	5,180	(1,295)
22.	OKLAHOMA STATE	5,130	(1,282)
23.	U.N.L.V.	5,000	(1,250)
24.	U. OF MISSOURI	4,739	(1,185)
25.	COLORADO STATE	4,185	(1,046)

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UNIVERSITY RANKINGS

OF PH.D. GRANTING INSTITUTIONS

Average Salary

1.	U. OF ILLINOIS	$7,292
2.	U.C.L.A.	6,625
3.	U. OF NEBRASKA	6,600
4.	U. OF IOWA	6,420
5.	ARIZONA STATE	6,350
6.	U. OF COLORADO	6,100
7.	U. CAL--BERKELEY	6,070
8.	U. CAL--DAVIS	5,999
9.	U. OF TEXAS	5,900
10.	U. OF WASHINGTON	5,545
11.	U. OF HOUSTON	5,407
12.	U. OF KANSAS	5,300
13.	U. OF OKLAHOMA	5,298
14.	KANSAS STATE	5,182
15.	U. OF NEW MEXICO	5,180
16.	OKLAHOMA STATE	5,130
17.	U. OF UTAH	4,900
18.	U. OF OREGON	4,848
19.	WASHINGTON STATE	4,846
20.	U. OF MISSOURI	4,739
21.	U. OF INDIANA	4,545

Adjusted Salary (Stipend per Course)

1.	U. CAL--BERKELEY	$12,140	(3,035)
2.	U.C.L.A.	8,612	(2,208)
3.	U. OF IOWA	8,538	(2,140)
4.	U. CAL--DAVIS	7,978	(2,000)
5.	U. OF TEXAS	7,847	(1,967)
6.	U. OF WASHINGTON	7,375	(1,848)
7.	U. OF ILLINOIS	7,292	(1,823)
8.	U. OF NEBRASKA	6,600	(1,650)
9.	U. OF UTAH	6,517	(1,633)
10.	U. OF OREGON	6,448	(1,616)
11.	WASHINGTON STATE	6,446	(1,615)
12.	ARIZONA STATE	6,350	(1,587)
13.	U. OF COLORADO	6,100	(1,525)
14.	U. OF INDIANA	6,045	(1,515)
15.	U. OF HOUSTON	5,407	(1,352)
16.	U. OF KANSAS	5,300	(1,325)
17.	U. OF OKLAHOMA	5,298	(1,324)
18.	KANSAS STATE	5,182	(1,295)
18.	U. OF NEW MEXICO	5,180	(1,295)
20.	OKLAHOMA STATE	5,130	(1,282)
21.	U. OF MISSOURI	4,739	(1,185)

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GRADUATE LANGUAGE REQUIREMENT

ENGLISH DEPARTMENTS

University	Course Work	Translation	Examination	Score
OREGON STATE	NO GRADUATE PROGRAM			
MONTANA STATE	NO GRADUATE PROGRAM			
U. OF OREGON	Yes		GSFLT	2 languages: 25% 1 language: 75%
U. OF IDAHO	Yes	Yes (Lang. Dept.)	GSFLT	570 (50%)
U. OF OKLAHOMA	Yes	Yes (Lang. Dept.)	GSFLT	475
U. OF COLORADO	Yes[1]		GSFLT	580
U. OF KANSAS	Yes[2]		GSFLT	550 (German) 560 (French)
U. OF ILLINOIS	Yes[3]		GSFLT	500
OKLAHOMA STATE	Yes	Yes (Lang. Dept.)		
U.C.L.A.	Yes[4]	Yes (both)[5]	GSFLT	600
TEXAS A & M	Yes[6]	Yes[7] (English Dept.)		

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	Course Work	Translation	Examination	Score
COLORADO STATE	Yes		GSFLT	425[8] 560[9]
U. OF INDIANA	Yes	Yes (Lang. Dept.)[10]	GSFLT	580 (French) 552 (German) 578 (Spanish)
U.N.L.V.	Yes[11]	Yes (English Dept.)		
U. OF HOUSTON	Yes		GSFLT	450
ARIZONA STATE		Yes (Lang. Dept.)		
U. OF IOWA	Yes[12]		GSFLT	620
U. OF UTAH		Yes (Lang. Dept.)[13]	MLA	
U. OF ARIZONA[14]	Yes[15]	Yes (English Dept.)	GSFLT	620 (French: 70%) 600 (Spanish: 70%) 610 (German: 65%) 620 (Russian: 65%)
KANSAS STATE		Yes[16] (Lang. Dept.)		
WASHINGTON STATE	Yes	Yes (English Dept.)		
U. OF WASHINGTON[17]	Yes[18]	Yes (Lang. Dept.)		
U. OF CALIF. AT DAVIS[19]	Yes[20]	Yes (English Dept.)	GSFLT	550
U. OF CALIF. AT BERKELEY	Yes	Yes (English Dept.)		

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University	Course Work	Translation	Examination	Score
U. OF TEXAS	Yes		GSFLT	550 650[21]
U. OF WYOMING	Yes	Yes (English Dept.)		
U. OF MISSOURI	Yes[22]		GSFLT[23]	510 (French) 470 (Spanish) 480 (German)
U. OF NEW MEXICO[24]			GSFLT	550

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III. OTHER DEPARTMENTAL ACTIVITIES

A. The Department sponsored the following lectures during the year:

1. September 2, Jeanne Lance, a poet from New York read from her work to faculty and students.

2. September 29, Mike Gregory, a poet from Arizona, read from his work to faculty and students as part of the UNM Poets and Writers Noon Reading Series.

3. October 7, Heide Ziegler of the American Studies Program at the University of Texas at Austin presented a lecture entitled "Irony in Postmodern Literature."

4. October 13, W.J.T. Mitchell, Professor of English and Art and Design, University of Chicago, presented a lecture on "William Blake's Wondrous Art of Writing." He also discussed his work in "The Romantic Self" class (English 411/511) on October 12 and 14. Professor Mitchell's visit to UNM was sponsored by the Graduate Lecture Committee and the Carl Grabo Memorial Fund.

5. November 3, Stanley Noyes read from his poetry. This reading was sponsored by the UNM Poets and Writers Noon Reading Series.

6. November 17, Stanley Cavell, of the Department of Philosophy at Harvard University gave a lecture entitled "In Quest of the Ordinary." He also discussed his work in "The Romantic Self" class on November 16 and 18. Professor Cavell's visit to UNM was sponsored by Dean Charlene McDermott and the Graduate Lecture Committee.

7. February 1, Besty Bowden of Rutgers University gave a lecture entitled "Dylan and Chaucer: The Merchant in Performance."

8. February 16, Nortrop Frye of the University of Toronto delivered a public lecture on "Romance as the Survival of Eros." He also discussed

his critical theory in "The Romantic Self" class on February 15 and 17. Professor Frye's visit to UNM was sponsored by the office of the President of the University.

9. March 9, J. Hillis Miller, Professor of English at Yale University, delivered a public lecture on "From Self to Language: The Linguistic Moment in Modern Poetry." He also discussed his work in critical theory with members of "The Romantic Self" class on March 8 and 10. Professor Miller's visit to UNM was sponsored by the Office of the Provost.

10. March 22, William Kupersmith, professor of English at the Univ. of Iowa, gave a lecture entitled "Roman Satire in Seventeenth Century England."

11. March 28, Werner Habicht of the University of Würzburg in Würzburg, West Germany gave a lecture entitled "Shakespeare in Nazi Germany."

12. March 30, M.H. Abrams, Professor of English at Cornell University gave a public lecture on "Construing and Deconstructing: Wordsworth's 'A Slumber Did My Spirit Seal.'" He also discussed his critical theory with members of "The Romantic Self" class on March 29 and 31. Professor Abrams' visit to UNM was sponsored by the Office of the Provost.

13. April 6, Nathaniel Tarn, a nationally known poet who now lives in New Jersey read from his work.

14. April 13, Shirley Kaufman, an internationally known poet who lives in Isreal read from her poetry to faculty and students.

15. April 14, Jess Bessinger, Jr., Professor of English, New York University, gave a public lecture with slides: "Challenge and Change in Anglo-Saxon Poetry and Archaeology." He also directed a coolquium on April 15. Professor Bessinger's visit was co-sponsored by the Graduate Lecture Series.

16. April 21, Donald Eulert of San Diego read from his poetry to faculty and students as part of the UNM Poets and Writers Series.

17. May 4, Geary Hobson, noted Native American poet and instructor in the Native American Studies program at UNM, read from his work for faculty and students.

18. Last, but not least, the Departmental Intramural softball team claimed its first victory during the Spring, 1983 season. In the final game the Wet Sox, composed of faculty and teaching assistants, beat a team of P.E. majors in extra innings. The score was 36-26.

IV. ANNUAL REPORT ON ACTIVITIES OF INDIVIDUAL FACULTY MEMBERS

1. ADVANCED STUDY

David K. Dunaway
-Attended Quebec Summer Seminar: State University of New York-Plattsburgh

2. SABBATICALS, ETC.

Rudolfo A. Anaya
-UNM Sabbatical January, 1982 through December, 1982.
-Travel-Mexico and Canada

Sharon R. Barba
-Travel-Washington, D.C., July, 1982.

Lee A. Bartlett
-Summer research at U.C.L.A., William Clark Memorial Library, U.C. Berkeley.

Paul B. Davis
-Research trip to several mid-western libraries during May and June

David K. Dunaway
-Summer reseach in Canada; University of Montreal, McGill, University of Toronto, University of British Columbia, Provincial Archives of British Columbia, Center for Folk-cultural Studies, Ottawa

Michael Fischer
-Sabbatical leave, Spring semester, 1982.

Cheryl H. Fresch
-Two-month period of summer research at the Andover-Harvard Theological Library in Massachusetts.

Gene Frumkin
-Served as visiting exchange professor at the University of Hawaii, in Spring 1982, completing one year residence there.

Barry J. Gaines
-Visiting Professor, Institut für Englische Philologie, Universitat Würzburg, West Germany.
-Research in England (British Library, Bodleian-Oxford, John Rylands-Manchester, etc).
-Research in Poland (University Library-Wroclaw).
-Research in France (Biblioteque Nationale).

Hamlin Hill
-Guest Professor, University of Würzburg, May-July 1982.

Michael J. Hogan
-Graduate course for 25 Albuquerque Public School teachers at Eldorado High School, Spring 1982.

Mary Power
-Visiting Associate Professor, University of Wisconsin, Madison, Wisconsin, January - May, 1982.

Patricia C. Smith
-Director, Southwestern Literature Seminar, Las Palomas Institute (A course primarily for public school teachers in the Southwest seeking certification.).
-Workshop, February 11-12, Rock Point Navajo Community School, Rock Point, Arizona.

James L. Thorson
-Travel to London, Oxford, Dorchester, etc. for literary research, theatre, and opera, January, 1982.
-Travel to Gallup, New Mexico for research on Philip Stevenson, March, 1982.
-Acting Chairman, English Department, Summer, 1982.

NEW SCHOLASTIC HONORS, ETC.

Rudolfo A. Anaya
-Three-year Kellogg Foundation National Fellowship

Lee A. Bartlett
-Invited to join Poets & Writers

Helen Damico
-Research Allocations Grant. Individual research in progress: Fr. Klaeber: Letters from Bad Koesen.
-American Philosophical Society Grant. Individual research in progress to supplement RAC grant for Fr. Klaeber: Letters from Bad Koesen.
-NEH Publication Grant to the University of Wisconsin Press: Publication of Beowulf's Wealtheow and the Valkyrie Tradition.
-University of New Mexico Research Grant for publication. Matching grant to NEH.
-Research Allocations Grant. Techncial Assistance: Editing for Beowulf's Wealhtheow and the Valkyrie Tradition.

David K. Dunaway
-American Studies Teaching Award (with Peter White)
-Deems Taylor Award for "Outstanding Book on American Music" from American Society of Composers, Authors, and Publishers (ASCAP).
-Honorary listing in Contemporary Authors, 1982.

3. continued

Barry J. Gaines
-Appointed to Editorial Board Medieval and Renaissance Drama in English.

Hamlin Hill
-Annual Research Lecturer, UNM, 1982

Mary Power
-UNM Research Allocations Committee Summer Grant, 1982.

Patricia C. Smith
-Rockefeller Grant. One of twelve scholars awarded grant through SIROW for work on a book of essays on Southwestern women artists and landscape. Grant runs from Jan. 1, 1983 through Jan. 1, 1985.

Peter White
-American Studies Teaching Award (with David K. Dunaway), 1981-1982.

4. PUBLICATIONS

Rudolfo A. Anaya
-The Silence of the Llano, short story collection, (Quinto Sol/ Tonatiuh International Publishers, 1982), 173 pp.
-"The Magic of Words," essay for UNM Library, (UNM Press, 1982). Edited by Paul Vassallo, Dean, UNM Library. 83 pp. Bilingual edition.
-"B. Traven is Alive and Well in Cuernavaca," (Mother Jones, July 1982).
-"Memories of a New Mexico Christmas," a personal essay (New Mexico Magazine, December 1982).
-"Life, Liberty, and the Pursuit of Publication," short essay on minority publishing to Hispanic Link, Washington, D.C., 1982.
-"The Captain," (A Decade of Hispanic Literature: An Anniversary Anthology, Revista Chicano-Riquena Press, University of Houston, 1982). pp. 151-160.

Sharon R. Barba
-"A Cycle of Women," (poem) in Spiders and Spinsters, ed. Marta Weigle (UNM Press, 1982).
-"I Can't Help Noticing. . ." (poem) in New America, Vol. 4, No. 3 (Spring, 1982), p. 41.

James Barbour
-"Ball Four with Epilogue" (with William C. Dowling) reprint in The American Self,(UNM Press: Albuquerque, 1982). pp. 193-210.

Lee A. Bartlett
-Birth of a Poet: The Santa Cruz Meditations of William Everson (Santa Barbara: Black Sparrow Press, 1982). 204 pp.
-"American Poetry, 1940's to the Present," American Literary Scholarship 1980 (Durham: Duke University Press, 1982), pp. 385-412.

4. Lee A. Bartlett, continued

-"Gary Snyder's Myths and Texts and the Monomyth," Western American Literature (August, 1982). pp. 64-76.
-"On Creeley's 'I know a Man,'" The Explicator (Fall, 1982). pp 53-4.
-"Ezra Pound and James Dickey: A Correspondence and a Kinship" (with Hugh Witemeyer), Paideuma (Fall, 1982). pp. 290-310.

(Reviews)
-"News of the Universe by Robert Bly," Western American Literature (May, 1982). pp. 66-8.
-"Ginsberg, Bishop, and Black Sparrow: Three New Bibliographies," Arizona Quarterly (Summer, 1982). pp. 183-5.
-"Two Poets Selected: Mark Strand and Lawrence Ferlinghetti," Arizona Quarterly (Autumn, 1982). pp. 275-8.
-"Bounds Out of Bounds: A Compass for Recent American and British Poetry by Roberta Berke," Western American Literature (May, 1982). pp. 84-5.

Helen Damico
-"Sorlabattr and the Hamma Episode in Beowulf," Old English Newsletter Vol. 15, No. 2, pp. 42-44.

David K. Dunaway
-How Can I Keep From Singing, Revised, paperback, (McGraw Hill, 1982). 386 pp.
-"Oral History and Folklore: an annotated bibliography," Craft of Public History (Yale University Press, 1982) E. Douglass, Ed.
-"The Days of Yesteryear: Internal Security Today," Century (June 16, 1982). pp. 23-4.

Morris Eaves
-William Blake's Theory of Art. (Princeton University Press, 1982). xii + 217 pp., illustrated.
-Editor, Romantic Tests, Romantic Times: Homage to David V. Erdman. Festschrift published as special issue of Studies in Romanticism (Fall, 1982). 300 pp., illustrated.
-"Teaching Blake's Relief Etching," reprinted in Sparks of Fire: Blake in a New Age, ed. James Bogan and Fred Goss (Richmond, CA: North Atlantic Books, 1982). pp. 127-40.
-"Bread, Politics, and Poetry," an interview with David V. Erdman, in Romantic Texts, Romantic Times, Studies in Romanticism (Fall, 1982).
-Editor, "Blake Future," in Romantic Texts, Romantic Times, Studies in Romanticism (Fall, 1982).
-Review of Leopold Damrosch, Jr., Symbol and Truth in Blake's Myth, JEGP, 81 (1982), pp. 438-41.

Michael Fischer
-The Reader in the Text: Essays on Audience and Interpretation, Susan R. Suleiman and Inge Crosman, (Review) Philosophy and Literature, 5 (Fall, 1981), pp. 233-34.
-"Marxism and English Romanticism: The Persistence of the Romantic Movement," Romanticism Past and Present, 6 (1982), pp. 27-46.

4. Michael Fischer, continued

-"Morality and History in Coleridge's Political Theory." Studies in Romanticism, 21 (Fall, 1982). pp. 457-60.

Robert E. Fleming
-Introduction to A Tramp Across the Continent by Charles F. Lummis. (Lincoln: University of Nebraska Press), pp. v-xv.
-Review, Hemingway: The Critical Heritage by Jeffrey Meyers. The Hemingway Review, 2 (Fall, 1982). pp 83-85.

Cheryl H. Fresch
-"'And brought her unto the man'; The Wedding in Paradise Lost," Milton Studies, XVI (1982), 19 pp.

Gene Frumkin
-Book: Clouds and Red Earth (Athens, Ohio: Chicago, London: Ohio University Press, Swallow Press, 1981), March, 1982, 68 pp.
-Included in anthologies: "The Happy Man," Toward the Twenty-First Century: Tales of Terror, Mystery and Mercy (Corrales, NM: Red Earth Press, 1982), pp. 97-102.
-"Long and Shadowy Habits," "Passing By," "The Moon at Canyon de Chelly," Dacotah Territory: A 10-Year Anthology (Fargo, N.D.: North Dakota Institute for Regional Studies, 1982). pp. 57-60.
Poems:
-"Problems Can be Solved, Mysteries Only Lived," Yankee, Vol. 46, No. 3, p. 171.
-"Her Secret," "Mandelstam #6," HAPA, No. 2 (Spring 1982), pp. 98, 99.
-"The Style," New Letters, Vol. 48, No. 2 (Winter, 1981/82), p. 88.
-"What We're Doing This Summer," Puerto del Sol, Vol. 17 (Spring, 1982), p. 47.
-"The Tape," "The Woman," Poetry Now, Vol. VI, No. 4, p. 20.
-"Three Conditions," "Ground and Figure," New Mexico Independent, Vol. 86, No. 48, p. 7.
-Review, Breath, by Jenne Andrews in Rio Grande Writers Newsletter (Autumn, 1982), p. 3.

Barry Gaines
-Review, William Shakespeare: Records and Images by S. Schoenbaum, Shakespeare Studies, XV (1982).
-Associate Editor, Shakespeare Studies, Vol. XV.

Patrick J. Gallacher
-"Dame Alice and the Nobility of Pleasure," Viator, Volume 13 (1982), pp. 275-93. (Center for Medieval and Renaissance Studies, University of California, Los Angeles.)

Hamlin Hill
-Mark Twain's Collected Letters, Vol. 2 (with Frederick Anderson), University of California Press, 1982, 500 pp.
-"Roughing It: The End of the American Dream," American Renaissance and The American West (Laramie: University of Wyoming, 1982), pp. 3-13.
-"Mark Twain," Dictionary of Literary Biography, Vol. 12 (Detroit: Gale Research Company, 1982), pp. 71-94.

4. Hamlin Hill, continued

-"The Great American Novel," reprinted from America's Humor by Walter Blair and Hamlin Hill in Critical Essays on Philip Roth, ed. Sanford Pinsker (Boston: G. K. Hall & Co., 1982), pp. 217-228.
-"Archy and Uncle Remus" reprinted from The Georgia Review in Twentieth-Century Literary Criticism, ed. Sharon K. Hall (Detroit, Gale Research Co., 1982).

Michael J. Hogan
-"Graduate Courses in Composition," Teaching Writing, VI (Fall, 1982), pp. 22-25.

David M. Johnson
Articles:
-"Travel Rites in Mexico," Century, (April 7, 1982), pp. 14-18.
-"The Messiah of Mesoamerica," Arizona Quarterly (Autumn, 1982), pp. 241-250.
Poems:
-"February in New Mexico," New Mexico Independent (April 23, 1982).
-"A Time of Amateurs," Writers Forum 8, pp. 193-5.
-"Today," Century (May 19, 1982), p. 30.

Antonio Marquez
-"The Achievement of Rudolfo A. Anaya," The Magic of Words (University of New Mexico Press, 1982), pp. 33-52.
-"Literatura Chicanesca," A Decade of Chicano Literature (Santa Barbara, California: Editorial La Causa, 1982), pp. 73-81.

Thomas Mayer
Articles:
-"Albuquerque Airport Anguish," Aviation Consumer (June 19, 1982), 10 pp.
-"Albuquerque Airport Update," Aviation Consumer (August, 1982), 5 pp.
-"Flying Mexico," Aviation Consumer (December, 1982), 11 pp.

Ivan Melada
Review:
-"War in Melville's Imagination by Joyce Sparer Adler," Studies in the Novel, 14 (Summer, 1982), pp. 220-22.

Mary Power
-"The Figure of the Magician in The Third Policeman and The Hard Life," Canadian Journal of Irish Studies, Vol. VIII, no. 1 (June, 1982), pp. 55-63.
-"James Joyce and Irish History," Air Waves (May, 1982), pp. 22-23.

David Remley
-"Afterword," Johnny Christmas (Albuquerque: UNM Press, 1982).
-"Sacajawea of Myth and History," Women and Western American Literature, ed. by Helen Winter Stauffer, and Susan J. Rosowski (Troy, NY: Whitson, 1982), pp. 70-89.
Reviews:
"Russell H. Beatie, Saddles," Journal of the West, July 1982.
"David Dary, Cowboy Culture," Annals of Iowa: A Quarterly Journal of Western History (Fall, 1982).

Harvena Richter
Articles:
-"The Canonical Hours in Mrs. Dalloway," Modern Fiction Studies, Vol. 28, no. 2 (Summer, 1982), pp. 236-240.
Novel excerpt:
-"The Storm," South Dakota Review, Vol. 19, no. 4 (Winter, 1982), pp. 37-45.
Poems:
-"Corn Mother," New America, Vol. 4, no. 3, p. 96.
-"Sheryl Rising," Christian Science Monitor (March 17, 1982), p. 20.
-"The Discards," New Mexico Independent (April 30, 1982), p. 7.
-"Cutting Iris," Christian Science Monitor (October 25, 1982), p. 25.
-"All Yellow," New Mexico Independent (December 3, 1982), p. 7.
Essays:
-"A Scent of Mosses," Christian Science Monitor (January 11, 1982), p. 21.
-"Echo of a Giant," Christian Science Monitor (November 4, 1982), p. 21
Poem and Essay:
-"Collecting Chapels," Christian Science Monitor (March 11, 1982), p. 21.

Patricia C. Smith
Short Story:
-"Flute Song," New America, Vol. 4, no. 3 (Spring, 1982), pp. 14-25.
Article:
-"Up at Mabel's Place" Century, (November, 1982).

Ronald T. Swigger
-"Des Contributions joyciennes a l'elaboration de Guele de Pierre en Saint-Glinglin," Bulletin of Les Amis de Valentin Bru, no. 20 (October, 1982), pp. 19-23.

James L. Thorson
-"Reflections of Oxford in The Expedition of Humphry Clinker," in Oxford, The Journal of the Oxford Society, Vol. 34, no. 2 (December, 1982), pp. 34-44.

Mary Martha (Marta) Weigle
-Spiders And Spinsters: Women and Mythology, (UNM Press, 1982).
-Santa Fe and Taos: The Writer's Era, 1916-1941 (with Kyle Fiore), (Santa Fe: Ancient City Press, 1982).
-New Mexico Artists and Writers: A Celebration, 1940 (with Kyle Fiore), (Santa Fe: Ancient City Press, 1982).
-"The Southwest: A Regional Case Study," Handbook of American Folklore, Richard M. Dorson, et. al., editors. (Indiana University Press, 1982).
-"Brothers and Neighbors: The Celebration of Community in Penitente Villages" (with Thomas R. Lyons), Celebration: Studies in Festivity and Ritual, Victor Turner, ed. (Smithsonian Institution Press, 1982), pp. 231-51.
-"From Alice Corbin's 'Lines Mumbled in Sleep" to 'Eufemia's Sopapillas': Women and the Federal Writers' Project in New Mexico" (with Mary Powell), New America, Vol. 4, no. 3, pp. 122-23.
Reviews:
-"The South Corner of Time: hopi navajo papago yaqui tribal literature, edited by Larry Evers et. al." New America, Vol. 4, no. 3, pp. 123-24.
-"Southwestern Indian Ritual Drama, edited by Charlotte J. Frisbie." New America, Vol. 4, no. 3, pp. 122-23.

4. Mary Martha (Marta) Weigle

-"'And Other Neighborly Names': Social Process and Cultural Image in Texas Folklore," edited by Richard Bauman and Roger D. Abrahams," American Anthropologist, Vol. 84, pp. 190-91.
-"Sacred Words: A Study of Navajo Religion and Prayer, by Sam D. Gill," Journal of Anthropological Research, Vol. 38, pp. 331-32.

Mary Bess Whidden
-"Garbo Is There," Century, 2 (January 6, 1982), p. 5.
-"Tell Us, Inc.," Century, 2 (January 20, 1982), pp. 5-7.
-"Through the Molasses Darkly," Century, 2 (February 3, 1982), pp. 5-6.
-"Thank You for Your Letter," Century, 2 (March 3, 1982), pp. 25-26.
-"She Never Was a Clerk," Century, 2 (March 17, 1982), pp. 7-9.
-"Wonderful Every Single Day," Century, 2 (April 7, 1982), pp. 5-6.
-"Dear Nanny," Century, 2 (April 21, 1982), p. 9.
-"Pac-Man Pox," Century, 2 (May 5, 1982), p. 8.
-"My Car," Century, 2 (May 19, 1982), pp. 8-9.
-"Dressing for a Blessing," Century, 2 (June 2, 1982), p. 10.
-"Dear Nanny," Century, 2 (June 16, 1982), pp. 11-12.
-"My Summer Vacation," Century, 2 (July 7, 1982), pp. 7-8.
-"Twas Brillig in the Soup de Jour," Century, 2 (August 4, 1982), p. 5.
-"Caint Glow for Perspirin," Century, 2 (August 18, 1982), pp. 8-11.
-"Junk Mail Junkie," Century, 2 (September 1, 1982), p. 5-8.
-"Heal Thy Office Call," Century, 3 (October 20, 1982), p. 5.
-"Unhallowed Nights," Century, 3 (November 3, 1982), pp. 5-6.
-"Crab Apples," Century, 3 (November 17, 1982), pp. 8-9.

Peter White
-"Benjamin Tompson," in Dictionary of Literary Biography, 1982.
-"Charles Chauncy," in Dictionary of Literary Biography, 1982.
-"Benjamin Tompson," in American Writers Before 1800, 1982.
-Reviews in Eighteenth Century Studies in Bibliography, 1982.

Hugh Witemeyer
-"Ezra Pound and James Dickey: A Correspondence and a Kinship" (with Lee Bartlett), Paideuma, 11 (Fall, 1982), pp. 290-312.
-Review of The Illustrations of William Makepeace Thackerary by John Buchanan-Brown and of Victorian Novel Illustration: A Selected Checklist 1900-1976 by John Charles Olmsted and Jeffrey Egan Welch, in Dickens Studies Newsletter, 13 (1982), pp. 24-27.
-"Senators and Censors," humanities newspaper article syndicated by the New Mexico Humanities Council and published in the Hobbs Daily News-Sun (October 7, 1982); the New Mexico Independent (October 8, 1982); the Hobbs Flare (October 14, 1982); and the Rio Grande Sun (October 21, 1982).

5. OTHER RESEARCH PROJECTS OR CREATIVE WORK IN PROGRESS, ETC.

Rudolfo A. Anaya
-Rosa Linda, a screenplay for Corporation of Public Broadcasting in progress.
-The Manuscripts of the Duke of Albuquerque, a novel in progress.
-Who Killed Don Jose?, a play in progress.
-"Aztlan," an essay in progress.
-"Chispas," a short story in progress.
-La Llorona, a young adult novel ready to be submitted.

James Barbour
-"Death of a Lightweight" (docu-drama) on KOB-TV and KUNM. (New Mexico Humanities Council). 54 minutes.

Lee Bartlett
-On Writing the Waterbirds: Collected Forewards and Afterwords of William Everson, edited with an introduction and notes; forthcoming from Scarecrow Press, N.J.
-The City of Poetry: Selected Reviews of Three Decades by Karl Shapiro, with an introduction by Lee Bartlett, currently at UNM Press.
-"Gary Snyder's Han-shan" (article) in press--SageTrieb: Poets in the Pound/Williams Tradition (University of Maine).
-"Scratching the Beat Surface by Michael McClure" (review), forthcoming Western American Literature.
-"American Poetry, 1940's to the Present" (article), forthcoming in American Literary Scholarship 1981 (Duke University, in press).
-"Song of the Moth: William Everson and C.G. Jung" (article) currently at The Centennial Review.
-"On Kenneth Rexroth's The Homestead Called Damascus" solicited by Sagetrieb for their special Rexroth issue (in progress).
-"Lines for an Elegy" (poem) forthcoming in Cumberland Review; "Four Poems" forthcoming in The California Quarterly.
Jung and the Text: Studies in Analytical Psychology and Modern Literature (in progress).

LynnDianne Beene
-"Language Patterns in Mankind," USF Language Quarterly, (forthcoming, Spring 1983).
-"Review of Communicating Facts and Ideas in Business," Journal of Technical Writing and Communication (forthcoming, Spring, 1983).
-"Assignment Making, Research in Teaching Composition, Michael Moran and R. Lunsford, ed. (forthcoming, Greenwood Press, 1983).
-"Subjective and Modal Usage in American English" (Submitted for publication).
-"Language Patterns of New Mexico (work from Rocky Mountain Linguistic Atlas).
-"Pragamatics and Discourse Models: Necessary Criteria" (Submitted for publication).

Helen Damico
-"Sorlaþattr and the Hama Episode in Beowulf, Scandinavian Studies (forthcoming, Summer 1983), 25 pp.
-Beowulf's Wealhtheow and the Valkyrie Tradition (forthcoming, University of Wisconsin Press).

5. Helen Damico, continued

-"Curricular Renewal in Old English and Old Icelandic Studies: An Interdisciplinary Cross-cultural Approach for the Undergraduate," (25 pp, article circulating).
-"Frederick Klaeber: Letters from Bad Koesen," biographical monograph in progress.
-"Brunanburh, 20a: A New Kenning," article in progress.
-"Wael/Weal: Sound-play in the Wanderer," article in progress.

Paul Davis
-"The Message of A Christmas Carol," circulating.
-At work on a social history of A Christmas Carol.

David K. Dunaway
-Works in progress: A monograph on sociolinguistics; anthology on oral history
-Resubmitted a grant proposal to the New Mexico Humanities Council titled: "Humanities Radio."
-Submitted proposal for Fulbright Lectureship in Africa.

Morris Eaves
-Review of Martin Butlin, The Drawings and Paintings of William Blake, 2 volumes, (Yale University Press), Studies in Romanticism, scheduled for publication in 1983.
-The Artistic Machine: Blake's Illuminated Books and the Institutions of Memory, book in progress.
Submitted applications for the following grants to aid research:
-Rockefeller Foundation Humanities Fellowship (July 83-July 84, $15,000)
-American Council of Learned Societies Fellowship (July 83-July 84, $15,000)
-Guggenheim Foundation Fellowship (July 83-July 84, $15,000)

Rick Eden
-"Paragraphing for the Reader," accepted by College Composition and Communication, tentatively scheduled for October, 1983.
-Abstracts of pertinent articles in QJS and STCS (QJS, 1974-present, STCS, 1978-present) accepted by Abstracts of English Studies.
-"Detective Fiction as Satire," submitted to Novel.
-"Against Language Readers" (with Lynn Beene and Morris Eaves) submitted to College English.
Parody and the Rhetoric of Fiction, book in progress.

Michael Fischer
-Reviews forthcoming in Journal of Aesthetics and Art Criticism, Philosophy and Literature, and Blake: An Illustrated Quarterly.
-Deconstruction and the Defense of Poetry in Modern Criticism, book completed and submitted for publication.
-Essay-review: "Is Literature Still Worth Discussing?," to be reprinted in Contemporary Literary Criticism, Vol. 24.

Robert E. Fleming
-One article and one note on Hemingway pending at Studies in American Fiction and NMAL.
-Article on Willard Motley pending at Dictionary of Literary Biography.
-Book in progress: A critical work on James Weldon Johnson.
-Sinclair Lewis article pending, Hemingway article circulating.

5. continued

Cheryl H. Fresch
-"The Temptation and Fall of Spenser's Guyon and Milton's Adam," 24-page article, submitted.
-"The Education of Adam and the Story of Noah in Paradise Lost,' 26-page article, being reworked.
-"Eavesdropping in As You Like It," 21-page article, being restructured.
-"The Theology of Faith versus Works: Paradise Lost XI-XII," article in progress.

Gene Frumkin
-Completed manuscript of poems entitled A Cleaner Cell on a Quieter Floor, circulating.

Barry J. Gaines
-Completed edition of A Yorkshire Tragedy.
-Received RAC grant for stage history research: $1020 for "Research in Boston and Washington to Complete the Stage History of a Critical Edition of A Yorkshire Tragedy."
-Gathered data for articles on "Malory fragements" and "Shakespeare Quartos in Poland."

Patrick J. Gallacher
-"Perceptions and Reality in the Miller's Tale," forthcoming, Chaucer Review, 1983.
-"Medieval Allusion in the Summoner's Tale," circulating.

Michael J. Hogan
-Completed Words and the Writer: A Language Reader, Scott, Foresman and Co., forthcoming January 1983.
-Completed Teacher's Manual for Words and the Writer, approx. 70 pp.

Antonio Marquez
-"A Discordant Image: The Mexican In American Literature," completed and accepted by Minority Voices.
-"The American Dream In the Chicano Novel," completed and accepted by Rocky Mountain Review.

Thomas Mayer
-Finished long novel, sent to agent.
-Began new novel.
-Several magazine pieces in contemplation or under way.

David McPherson
-"The Attack on the Stage in Shakespeare's Time," forthcoming, Comparative Literary Studies.
-"On the Significance of Jonson's Comic Names," forthcoming, Philological Quarterly.
-Completed rough draft of book length study of Ben Jonson.

Ivan Melada
-Book manuscript accepted: "Guns for Sale: War and Capitalism in English Literature, 1851-1939," McFarland Publishing, 1983.
-Submitted proposal for a book on Sheridan LeFanu to the publishers of Twayne's English Authors Series.
-Articles on Cooper, Cather, Twain and Ruskin circulating.

5. Ivan Melada, continued

-Review of The Image of the City in Modern Literature by Burton Pike accepted by The Journal of English and German Philology.
-Review of The Socialist Novel in Britian by H. Gustav Klaus, commissioned by Victorian Studies.

Peter C. Page
-Work in progress: Writing in the Curriculum: Methods and Models, a textbook. Prospectus and chapters circulating.
-Articles in American Literature revised and circulating.

Roy Pickett
-Reading in approaches to teaching composition, in discourse analysis and in critical deconstructionism.

Mary Power
Book in progress: Popular Culture in Ulysses.
Long article or monograph in progress: The Reputation of Queene Maeve in the Irish Literary Renaissance.

David Remley
-Additional research in western literature at various libraries, archives, and museums of note.
-Researched U.S. Calvary operations in the West in the 19th Century at the Santa Fe Trail Archives and Museum, Larned, Kansas; Fort Larned National Park; Fort Scott National Park, Fort Riley United States Calvary Museum; Fort Leavenworth Museum; and Jefferson Barracks Park, St. Louis, Missouri, July-August, 1982.

Harvena Richter
-Work in progress: Novel completed, on way to agent. Short stories and short novel. Book on father's writing notebooks.

Patricia C. Smith
-"Ain't Seen you Since; Dissent among Female Relatives in Native American Women's Poetry" and "Coyote Ortiz: Canis latrans latrans in the Poetry of Simon Ortiz," in Teaching Native American Literature," ed. Paula Gunn Allen, forthcoming, MLA, spring, 1983.
-"Native American Poetry, 1968-1983," Chapter in A Literary History of the American West, ed. J.J. Lyon, forthcoming, July, 1983.

Ronald T. Swigger
-Paper on Queneau and the Classics accepted for American Comp. Lit. Triennial meeting March, 1983.

James L. Thorson
-Norton Critical Edition of Tobias Smollett's The Expedition of Humphry Clinker, an Authoritative Text, Contemporary Responses and Criticism, 435 pages, March, 1983.
-"Gomorrah on the Puerco: A Critical Study of Philip Stevenson's Proletarian Epic, The Seed" (with Connie Thorson), in Labor in New Mexico: Strikes, Unions, and Social History, pp. 146-75, UNM Press, April, 1983.
-Review of Michael Hunter, Science and Society in Restoration England, forthcoming, Eighteenth Century Studies.

5. continued

Fred B. Warner
-"Books That Went to War," a study of popular reading during W.W. I, work in progress.

Mary Martha (Marta) Weigle
-Final Report, June 28, 1982, for National Endowment for the Humanities grant no. RS-00056-79-589, "Governmental Support for the Arts in New Mexico, 1933-1943" (with William Wroth, Taylor Museum, Colorado Springs Fine Arts Center). Initial grant: $32,400 (1 July 1979-31 December 1980); extension: $15,000 (1 January-31 December 1981).

Mary Bess Whidden
-New Mexico Humanities Council: Project Director, Ad Hoc Committee on Literature for the Public, cash grant $11,432.
-Applied and in finals but did not receive a Faculty Grant, Woodrow Wilson National Fellowship Foundation.

Peter White
-Co-author with Marta Weigle a book on the Folklore and Folklife of New Mexico, under contract with UNM Press.
-Co-edit with Lee Bartlett American Poetry, a tri-quarterly journal, McFarland Press.
-Continuing work on Puritan Poets and Poetics, submitted to Penn State Press, forthcoming, 1983.

Joseph B. Zavadil
-Research and writing article on Chaucer's tales of the Summoner, Friar, and Wife of Bath.

6. ACTIVITIES IN LEARNED AND PROFESSIONAL SOCIETIES

Rudolfo A. Anaya
-Rio Grande Writers meeting in El Paso, Texas
-Member of Literature Panel for New Mexico Arts Commission
-Delegate, "Dialogo de las Americas," International Conference of the Sovereignty of the American Nations, Mexico City.

James Barbour
-Member, MLA, RMMLA, Society for the Study of Midwestern Literature, Melville Society, SABR.

Lee A. Bartlett
-Attended Modern Language Association Annual Meeting, Los Angeles, California, December 27-29, 1983.

LynnDianne Beene
-"Subjunctive and Modal Usage in American English," paper presented at the Wyoming Conference on Freshman English, June 1982.
-Attended: College Composition and Communication Conference, March 1982.
New Mexico Council of Teachers of English Conference, October 1982.
-Member, Committee on Teaching Dialectology, American Dialectology Society.

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6. continued

Helen Damico
-"Curricular Renewal in Old English and Old Icelandic Studies," paper read at Society for Scandinavian Studies (international organization) May, 1982.
-The Medieval Institute, 17th International Congress, Kalamazoo, May, 1982. Chaired special session on The Female Temperament in Old English Literature and read paper: "The State of Feminist Studies in Old English Literature."

David K. Dunaway
-Coloquium on Oral History, Oral History Association.

Morris Eaves
-Blake and Criticism (a conference at University of California, Santa Cruz), May 1982. Read a paper: "Blake's Illuminated Books and Criticism." Served on two panels.
-Impact of Technical Change on Literature (special session, Modern Language Association annual meeting, Los Angeles), December 1982, read a paper: "Swinburne's Blake and the Institutions of Memory."

Rick Eden
-Chair, Session F-14, "Paragraph Theory," Conference on College Composition and Communication, March 18-20, 1982, San Francisco, CA.
-Organizer and presenter, Special Session 537, "Detective Fiction; New Approaches to the Problem of Genre," Modern Language Association annual meeting, December 27-30, 1982, Los Angeles, CA

Michael Fischer
-Member, Modern Language Association.
-Delivered paper, "William Blake's Quarrel with Indeterminacy," Blake and Criticism Conference, U. of California, Santa Cruz, May 20-22, 1982.

Robert E. Fleming
-Read a paper, "Hemingway's 'The Killers': The Map and the Territory," at the 1982 meeting of the Rocky Mountain Modern Language Association in Salt Lake City, October 22, 1982.

Cheryl H. Fresch
-Attended 1982 Modern Language Association annual meeting in Los Angeles in December 1982.

Gene Frumkin
-Member, Committee I, Hawaii Literary Arts Council.
-Member, Rio Grande Writers Association.
-Member, Associated Writing Programs.

Barry J. Gaines
-Chairman, Nominating Committee, Renaissance Section, South Atlantic Modern Language Association.
-Elected to Delegate Assembly, Modern Language Assn.
-Elected to 5-person Steering Comm. of Delegate Assembly, M.L.A.
-Nominated as Trustee, Shakespeare Association of America.

6. continued

Patrick J. Gallacher
-Member of Editorial Board, New Wycliffe Society.

Hamlin Hill
-"Roughing It: The End of the American Dream," WHIM Conference, Arizona State University, 2 April 1982.
-Chair, American Humor Studies Association session, Modern Language Association Annual Meeting, Los Angeles, 29 December, 1982.
-President, American Humor Studies Association, 1982.

Michael J. Hogan
-Attended CCCC, March 1982, San Francisco.
-Chaired a panel of teachers, BEF personnel, and State Department of Education members at New Mexico Quality Education Conference II, June 1982, Las Cruces, New Mexico.

Antonio Marquez
-Paper: "Eros Denied: Sex in the Contemporary American Novel," Rocky Mountain Modern Langauge Association (Salt Lake City, Utah), October 22, 1982.

David C. McPherson
-Member, Modern Language Association and Medieval and Renaissance Drama Society.

Ivan Melada
-Member, Modern Language Association, Rocky Mountain MLA.
-Active Member, Friends of the Huntington Library.

Peter C. Page
-"Basic Writing and the Teaching of Grammar," lecture delivered at the New Mexico Council of Teachers of English, Albuquerque, Sept. 24, 1982.
-Member, Modern Language Association.
-Member, Poe Studies Association.

Mary Power
-"Joyce and Modernism Reconsidered," lecture for the Joyce Centenary, sponsored by English Department, Marquette University, Milwaukee, Wisconsin, 2 February, 1982.

David Remley
-Attended Western History Association Annual Conference, Phoenix, Arizona, October 20-22.
-Attended Western Literature Association Annual Conference, Denver, Colorado, June 8.
-Paper: "Canadian and American Diplomatic Relations in the 1930's," Fiftieth Anniversary Alaska Highway History Symposium, Fort St. John, B.C., Canada (June 22-25, 1982). Chaired a session called "The Impact of the Alaska Highway on Northern Natives."
-"The Personal Essay," a lecture for student writers at a Wyoming-Montana High School Student Writers Conference sponsored by Northwest Community College, Powell, Wyoming, 7 April, 1982.

651 David Remley, continued

-"Transitions in the North," a slide lecture on Alaska and the Yukon Territory since World War II for the "Community Lecture Series" sponsored by Northwest Community College, Powell, Wyoming, 6 April.
-Taught "Anglo-American Southwestern Literature," Las Palomas Conference for Teachers held at the Mabel Dodge Lujan Home, Taos (July 7-9, 1982).

Ronald T. Swigger
-Member, National Council of Teachers of English.

James L. Thorson
-President, UNM Fulbright Alumni Association, 1981-82. Presided at two meetings of Fulbright Alumni Association.

Fred B. Warner
-Attended annual meeting, Rocky Mountain Modern Language Association, Salt Lake City, Utah, October, 1982.

Mary Martha (Marta) Weigle
-Series Editor, Publications of the American Folklore Society.

Peter White
-Member, Modern Language Association, Manuscript Holdings Committee.

Hugh Witemeyer
-Attended Modern Language Association annual meeting, 1982; panelist for special session entitled "The Pound-Joyce Connection."

7. OTHER PROFESSIONAL ACTIVITIES

Rudolfo A. Anaya
-Interviews with John Nichols for Puerto Del Sol, with Carole Mazur for The Albuquerque Journal, with Charles Grandjeat from Paris, on KABQ radio station, and on KGGM-TV fundraising for N.M. Symphony Orchestra.
-Readings and lectures: University of Utah; Brigham Young University; UCLA --Colloquim on Chicano Writers--Chicano Studies Research Center; Latino Writers Workshop, Los Angeles; Eastern New Mexico University, Portales; University of Washington, Seattle; Eastern Washington University, Cheney; National Association of Chicano Studies, Tempe, Arizona; UNM Gallup Branch; Seminary in Santa Fe, New Mexico; University of Albuquerque, class lecture; panel member on Hispanic Theatre, Museum of Albuquerque; Santa Fe La Farge Library lecture; Barelas Community Center talk to Senior Citizens; Sandia High School visit; John Adams Junior High class visit; West Mesa High School class visit; commencement address: University of New Mexico Medical School, May 1982.
-Quebec Writers Exchange, panel and lectures in Trois Rivieres, Quebec.
-Project with Swiss Radio in Bern to exchange letters with a Swiss writer (Bruno Hanneman, Director).
-Panel member, Rio Grande Writers Association Seminar, "The Writer and the Law," Albuquerque.

Sharon R. Barba
-Poems in Dramatic Presentations: "Thanksgiving," in The Poem is the Last Resort, director Jerilyn Gilstrap, performed at the Washington Project for the Arts (Oct. 27-31); also presented in an excerpt from The Last Resort for the Humanistic Psychologists International Conference in Washington, D.C. (July, 26).

7. Sharon R. Barba, continued

-"Pedestrian," "Anon.," and "39," in The Revolutionary Woman dramatic reading by B.J. Floto for "Women in the Arts," University of Texas at El Paso (April 15).
-Noon Reading Series, UNM English Department (April 14).
-Heights Community Center, Albuquerque (March 13).
-Full Circle Book Store, reading, (March 2).
-Reading of women poets at UNM Women's Center (Feb. 5).

James Barbour
-Consultant for Baseball in Literature course at Stanford University.

Lee A. Bartlett
-Read manuscript for Rocky Mountain Modern Language Association.
-Poetry reading, University of New Mexico.
-Regular reviewer for Arizona Quarterly and Western American Literature.

LynnDianne Beene
-Consultant for Oxford University Press; Holt, Rinehart, and Winston Press; Wadsworth Press; and D.C. Heath Publishers.

Helen Damico
-Lecture for Highland High School Literary Society, January, 1982: "Aristotle's 'Character' and Oedipus Rex."
-Lecture for Faculty and Professional Women's Association, May, 1982: "Female Warriors in Old English and Old Norse Literature and Culture."

Paul Davis
-"Characters Alive," sponsored by the N.M. Humanities Council, six performances during summer and fall in Albuquerque and Los Alamos.
-Faculty participant in new student orientation, January and June.
-Member of accreditation panel for School of Architecture, April, 1982.
-Curriculum Consultant, Los Alamos Public Schools, October, 1982.
-Lectures at Cibola High School and Highland Senior Center.

David K. Dunaway
-Griegos History Project lecture "Oral Tradition and Oral History"
-Corporation for Public Broadcasting Minority Producers Conference "Radio and American Culture Today."

Morris Eaves
-Radio interview for National Public Radio (NPR) by Russ Patrick of Toronto (via local hookup) for a radio documentary on William Blake for the syndicated program "Sunday Morning," December, 1982.
-Consultant reader for Cornell Univ. Press: Lawrence Lockridge, Romantic Morality, January 1982.
-Consultant reader for Cornell Univ. Press: collection of essays on the lyric poem, December 1982.
-Consultant reader for PMLA (journal of the Modern Language Association): "Blake Sees More Than We Know The Visions of the Daughters of Albion" Anonymous.
-Outside advisor for Yale Univ. English Dept. on a case of promotion to Assoc. Prof. (March, 1982).
-Consultant to National Endowment for the Humanities: project proposal by G.E. Bentley, Jr., September 1982.
-Board of Advisors, film, "Why Blake?" (90 mins., color), being developed by Morton D. Paley (Berkeley) and Alan Pesetsky (NY, filmmaker).

7. continued

Rick Eden
-Outside referee for the following: U.C. San Diego Writing Guides (textbook series) by Charles Cooper, U.C.S.D.; Language Reader (a dummy title) by Professors Young, Morris, and Ostrom for McGraw-Hill; The Present State of Scholarship in Historical and Contemporary Rhetoric, edited by Winifred Horner, for University of Missouri Press.

Michael Fischer
-Organized "Romantic Self" Lecture Series.

Robert E. Fleming
-Lecture: "Richard Wright," to sophomore literature classes at Rio Grande High School, December 7, 1982. Lecture was videotaped and shown to sophomore literature classes throughout the school.
-Associate Editor, Minority Voices.

Gene Frumkin
-Interviewed on "Island Views," a weekly program on KHPR, Honolulu, the PBS Station, March 30, 1982; program aired in August, 1982.
-Recorded the entire contents of book, Clouds and Red Earth, for the archives of the University of Hawaii, April 13, 1982.
-Poetry reading at the Volcano Arts Center, Volcano, Island of Hawaii, April 14, 1982.
-Poetry reading at the Hawaii Preparatory Academy, Island of Hawaii, April 15 and 16, 1982.
-Poetry reading (with Jon Gil Bentley) at the Living Batch Bookstore, September 3, 1982. Recorded for the UNM English Dept. archives.
-Attended a Conference of the New Mexico Arts Division at the Ghost Ranch, September 16 and 17, 1982.
-Served as resident poet in the New Mexioc Poets-in-the-Schools program at Grady School, Grady, NM, November 15-18. Sponsored by the New Mexico Arts Division.
-Recorded a half-hour tape for New Letters on the Air, a production of New Letters magazine. The tape aired nationally on December 17, 1982. Cassettes of the tape are marketed through New Letters on the Air, University of Missouri-Kansas City.

Barry J. Gaines
-"Editing Romeo and Juliet" Faculty Colloquium, Istitut für Englische Philologie Würzburg.
-Manuscript reader, University of Oklahoma Press.
-Manuscript reader, Medieval and Renaissance Drama in English

Patrick J. Gallacher
-Talk on "King Arthur in History and Literature" at Coronado 4 Theater after a showing of the movie, "Excalibur." Invited to do this by the firm of Levenson and Levenson, who handle the publicity for Warner Bros.

Hamlin Hill
-Annual Research Lecture, "Huckleberry Finn's Humor Today," 12 April 1982.
-"Regionalism in American Literature," University of Eichstatt (Germany), University of Basel (Switzerland), Unversity of Bern (Switzerland).
-"Mark Twain's Roughing It," University of Stuttgart (Germany).

7. Hamlin Hill, continued

-"Huckleberry Finn's Humor Today," North Texas State University, November 1, 1982.
-"Mark Twain: Coming of Age," New Mexico Council of Teachers of English, 25 September, Albuquerque, NM.
-"Mark Twain," Highland Senior Citizens Center, 20 September.
-Various lectures, UNM Outward Bound, Roswell, 6-8 January.
-Editorial consultant: American Literature, RMBL&L, The Library of America, University of Missouri, University of Alabama, and University of Iowa Presses, National Endowment for the Humanities, Media and Research Division.
-Chairman, Senior American Literature Fulbright Selection Committee.

Michael J. Hogan
-Grader for CLEP general exam for Educational Testing Service, July, Princeton, New Jersey.
-Wrote two units for English Usage component (25 questions, responses, answer key) of the 1983 A.C.T. exam.
-Consultant reviews for Bobbs, Merrill; Houghton Mifflin; MacMillan; Harcourt, Brace, Jovanovich.
-Speech to Las Vegas, NM high school students and teachers, November.
-Referee for reappointment of faculty member (Linda Brodkey) at Pennsylvania University, October.

David M. Johnson
-Poet-in-the-Schools, National Endowment for the Arts; Bernalillo, NM.
-Reader, Educational Testing Service
-Lecture, New Mexico Geneological Society, March 16, 1982.
-Poetry Readings: March 11 (Cristo del Valle); March 10 (UNM); November 27 (Bernalillo).
-Board member, Friends of the Kimo, Inc.
-Board member, Cornucopia.

Antonio Marquez
-Refereed "A Tale Well Wrought Is the Gossip O' The Gods: Story Telling in John Barth's The Sot-Weed Factor" for Rocky Mountain Review.

David C. McPherson
-Participated in "Characters Alive: Love" and "Characters Alive: Age and Youth," both sponsored by the New Mexico Humanities Council. Impersonated famous literary characters in order to argue about issues of broad humanistic concern. Performed before community groups: "Age and Youth" June 25 and July 9; "Love" July 16 and 23, Oct. 23, and Nov. 9.

Peter C. Page
-In-house reviewing for MacMillan and Co.
-Board of Directors of Artspace Southwestern Contemporary Arts Quarterly.

Mary Power
-"Flann O'Brien and Magic," paper at American Committee for Irish Studies meeting, University of Vermont, Burlington, 2 April; 1982.
-"James Joyce and the Music Hall," panelist, James Joyce Symposium, Dublin, 13 June.
-"Opposing Views: the Dublin of Joyce and Beckett," co-chair of panel with Dugald McMillan, James Joyce Symposium, 12 June.

7. continued

David Remley
-Interviewed for a special TV program on the Alaska Highway to be aired by CBS.
-Served as the interviewer of Richard Finnie, the official U.S. Army photographer of the Alcan Highway and Canol Projects in 1942-43, for a TV documentary to be aired in Canada.

Patricia C. Smith
-Reading, Rio Grande Writer's Association, El Paso, Texas, May 1982.
-Reading, Poetry Series, UNM, March 3, 1982.
-Consultant, MESA program, Rio Grande High School, Sept.-December, 1982.

Fred B. Warner
-Co-host October, November, December KUNM Old Jazz Show (UNM radio station).

Mary Martha (Marta) Weigle
-"Hispanic Penitentes of the American Southwest," lecture at Colorado State University, Fort Collins, April 5.
-"A Mythology/Folklore of One's Own Mundus vs. Mythos," talk at Colorado State University, April 5.
-"Goddesses and Gossip: How Women Fare Mythologically and What Might be Done About it," lecture, Colorado State University, Fort Collins, April 6.
-"From 'The Sanitarium Different' to The Santa Fean: Literary Santa Fe, 1915-1941," paper presented at the annual meeting of the Historical Society of New Mexico, Santa Fe, April 17.
-Panelist, Panel: The Future of Western Publishing, and Publishing Westerns. 30th Annual Convention, Western Writers of America, Santa Fe, July 1.
-"Writing and Literature in New Mexico," Southwest Studies Summer program, Colorado College, Santa Fe, July 22.
-"The Spanish Impact: Folk Religion." Brown University's Continuing College, Santa Fe, August 3.
-"The Santa Fe Art Colony Between Two Wars." Annual meeting of the Santa Fe Historical Society, Santa Fe, October 30.
-Consultant, "Hispanic Storytellers of New Mexico" and "Portraits of Spanish Storytellers," Youth Grant, National Endowment for the Humanities, for Judy L. Goldberg and Juan P. Lopez, Self Reliance Foundation, Las Trampas, New Mexico, until June 1982.
-Consultant-editor for "Chamisal and Penasco: The Photographs of Russell Lee" edited by William Wroth. Supported by a National Endowment for the Arts Grant and to be published by the University of New Mexico Press.
-President and editor, Ancient City Press, Inc., Santa Fe.

Mary Bess Whidden
-Project Director, New Mexico Humanities Council, Ad Hoc Committee for Literature for the Public, presentations by "Characters Alive": June 25, Highland Senior Center; July 9, Palo Duro Senior Center; July 16, Palo Duro Senior Center; July 23, Highland Senior Center; September 14, Manzano del Sol; October 23, Los Alamos Senior Center; November 9, Kimo Theater; 3 videotapes shown on Los Alamos television and on Albuquerque Educational Channel.

7. continued

Hugh Witemeyer
-Talk on "D.H. Lawrence in New Mexico," Santa Fe Prep School, January 27 and Downtown Statesman Club, Albuquerque, May 26.
-Talk on "Senators and Censors," Rio Grande Writers' Association, November 13.
-Seven performances of "Characters Alive," sponsored by the New Mexico Humanities Council, at senior citizens' centers in Albuquerque and Los Alamos and at the Kimo Theater.

Joseph B. Zavadil
-Talk on Advanced Placement, Highland High School, April.
Attended Conference on Community College Staff Development, February 4.

8. NON-TEACHING UNIVERSITY SERVICE

Rudolfo A. Anaya
-Faculty Advisor to the Creative Writing Fellowship
-Grant writer to Witter Brynner Foundation for Writing Fellowship
-Member, Creative Writing Committee, UNM English Department

James Barbour
-English Graduate Director
-English Dept. Graduate Committee
-College of Arts & Sciences Graduate Committee
-College of Arts & Sciences Sub-Committee on Sabbatical Reviews
-Member, Graduate senate
-Member, Graduate GA-TA Committee
-Member, Graduate Telecommunications Committee.

Lee A. Bartlett
-D.H. Lawrence Fellowship Committee
-Minority Creative Writing Fellowship Committee
-Guest lecture on "Modern Poetry and Poetics" in Prof. Lynn Beene's British Literature Course
-Organized UNM Poets and Writers Reading Series (Spring) and UNM Poets and Writers Reading and Film Series (Fall)
-Outside reader on American Studies Dissertation
-Member, English Dept. Graduate Committee
-Prepared questions and read for 20th Century American Ph.D. examination
-Reader for 8 B.A. and M.A. Creative Writing Theses
-Read applications for the Graduate Creative Writing Program
-Member, English Dept. Dissertation Committee

LynnDianne Beene
-Member, Computer Use Committee
-Member, Freshman English Committee
-Participant, Senior Day Activities (Nov. 1982)
-Faculty advisor, English Comp. and Rhetoric program
-Director, Communications Skills Test

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Helen Damico
-Member, Scholarships, Prizes, and Loan Committee, UNM
-Member, Ad Hoc Committee, Graduate Lectures Series, UNM
-Member, Policy and Personnel Committee, Dept. of English, UNM
-Curricular Renewal: Period Minor in Medieval Studies, Dept. of English, UNM

Paul Davis
-Director of Undergraduate Studies, English Dept
-Member, Undergraduate Committee, English Dept.
-Member, College of Arts & Sciences Curriculum Committee
-Member, College of Arts & Sciences Task Force on Group Requirements
-Dissertation director for Stephanie Kauffman and Henry Sikorski
-Dissertation committee member for Kyle Fiore and Jean McConnell
-Graduate committee chairman for Mohammed Ataee

David K. Dunaway
-Member, American Studies Committee
-Member, Undergraduate Committee in English
-Provost's designate, University Radio Committee
-Course development, Professional Writing Minor, graduate degree in Folklore

Morris Eaves
-Member, English Dept. Policy & Personnel Committee (January-May)
-Chairperson, Committee to evaluate the performance of the Chairman, English Department.
-Chairperson, Committee to review the Freshman Composition program.

Rick Eden
-Member, Freshman English Committee
-Member, Ad Hoc Committee to Evaluate Freshman Composition
-Member, Screening Committee
-Member, Interviewing Committee
-Helped design new M.A. and Ph.D. programs (emphases) in English Language and Rhetoric

Michael Fischer
-Faculty Advisor, English Graduate Student Association
-Member, Graduate Lectures Series Committee
-Member, Provost's Committee on the Humanities
-Member, Undergraduate Studies Committee

Robert E. Fleming
-Member, English Dept. Graduate Committee
-Member, American Studies Committee

Cheryl H. Fresch
-Member, Provost's Committee on the Humanities
-Member, English Dept. Policy & Personnel Committee
-Member, Screening Committee for Phi Beta Kappa
-Member, University Admission and Registration Committee

8. continued

Gene Frumkin
-Director of Creative Writing program at UNM, Fall 1982
-Chair, D.H. Lawrence Fellowship Committee, Fall 1982

Barry J. Gaines
-Member, College of Arts & Sciences Tenure Committee
-Member, English Dept. Graduate Committee
-Helped select German students for UNM Würzburg exchange

Patrick J. Gallacher
-Member, English Dept. Graduate Committee

Hamlin Hill
-Chairman, English Department
-Member, New Mexico Union Board
-Member, College of Arts & Sciences Allocation Committee
-Member, International Programs Student Exchange Selection Committee

Michael J. Hogan
-Director of Freshman English Program
-Senior Day Advisor
-Member, Faculty Senate
-Member, UNM- Albuquerque Schools Liaison Committee

David M. Johnson
-Member, UNM Curriculum Committee
-Director of Creative Writing Program, English Dept., Spring 1982

David C. McPherson
-Member, Faculty Senate Library Committee
-Member, English Dept. Policy and Personnel Committee, Fall, 1982
-Faculty advisor, Society for Creative Anachronism (student organization)

Ivan Melada
-M.A. advisor
-Proctor for the 19th century section of the M.A. exam
-Proctor for the 19th century major and minor Ph.D. field exams
-Dissertation committee member for Lucille McAuliffe
-Library liaison.

Peter C. Page
-Assistant Director of Freshman English
-Member, Freshman English Committee
-Member, Policy and Personnel Committee, English Dept
-Member, Faculty Senate
-Member, Admission and Registration Committee, and Falsification of Records Subcommittee
-College Enrichment program lectures: June 6 and June 17

8. continued

Roy Pickett
-M.A. Exam Committee
-Two Ph.D. dissertation committees
-Member, Voting faculty of the Linguistics Dept

Mary Power
-Executive Committee, Women's Studies, UNM, September-December.
-Lewis Prize Committee (Undergraduate Creative Writing Award) University of Wisconsin, January-May
-Associate Editor, Wisconsin Studies in Contemporary Literature, January-May

David Remley
-Active member of UNM Press Committee. Suggested new books, evaluated manuscripts, attended all meetings.

Patricia C. Smith
-Member, English Dept. Graduate Committee, January-June, 1982
-Member, Creative Writing Committee, English Dept
-Member, Undergraduate Committee, August-December, 1982

James L. Thorson
-Member, Faculty Senate.
-Member, Campus Planning Committee, January-June, 1982
-Member, Athletic Council, July-December, 1982
-Member, English Dept. Policy & Personnel Committee
-Sponsor of a Presidential Scholarship, 1982-83
-Participant in Fund Raising Drive for Presidential Scholarship

Fred B. Warner
-Member, UNM Curriculum Committee.
-Member, UNM European Studies Committee
-Member, UNM Latin American Institute curriculum committee (colonialism courses)

Mary Martha (Marta) Weigle
-Member, University Press Committee
-Visiting Lecturers Committee for Humanities and the Social Sciences

Mary Bess Whidden
-Member, English Dept. Policy & Personnel Committee
-Member, Faculty Club Board
-Member, Honors Council
-Member, College of Arts & Sciences Committee on Curriculum and Policy

Peter White
-Member, American Studies Faculty Committee
-Member, Southwestern Studies Committee
-Member, search committee for composition/technical writing specialist
-President, Fulbright Alumni Association, UNM
-Co-ordinator, technical writing, UNM

8. continued

Hugh Witemeyer
-Member, English Dept. Policy and Personnel Committee
-Member, College of Arts & Sciences Promotion Committee for the Humanities

Joseph B. Zavadil
-Chair, Comparative Literature Program
-Chair, Academic Freedom & Tenure Committee
-Member, Community Education Committee
-Member, General College Task Force
-Member, Ad Hoc Committee on Telecommunications
-Member, English Dept. Undergraduate Committee

9. PUBLIC SERVICE

James Barbour
-Albuquerque Academy Trustee
-Albuquerque Academy Education Committee (chair)
-Albuquerque Academy Finance Committee

LynnDianne Beene
-Member, New Mexico Voters Conservation Alliance
-Member, American Civil Liberties Union
-Member, Sierra Club

Robert E. Fleming
-Religious Education Committee, Aquinas Newman Center, UNM Campus

Thomas Mayer
-Chairman, Espanola Airport Commission

David C. McPherson
-Strolling minstrel for annual Children's Book Fair, December 4, UNM Bookstore (benefit for Friends of the UNM Library)

Peter C. Page
-Member, New Mexico M.S. Society

Ronald T. Swigger
-Friend of League of Women Voters

James T. Thorson
-Member, UNM Foundation President's Club
-Member, Albuquerque Opera Guild
-Member, Friends of KNME-TV
-Member, Friends of Zimmerman Library

Mary Martha (Marta) Weigle
-Director, Spanish Colonial Arts Society
-Board Member, New Mexico Folklife Center

9. continued

Peter White
-Spoke to local organizations (Philosophers Anon., Shriners, etc.) on experiences in Poland as Fulbright Fellow, 1980-81.

Joseph B. Zavadil
-Lay Minister, Aquinas Newman Center, UNM Campus

Annual Report

Department of Geography

College of Arts & Sciences

July 1982 - July 1983

Overview

The academic year was characterized by significant progress in our program development, but it was also marred by the loss of personal and professional friends and colleagues and by internal departmental turmoil. In October, former chairman Dr. Richard Murphy suffered a heart attack/stroke and died. His death not only left the Department in shock, but it created holes in our course offerings and long term program plans. Interpersonal conflicts between members of the clerical staff added to these difficulties and led to the dismissal of one person. More than usual amounts of effort were therefore spent seeking short-term replacements for both academic and staff positions. On the positive side, the faculty began a new thrust in program development and planning aimed at "Applied Geography."

During the spring semester Chairman Snead resigned and was succeeded by Dr. Morain.

Significant Achievements

A decision has been made which will strongly influence future programs and staffing within the Department. Recognition of

"Applied Geography" as a relevant and timely direction for the undergraduate and graduate programs should allow us to maximize our resources, increase student production, graduate employable students, maintain our good individual and Departmental reputations in the discipline, and continue to serve the needs of students in other academic departments. One of the first tasks in creating this new image was to develop a descriptive statement of the discipline. Dr. Robert Campbell, Emeritus Professor of Geography (retired), developed such a statement titled "The Role of Geography in a World of High Technology," the text of which follows:

THE ROLE OF GEOGRAPHY IN A WORLD OF HIGH TECHNOLOGY

We live in a highly technological society, a society in which new products -- from drugs to detergents, from word processors to automatic bank tellers -- are being offered for our use every day. Universities are being asked to graduate more technically trained people to manage the new technology and contribute to the flood of invention. But the new technology is also creating many problems: drugs with devastating side effects, soaring demands for energy, the possibility of nuclear holocaust. Technologists do not always have the capability of evaluating the effects of their new products on human beings and society.

That job is left to the sciences which deal with people and

society, and the job is going to become so crucial in the next decade that the need for more -- not fewer -- social scientists should become very apparent.

Geography is becoming increasingly important in this role, because it is both a physical and a social science: the geographer cannont study society without studying the environment in which it exists and of which it is a part. He or she is in this sense a human ecologist, studying the spatial and human and environmental interactions of people and place. Some of these interactions go by such terms as unemployment, traffic, international frictions, affluence and poverty, racism, soil erosion, atmospheric pollution, and neighborhood deterioration. These are matters the geographer deals with regularly, in the classroom and in articles in scientific journals. What geography offers to the understanding of such interactions is both a spatial and an ecological approach -- and thus a perspective that is not shared by any other social science.

The Department of Geography at the University of New Mexico offers what can be described as four kinds of geography courses: (1) those that deal with specific aspects of the environment or society -- courses such as Climatology, Geomorphology, Soils, or Population, Transportation, Food Production; (2) those that concern specific places, such as South America, the Middle East, Western Europe, the Soviet Union and Eastern Europe, Southern Africa; (3) those that teach the methods and

techniques of geographic study, such as Cartography, Photo and Map Interpretation, Remote Sensing, Location Theory; and (4) those that investigate the human condition in spatial and ecological terms, that is, demonstrate the geographic approach, such as Land Use Practice and Planning, Political Geography, Man and Nature in America, and Conservation.

For an undergraduate degree in Geography, the department requires 34 hours of course work in Geography so distributed that the student will take courses of all four kinds and will study under professors who have emphasized in their studies and research different aspects of the geographic science. (By the way, they also show a nice spatial distribution, having come from graduate schools on both coasts, in the midwest, and in the South.) In many of the courses emphasis is placed upon students undertaking studies either singly or in teams, which investigate human problems (planning, pollution, water supply, transportation) ecologically and spatially, thus providing practical experience and a form of job training. In addition, the department has arranged undergraduate internships with the City Planning Department and is working on other such job-related activities.

As the problems of our technological society multiply, more job opportunities are created for geographers -- in urban, regional, and economic planning; in newly-created federal and state agencies administering new environmental protection laws; in greatly increased demands for mapping and photo

interpretation skills, including computer graphics; and in site selection for everything from factories to parks to shopping centers. Society is currently putting first priority on expanding job opportunities in technological fields -- in engineering, in computer programming, in high technology in general. But inevitably this will lead to greater job opportunities for those students who have learned to help society adjust to the rapidly changing social technological environment.

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In addition to our new thrust in Applied Geography, major changes were inaugurated for the 1982/1984 Graduate Bulletin. We have established a Graduate Studies Committee within the Department to foster better advising and to improve our standards of quality. Students seeking the MA degree still have two options (thesis and non-thesis). Non-thesis students are no longer required to prepare two approved seminar papers, but are required to take comprehensive written and oral examinations. Thesis students are required to defend their research effort.

Finally, commensurate with our new thrust, we are trying to create other sources of support. For example, in the fall semester, 1982, two graduate students worked at TAC, two worked for the National Park Service Remote Sensing program on campus, and one worked for IARS' Government Research Institute. Professor Williams has developed an intern program, and in FY 83 placed

two students in programs in the Albuquerque City Planning Department and Albuquerque Public Schools. There are prospects for three more in the Council of Governments, this year, and several with the City Transportation Department. Professor Williams sees this program as having great potential for graduate student support, not to mention the role it can play in creating an external interest in our program. As practitioners of a "synthesizing science," geographers learn to integrate diverse perspectives and methodologies from physical and social sciences. They have traditionally found employment in a variety of inter-disciplinary fields as was recently highlighted in the Chicago Tribune:

> Corporations have found 'geographers to be effective in dealing with a variety of problems,' including questions of location in transportation planning, market analyses, estimating the business potential of domestic and foreign areas, resource allocation, planning for real estate development, and calculating the impact of a particular firm on human and natural environments.

There appears to be a trend toward Applied Geography in America. At UNM several members of the Department have primary research interests in this approach to the discipline and in the past few years our program has evolved along with the national trend. We have this year formalized our efforts and developed a teaching/research/service program that is second to none.

In the teaching arena many of our present courses are already applications-oriented. Spatial Organization, Map Reading and

Interpretation, Cartography, Transportation Geography, Land Use Practice and Planning, Food Production Systems, Remote Sensing, and Field Methods are the most obvious. All of these are supported by laboratory or field investigations. The teaching program will be strengthened by an intern program that involves agencies which can employ people with geographic training.

In Departmental research two kinds are relevant. In the first, students are given projects focused on problems currently facing New Mexican communities -- problems such as environmental protection, resource mapping, marketing, zoning, and others. They are asked to compile community and town plans, analyze faulty systems and recommend corrective measures. In the second research mode, faculty members develop research programs involving both potential clients and students, so that the research will benefit the faculty member with publications, the client with suggested solutions to some of his or her problems, and the student with on-the-job training and first-hand acquaintance with potential employers. This kind of "town-gown" relationship is essential to the development of a quality program.

We regard our service function as one of providing local, state, and national firms and agencies with properly trained students. To make such service a major objective of an Arts and Sciences department is, we feel, a step in the direction of better understanding and the development of stronger bonds between the University and the community which supports it.

The appointment of Dr. Morain as Chairman (who also serves as Director of UNM's Technology Application Center) should enhance opportunities within the Department for both research and service. Among the prospects are (1) access to modern image processing facilities, (2) more opportunities for student employment, (3) more exposure to remote sensing as an aspect of Applied Geography, and (4) greater opportunities for contract research.

Our move to Bandelier West has improved our teaching and research environment materially. Our cartography laboratory is now reasonably well equipped; we have space for some of our graduate students; and esprit de corps has improved markedly. After we move our classrooms from temporary space in the old Anthropology lecture hall to Bandelier East, we will have adequate consolidated space. With the addition of a graphics computer terminal, we will have adequate facilities to meet the basic needs of the Department and the Applied Geography program for several years ahead.

Plans and Recommendations

The Department's goals and aspirations are apparent from the foregoing. We are anxious to promote our programs in FY 84, and beyond, and equally anxious to secure additional outside funding to boost their development. Adversities in FY 83 regarding faculty have been temporarily overcome, but it is obvious that replacement faculty are urgently needed to relieve pressure on courses that must be offered to maintain enrollments.

In FY 84 we will undertake two self-evaluations. The Association of American Geographers has supplied us with an exhaustive self-evaluation questionnaire which we will use to examine our direction, financial support and staffing, as well as the academic courses and activities toward which they are directed. Secondly, we will participate as one of five Graduate Departments in an evaluation of our Master's degree program.

Appointments to Staff

Dr. Stanley Morain to Chairman	May 16, 1983
Dr. Stuart White, Adjunct Assistant Professor	May 25, 1983
Dr. Carroll Schwartz, Visiting Professor	Jan. 14, 1983
Mr. William Hodges, Lecturer	Oct. 15, 1982

Separations from Staff

Dr. Richard Murphy, deceased	Oct. 1982
Ms. Chris Poor, Clerical Specialist	Oct. 20, 1982
Dr. Stuart White, Assistant Professor	May 14, 1983
Dr. Carroll Schwartz, Visiting Professor	May 15, 1983
Mr. William Hodges, Lecturer	Jan. 15, 1983

Sponsored Research and Other Projects

FY 83 was not a year conducive to securing outside support. Drs. Barrett and Morain served in half-time capacities whose administrative responsibilities precluded the search for outside research. Dr. White resigned his position upon returning to UNM in January. While he may be active in future, his retirement to cattle ranching in Ecuador precluded any attempt to obtain research funding. Dr. Schwartz and Mr. Hodges served only in temporary positions to cover courses that were to be taught by the late Dr. Murphy. Dr. Snead was consumed with Departmental matters for most of the year. The number of faculty members submitting proposals, was therefore, understandably low. We plan to increase the number of proposals submitted and the success rate for funded research in FY 84 and beyond.
In FY 83 three of our seven faculty (6 FTE), or roughly 40%, submitted proposals for outside support. One was funded, the other two are still undecided.

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Department of Geology

University of New Mexico

July 1, 1982 - June 30, 1983

The Report of the Department of Geology

July 1, 1982 - June 30, 1983

Rodney C. Ewing, Chairman

Wofgang E. Elston, Acting Chairman (1982)

Barry S. Kues, Assistant Chairman

FACULTY AND STAFF OF THE DEPARTMENT OF GEOLOGY

FULL PROFESSORS:

Roger Y. Anderson, Ph.D., Stanford University, 1960.

Douglas G. Brookins, Ph.D., Massachusetts Institute of Technology, 1963.

Wolfgang E. Elston, Ph.D., Columbia University, 1953.

Klaus Keil, Director, Institute of Meteoritics, Ph.D., Mainz University, 1961.

Lee A. Woodward, Ph.D., University of Washington, 1962.

ASSOCIATE PROFESSORS:

Jonathan F. Callender, Ph.D., Harvard University, 1975.

Rodney C. Ewing, Ph.D., Stanford University, 1974.

Stephen P. Huestis, Ph.D., University of California-San Diego, 1976.

Albert M. Kudo, Ph.D., University of California-San Diego, 1967.

Barry S. Kues, Ph.D., Indiana University, 1974.

Stephen G. Wells, Ph.D., University of Cincinnati, 1976.

ASSISTANT PROFESSORS:

Jeffrey A. Grambling, Ph.D., Princeton University, 1979.

Leslie D. McFadden, Ph.D., University of Arizona, 1982.

Kenneth D. Mahrer, Ph.D., Stanford University, 1979.

Crayton J. Yapp, Ph.D., California Institute of Technology, 1980.

PROFESSORS EMERITUS:

J. Paul Fitzsimmons, Ph.D., University of Washington, 1949.

Vincent C. Kelley, Ph.D., California Institute of Technology, 1937.

Stuart A. Northrop, Ph.D., Yale University, 1929.

Sherman A. Wengerd, Ph.D., Harvard University, 1947.

ADJUNCT PROFESSORS:

Adjunct Associate Professor Edward C. Beaumont, M.S., University of New Mexico, 1948.

Adjunct Associate Professor Frank D. Gorham, B.A., University of Missouri, 1943.

Adjunct Associate Professor Rodney J. Holcombe, Ph.D., Stanford, 1973.

Adjunct Assistant Professor, Spencer G. Lucas, Ph.D., Yale, 1983.

Adjunct Professor William C. Luth, Ph.D. Pennsylvania State University, 1963.

Adjunct Associate Professor John Shomaker, M.S., University of New Mexico, 1965.

Adjunct Associate Professor Lawrence W. Teufel, Ph.D., Texas A&M, 1979.

RESEARCH ASSOCIATES:

Richard Haaker, Research Associate, M.S., Texas A & M.

John Husler, Senior Staff Chemist, M.S., Univeristy of New Mexico.

Michael Pedley, Chemist, Ph.D., University of Keele (U.K.).

Edward R. D. Scott, Research Scientist, Institute of Meteoritics; Ph.D., University of Cambridge (U.K.).

Jefferey Taylor, Senior Research Associate, Institute of Meteroritics, Ph.D., Rice University.

STAFF:

Marion Buck, Staff Secretary

George Carnako, Department Preparator

George Conrad, Microprobe Specialist

Elaine Faust, Drafting Technician

Earl George, Electronics Technician

Gerald Gomez, Thin Section Preparation

Veronica Grady, Staff Secretary

Lucy Landis, Department Secretary

Cornelia Nestor, Bookkeeper

Elaine Newman, Secretary (Caswell Silver)

Judith Salas, Drafting Technician

Marguerite Swanson, Administrative Assistant

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GENERAL DEPARTMENTAL INFORMATION

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SIGNIFICANT ACHIEVEMENTS

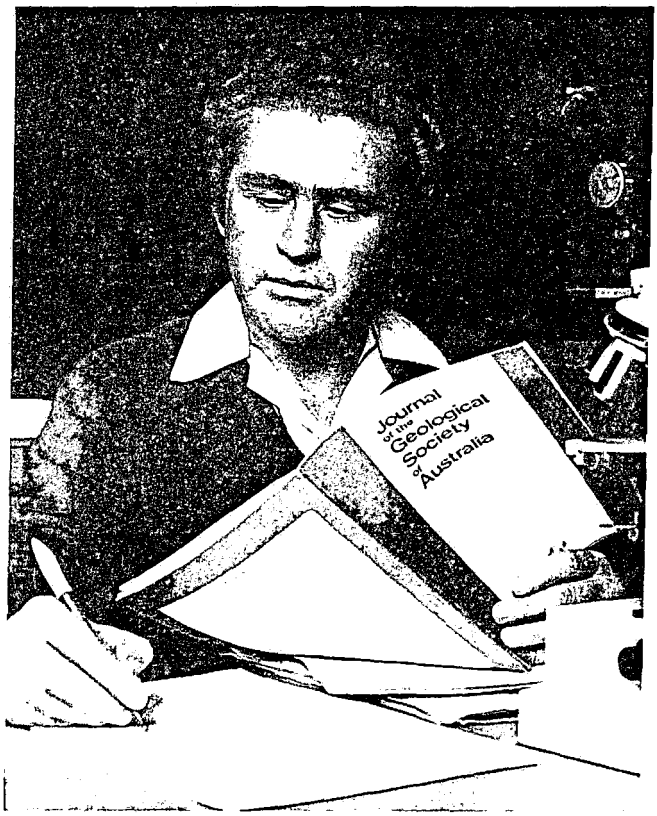
This report provides a detailed summary of the activities and accomplishments of the faculty, staff and students of the Department of Geology. The Department of Geology has continued to increase and improve its teaching at the undergraduate and graduate level, expand its research efforts, and to provide for the technical needs of the State of New Mexico in its efforts to develop its natural resources and preserve the quality of its unique environment.

Highlights of these activities include:

1. The Department has hired Robyn Wright (Ph.D. Rice University) as an assistant professor to fill the stratigraphy-sedimentology position. She will join our faculty for the Spring semester of 1984. Robyn brings a diverse and field-oriented background to our program, and she will be an excellent addition to the developing program in Quaternary Studies. Robyn has served as a geological oceanographer in the United States Antarctic Research Program since 1978, and her Ph.D. dissertation was a study of the sedimentology and paleoenvironments of the upper Mancos Formation and lower Mesaverde Group of the San Juan Basin.

2. Professor R. H. Vernon of Macquarie University in Australia has been appointed the next Caswell Silver, Distinguished Professor, effective June 1, 1984. Professor

Vernon's principal interests are the application of microstructural studies to selected problems in petrology and structural geology. He is co-editor of the Journal of Metamorphic Geology and the Honorary Editor of the Journal of the Geological Society of Australia and author of the well-known book Metamorphic Processes. We look forward to his interaction with students and his contributions to on-going research projects on the Precambrian of New Mexico.



R. H. VERNON, Caswell Silver Distinguished Professor 1984-1985

Professor William Holser completed his tenure as the Caswell Silver Distinguished Professor and returned to the University of Oregon. We hope that his one-year visit is only the beginning of a continuing collaboration between Bill Holser and our faculty and students.

3. Student enrollments at the undergraduate and graduate levels were essentially constant (although there was a slight decrease, 2 percent, in the total number of student credit hours generated, there was an increase in the number of geology majors). During the past year, the Department awarded 19 Bachelor of Science Degrees, 8 Master of Science Degrees and 2 Doctor of Philosophy Degrees (Appendix I). All of the M.S. and Ph.D. graduates found employment or continued their education in a higher degree program.

4. Applications for admission to our graduate program increased dramatically (Appendix VI). The Department received nearly 2,000 requests for application materials, and 355 completed applications were reviewed by the faculty (this is an increase of 69% over the previous year). The Department accepted approximately one-third of the applicants and based on previous experience, we expect 20 to 25 percent of these students to enroll in our program. This will bring our total graduate student enrollment to approximately 80 - which is at the Department's maximum capacity, considering the size of our faculty, financial resources and the space in Northrop Hall. Based on GRE scores the average accepted student placed in the 76th percentile on the verbal; 83rd, quantitative; 76th, advanced geology.

5. A major hallmark of the Department remains a dedication to research and the incorporation of that research into the instruction of students at the undergraduate and graduate level. Our fifteen full-time faculty published over 140 papers, technical reports, abstracts, maps and books (this does not include papers in press or in preparation). Indeed, based on the Dean's ranking of departmental productivity, the Department of Geology ranks number one among the 20 departments in the College of Arts and Sciences. The total value of contracts in effect in which Geology faculty are participants is over $1,130,000 (Appendix II). This generates a return to the University of New Mexico of over $300,000. A detailed list of the research programs is provided in the chapter entitled "Research Projects or Creative Work in Progress." A detailed list of the publications (many with student authors) is provided in the chapter entitled "Publications."

6. A new and significant effort was the development of the Quaternary Studies Laboratory and Program (Appendix X). The program combines the efforts of S. G. Wells, L. D. McFadden, R. Y. Anderson and C. J. Yapp (with the anticipated collaboration of Robyn Wright, the next strat./sed. faculty member). Support for the creation of the laboratory was provided by the UNM Foundation ($35,000), State of New Mexico science/engineering bond funds ($48,500), and the U.S. Geological Survey. The efforts of our faculty are in collaboration with the New Mexico Environmental Improvement Division, Pennsylvania State University, California Institute of Technology

and the University of Arizona. In the fall of 1983, the Department of Geology will host the meeting of the American Geomorphological Field Group. One of the most exciting features of the effort is its direct impact on problems in New Mexico (e.g. assessment of landscape reclamation, waste-disposal sites, potential seismic risks, and past and present water-resource conditions).

7. The University completed the Phase II renovation of the basement of Northrop Hall. This included the completion of the Electron Microbeam Analysis Facility. In addition to the fully automated ARL EMX SM electron microprobe and an Hitachi 450 scanning electron microscope, the Department of Geology purchased a new JEOL 733 Superprobe ($250,000 from the State of New Mexico science/engineering bond money and $180,000 in matching funds from the National Science Foundation). The renovation also included laboratory space for a Scanning Transmission Electron Microscope (STEM). Funds for a STEM have been approved (approximately $450,000) from the State's appropriation for programs in high-technology materials. This will provide the Department of Geology with one of the most modern analytical facilities for materials characterization of any geology department in the country. Once this part of the basement is completed and the STEM is purchased, the Electron Microbeam Analysis Facility will have a total value of approximately $2,000,000 -- almost half of the total raised from external sources. Phase III renovations have been approved and are presently in the University Architect's office for final design

and drawings. This phase of the renovation will provide the department with modern storage facilities for its paleontology, mineralogy and petrology collections, a new stratigraphy-sedimentology laboratory (for R. Wright), complete renovation of the large lecture hall (Rm. 122), and a new roof and face-lift for the entire building.

8. The University through the Office of Graduate Studies completed an external review of the Department. The external panel members included Professor R. P. Sharp of the California Institute of Technology, Dr. R. Brett (U.S. Geological Survey) and Professor K. B. Krauskopf (Stanford University). UNM members of the review panel included Professor R. Paine (Chemistry) and Professor D. Schlegel (Architecture). The Department benefited greatly from the review and the visiting panel's written report touched on a wide range of issues in the Department (e.g. chairmanship, quality of the research program, teaching load, student advisement, library facilities, geophysics program, etc.). In general, the Department received a positive evaluation and should be proud and encouraged by the observations, comments and suggestions made by the visiting panel; however, there are a number of areas where important improvements can be made. The panel report (not available until the end of the past spring semester), will be the subject of detailed discussion with the University administration and among geology faculty and students.

9. Alumni support for the department continues to be a mainstay for the Department. The support of the Caswell Silver

Foundation, funds available through the Alumni Fellowship Program and the Energy Exploration Education, Inc. program in Petroleum Geology prosper only through the efforts of the alumni and industry supporters. The Department hosted an alumni breakfast at the annual meeting of the Geological Society of America in New Orleans, and Pat Gratton organized and hosted an alumni cocktail party at the annual meeting of the American Association of Petroleum Geologists in Dallas. Both events were a great success and warming testimony to the accomplishments of the graduates of the Geology Department program.

10. The Department continues an active program of Public Service, hosting 3,162 visitors to the Department's Museums and over 500 visitors to the Harding Pegmatite. Faculty and staff participated in programs or projects for Parent's Day, UNM Academic Mart, Senior Day, UNM Outreach Program, Saturday Science Academy, the Museum of Natural History, the Albuquerque Parks and Recreation Department, and the International Science Fair.

Finally, the Department, and particularly the present chairman, wishes to express their thanks and appreciation to Professor Wolfgang Elston for his efforts as Acting Chairman during 1982. It is certainly more difficult to be the person "filling-in", as every detail requires special attention and consideration. The Department appreciates Professor Elston's sacrifice of his time in behalf of the Department.

SIGNIFICANT PLANS AND RECOMMENDATIONS

As part of the process of review by the Visiting Panel, the Department of Geology prepared a detailed Self-Study of the Department (179 pages plus appendices). The University administration is referred to this document, particularly the chapter entitled "Projections and Plans" (reproduced as Appendix XI in this report). This chapter outlines immediate and long-term needs of the Department, particularly with respect to moving forward in national rankings.

In addition to those specific recommendations, the following should be emphasized:

1. The continued renovation of Northrop Hall on a floor-by-floor basis is absolutely necessary if new facilities and programs are to prosper (e.g. Quaternary Studies Program and the Electron Microbeam Analysis Facility). Although Phase II has been completed and Phase III is in progress, Phase IV (strat./sed. laboratories and classroom in basement; first floor teaching laboratories) should be approved as quickly as possible so that the necessary planning may begin.

2. The Department of Geology is in a unique position to contribute to the University's efforts in high-technology materials. The Electron Microbeam Analysis Facility is only a part of the required up-grading of research facilities in materials science. The Department will make every effort to raise matching funds to up-grade x-ray diffraction and mass spectrometer

laboratories as a part of the University's efforts in materials science.

3. The University must develop a budgetary process that reflects the cost of an academic program. Present budget restrictions and University regulations prevent departments from dealing with their budgets in a logical and consistent fashion. It is particularly important that the cost of graduate level instruction be considered in the allocation of University resources.

4. Library facilities for the geosciences remain woefully inadequate. The absence of a departmental library has been the subject of special criticism by both the previous Caswell Silver Distinguished Professors (Bloss and Holser). The report by the Visiting Panel emphasized the inadequacy of the present facilities. The present plans for a Science/Engineering library may alleviate some of these difficulties, but proposals to eliminate the map room and U.S. Government Documents from the new Science/ Engineering Library will leave the Department of Geology in an even more dismal position than it is in at the moment. The new library must satisfy the needs of the Geology Department, as well as those of other science and engineering departments.

APPOINTMENTS TO STAFF

Amy Tokunaga, apppointed as Staff Secretary, effective October 14, 1982.

Lucy Landis, appointed as Department Secretary, effective January 1, 1983.

Elaine Newman, appointed as secretary, Caswell Silver Foundation effective January 1, 1983.

Robyn Wright, Rice University (1983) appointed as an assistant professor, effective December, 1983.

Elaine Faust, appointed as Drafting Technician, effective April 11, 1983.

SEPARATIONS FROM STAFF

Veronica Grady, Staff Secretary, resigned effective October 1, 1982.

John Bristow, Post-Doctoral Fellow, October 14, 1982.

Elaine Newman, Department Secretary, resigned effective December 31, 1982.

Judy Salas, Drafting Technician, resigned effective March 8, 1983.

Marian Buck, Staff Secretary, resigned effective May 20, 1983.

Lucy Landis, Department Secretary, leave without pay, effective May 20, 1983.

Mike Pedley, Chemist, resigned effective June 17, 1983.

SPONSORED RESEARCH

Contracts in effect during this reporting period are summarized in Appendix II. Total contract dollars for this period are $1,135,960. Of the fifteen faculty for this reporting period, nine submitted 35 new or revised proposals. A total of eleven faculty had external support.

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FACULTY ACTIVITIES

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1. ADVANCED STUDY

Douglas G. Brookins

Sixth International Symposium on the Scientific Basis for Nuclear Waste Management; Boston, Mass. Nov. 1-4, 1982. Sponsored by the Materials Research Society. Program chairman for the symposium and editor of the Proceedings volume.

Leslie D. McFadden

December, 1982: Doctor of Philosophy degree, University of Arizona, Tucson Arizona, December 31, 1982; The Impacts of Spatial and Temporal Changes in Climate on Alluvial Soils Genesis in Southern California.

2. SABBATICALS, LEAVES OF ABSENCE AND TRAVEL

Roger Y. Anderson

Travel to Wormley, England, Institute of Ocean Sciences.

Travel to Berlin, Germany, Fifth International Symposium on the Scientific Basis for Nuclear Waste Management.

Douglas G. Brookins

January 7, Denver, Colorado: meeting with Materials Research Society personnel on radwaste symposia.

January 8, 9, Atlanta, Georgia: Materials Research Society annual symposia planning meeting.

February 1-2, Los Angeles, California: Invited lecturer at California State at Los Angeles, Dept. Earth Sciences.

March 24-26, Berkeley, California: Meeting on high level radwaste (workshop) at Lawrence Berkeley Laboratory.

March 31, Los Angeles, University of California, Los Angeles, invited lecture.

March 31-April 4, Las Vegas, Nevada: Annual Meeting of the American Chemical Society.

April 25, Socorro, NM: Annual Spring Meeting of the New Mexico Geologic Society.

May 5-6, Salt Lake City, Utah: Joint Cordilleran-Rocky Mountain Geological Society of America Meeting.

May 11-12, Carlsbad, New Mexico: New Mexico Environmental Evaluation Group Meeting.

May 17-18, Workshop on fission-fusion reactors and related problems at Electric Power Research Institute, Palo Alto, California.

June 9-10, Annual Meeting of the American Nuclear Society, Los Angeles.

June 13-15, Detroit, Michigan: Annual Meeting of the American Nuclear Society.

July 23-26, Field work, western New Mexico and north-central Arizona.

August 1-4, Boston, Massachusetts: Informal workshop on geochronology of evaporites.

September 23-24, Boston, Massachusetts: Pre-symposia wrap-up meeting of the Materials Research Society.

October 25, Salt Lake City, Utah; Conference on radwaste analogues at Univ. Utah Research Institute.

October 30-Nov. 4, Boston, Massachusetts: Annual Meeting of the Materials Research Society and Sixth International Symposium on the Scientific Basis for Nuclear Waste Management.

November 11-12, Socorro, New Mexico: New Mexico Academic Science Annual Meeting.

December 9-10, Fort Collins, Colorado: Fifth Symposium on Uranium Mill Tailings Management.

December 16-18, Berkeley, California: Workshop on natural analogues for radwaste disposal at Lawrence Berkeley Laboratory.

Jonathan F. Callender

Summer, 1982 and 1983, Field work in northern New Mexico, southern Colorado.

October 23-24, 1982, Field trip for Princeton University, northern New Mexico.

January 26-29, Invited speaker Symposium or Regional Aeromagnetism, San Antonio Texas.

November 4-6, 1982, Annual meeting, New Mexico Geologic Society, Albuquerque.

March 12-20, UNM field trip to Arizona, Utah, Nevada and southern California.

May 1-5, Speaker, Geological Society of America meeting, Salt Lake City, Utah.

Wolfgang E. Elston

June 30-July 1, 1982. Visiting Lecturer, UNM German Summer School, Taos, New Mexico. Lectured (in German) on "Neues über Mount St. Helens (New Developments at Mount St. Helens)." Led field trip to Harding Mine.

October 4-5, 1982, Instructor, short course for the mining industry "Volcanoes and Their Vents," University of Nevada - Reno.

Geologic field work in southwestern New Mexico, eastern Arizona and Mount St. Helens, Washington.

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Rodney C. Ewing

Sabbatical

January 21-22, Gainesville, Florida: Department of Materials Science, University of Florida (host, L. L. Hench).

January 23-26, Paris, France: Rene Bernas Laboratory, University of Paris (Xl), Orsay (host, J. C. Petit); The Museum National D'Historie Naturelle Mineralogie (host, Henri-Jean Schubnel); Monde et Mineraux editorial office (host, A. Voileau); University of Paris (VI), Jussieu (host, Pierre Bariand).

January 28-30, Frankfurt, Germany: Meeting of the program committee for the Fifth International Symposium on the Scientific Basis for Nuclear Waste Management (host, W. Lutze).

January 30-February 2: Department of Nuclear Chemistry, Hahn-Meitner Institute, Berlin, Germany (host W. Lutze).

February 3-6, Gainesville, Florida: Workshop on Evaluation of Systems Variables in Long-Term Performance of Nuclear Waste Solids (host, L. L. Hench).

February 8-13, Albuquerque, New Mexico: Department of Geology, University of New Mexico.

February 12-13, Tucson, Arizona: Tucson Gem and Mineral Show and Mineralogical Society of America Symposium.

February 13-17, Honolulu, Hawaii.

February 18-21, Sydney, Australia: Department of Geology, University of Sydney (host, K. L. Williams).

February 21-April 10, Brisbane, Australia: Department of Geology, University of Queensland (host, R. H. Holcombe).

March 28-April 4, Cairns, Australia: Field trip to the Great Barrier Reef.

April 12-April 17, Sydney, Australia: Australian Atomic Energy Commission, Lucas Heights (host, K. Reeves); Department of Geology, University of Sydney (host, K. Williams); Mcquarrie University, Department of Geology (host, R. Vernon).

April 18-April 26, Tokyo and Kyoto, Japan: Power Reactor and Nuclear Fuel Development Corporation, Toka-Mura, Ibaraki (host, Tadashi Mano).

April 27-May 6, Sri Lanka: Department of Geology, University of Peradeniya, Kandy (host, T. Munasinghe).

May 7-November 21, Berlin, Germany: Department of Nuclear Chemistry, Hahn Meitner Institute (host, W. Lutze).

June 1-July 12, Los Alamos, New Mexico: Served as a member of the DOE Panel on "Scientific Needs of the Technology of Nuclear Waste Containment (host, D. Turnbull, Harvard).

September 18-25, Varna and Sophia Bulgaria: Attended 13th Meeting of the International Mineralogical Association and presented a paper and represented the Mineralogical Society of America on the Commission of New Mineral Names.

September 9-10, Goslar, Germany: Visited the Rammelsburg Mine.

October 1-8, Florence, Italy.

November 8-10, Karlsruhe, Germany: Institut fur Nukleare Entsorgungstechnik, Kernforschungszentrum Karlsruhe (hosts, G. Ondracek and H. Pentinghaus).

Jeffrey A. Grambling

July 1-August 15: Field studies in northern New Mexico.

October 14-16, New Orleans, Louisiana: Travel to New Orleans to attend short course in Metamorphism, offered by Mineralogical Society of America.

October 17-21, New Orleans, Louisiana: Travel to New Orleans to attend annual meeting of Geological Society of America.

October 25-27, Taos, New Mexico: Combined field trip for UNM and Princeton University.

November 3-6, Albuquerque: Attended annual meeting of New Mexico Geological Society.

May 1-5, Salt Lake City, Utah: Attended regional meeting of the Geological Society of America.

June 15-30: Field studies in northern New Mexico.

William T. Holser

June 30-September 8, Field studies in Italy, Austria, Portugal, Morocco, and Sweden, in connection with three different research projects.

June 19-July 11, Field studies in Arizona, Texas and Utah.

May, Berlin Dahlem Conference, Victoria; Geological Society of Canada.

Klaus Keil

January 13-17, Boston, Massachusetts: Tested new electron microprobe at JOEL.

January 25-26, Beaumont, Texas: Presented talk at the meeting of the Edison Foundation.

January 27-29, Houston, Texas: Served on Program Committee of the Lunar and Planetary Science Conference, Lunar and Planetary Institute.

February 3-7, Los Angeles, California: Tested new electron microprobe at ARL.

February 10-11, Detroit, Michigan: Presented talk at the meeting of the Edison Foundation.

February 25-27, Houston, Texas: Chaired meeting of the Lunar and Planetary Science Council, Lunar and Planetary Institute.

March 13-14, Houston, Texas: Chaired meeting of the Lunar and Planetary Science Council, Lunar and Planetary Institute.

March 15-19, Houston, Texas: Attended Lunar and Planetary Science Conference at the Johnson Space Center, co-authored 7 talks and chaired session.

April 16-18, Houston, Texas: Served on NASA-NSF Antarctic Meteorite Working Group, Lunar and Planetary Institute.

April 19-21, Houston, Texas: Participated in the Conference on Antarctic Meteorites and Glaciology, Lunar and Planetary Institute, and presented 2 invited talks.

May 2-3, Meteor Crater, Arizona: Led field trip to Meteor Crater, Arizona; Astrogeology Branch, U.S. Geological Survey, Flagstaff, Arizona; and Sunset Crater, Arizona.

May 6-8, Bozeman, Montana: Attended Rocky Mountain Sectional Meeting, Geological Society of America, and organized 1 day symposium on the disposal of high-level nuclear waste in igneous rocks.

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June 24-25, Taos, New Mexico: Presented invited talk at the German Summer School, University of New Mexico, Department of Modern and Classical Languages.

August 9-10, Washington, D.C: Met with NASA officials to discuss the future funding and programs of the Lunar and Planetary Institute, Houston, Texas.

August 16-18, Mercury, Nevada: Carried out research at the Nevada Test Site.

September 12-16, St. Louis, Missouri: Attended Meteoritical Society Meeting, presented one talk, co-authored five talks, and chaired session.

October 7-10, Washington, D.C: Attended meeting of the NSF-NASA Antarctic Meteorite Working Group.

November 6, Taos, New Mexico: Led field trip to Harding Pegmatite for Mineralogy I students.

November 14-17, Houston, Texas: Attended workshop on the origin of chondrites, Lunar and Planetary Institute, presented one paper and co-authored one paper.

Albert M. Kudo

May 18-October 10: Sabbatical leave to do research in Japan, Semester I.

May 24-26: Visited Hawaiian Volcano Observatory.

October 8: Visited Hawaiian Volcano Observatory.

October 17-21, New Orleans, Louisiana: Geological Society of America annual meeting.

Barry S. Kues

March 16, Galisteo, New Mexico: paleontological research.

March 28 and October 31, Jemez area, New Mexico: paleontological research.

April 18, Rio Puerco, New Mexico: paleontological research.

May 31-June 2, Taos, New Mexico: paleontological research.

May 17-22, Puerto Penasco, Mexico: marine station (with paleontology class) to observe modern subtropical marine environments and animals.

July 5, Bisti Badlands: paleontological research.

July 27-August 1, Colorado: Florissant Fossil National Monument.

October 30, Santa Rosa area, New Mexico: paleontological research.

April 16-17, Santa Rosa area: paleontological research.

May 1-5, Salt Lake City, to Cordilleran-Rocky Mountain Section of Geological Society America meeting; presented a paper.

May 17-19, Lake Valley and Sacramento Mountains: paleontological research.

May 23, Pagosa Springs, Colorado: paleontological research.

June 18-19, Santa Rosa area: paleontological research.

Kenneth D. Mahrer

May 21-24: Field trip to Carlsbad Caverns and White Sands, New Mexico.

July 8-9: Visited Stanford Geophysics Department, Stanford, California.

July 21: Visited Geometrics Company, Sunnyvale, California.

July 22: Visited Hunter Geophysics Co., Sunnyvale, California.

July 23: Visited Intersel Electronics Co., Sunnyvale, California.

December 8-15: American Geophysical Union Conference, San Francisco, California.

December 16: Visited Stanford University, Stanford California.

March 12-14: Visited Southwest New Mexico.

March 24: Socorro, New Mexico, NMGS spring Conference.

June 4-12: Visited Mojave Desert, California, Geophysical research.

June 27: Los Alamos National Laboratory, Los Alamos, New Mexico.

Leslie D. McFadden

June 26-July 1, Seattle, Washington: Seventh Biennial Meeting of the American Quaternary Association; attend pre-meeting field trip.

October 15, Socorro, New Mexico: New Mexico Academy of Science Meetings.

September 18-19, Salt Lake City, Utah: Travel to Friends of the Pleistocene Field Trip, Rocky Mountain Cell.

October 18-21, New Orleans, Louisiana: Annual Meeting of the Geological Society of America.

November 4-6, Albuquerque, New Mexico: Annual Meeting of the New Mexico Geological Society.

Stephen G. Wells

April 18-24, Anaheim, California: Geological Society of America, Cordilleran section, Annual meeting: Symposium on Surficial Deposits of Southwestern U.S. - A Memorial Symposium to Denis E. Marchand.

May 15-22, Mojave Desert, California: U.S. Geological Survey fieldtrip to examine geomorphology and Quaternary geology.

June 28-30, Seattle, Washington: American Quaternary Association Seventh Biennial Conference.

September 2-7, Pinedale, Wyoming: American Geomorphological Field Group Field conference.

October 18-21, New Orleans, Louisiana: Geological Society of America annual meeting.

November 4-6, Albuquerque area, New Mexico: New Mexico Geological Society field conference.

November 24-28, Mammoth Cave National Park, Kentucky: To examine karst hydrology and geology of region.

December 19-24, Volcano National Park, Hawaii: To examine volcanic landforms and research possibilities on landform evolution.

Lee A. Woodward

Travel to Colorado, Wyoming, Montana, and Arizona: Research projects.

3. NEW SCHOLASTIC HONORS, FELLOWSHIPS, ETC.

Douglas G. Brookins

Named outstanding symposium organizer, with plaque award, at the annual meeting of the Materials Research Society (Boston, Mass., Nov. 1-4, 1982).

Who's Who in America (42 Ed., 1982)

Who's Who in the World (6th Ed., 1982)

Personalities of America (for 1st Ed., 1983)

Who's Who in Frontier Science and Technology (for 1st Ed., 1983)

Co-Editor, Uranium (Elsevier)

Jonathan F. Callender

Certificate of Recognition, New Mexico Geological Society; Presidential Recognition Award and 10-year Service Award, UNM.

Invited speaker, Tectonics of Continental Rifts, 27th International Geological Congress, Moscow, U.S.S.R.

Rodney C. Ewing

Who's Who in Technology Today (1st. ed., 1983)

Who's Who in Frontier Science and Technology (1st ed., 1983)

Travel grant from the University of Queensland, Brisbane, Australia.

Elected as Councilor for the Materials Research Society (1983-1985)

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Jeffrey A. Grambling

Selected to "Outstanding Young Men of America," 1983.

Selected to "American Men and Women of Science," 1983.

Nominated for "Who's Who in Frontier Science and Technology," 1983.

UNM candidate for Alan Waterman Award (National Science Foundation), 1983.

Stephen P. Huestis

American Men and Women of Science (15th ed., 1983)

Klaus Keil

Member, Program Committee, Lunar and Planetary Science Conference, Houston, Texas. 1981-1983.

Member, Advisory Committee on Comparative Planetology, International Union of Geological Sciences. 1982-1985.

Associate Editor, Journal of Geophysical Research, American Geophysical Union. 1982-1985.

Associate Editor for "Chondrites and their Origin," a volume to be published by the Lunar and Planetary Institute, Houston, Texas.

Albert M. Kudo

Received Japan Society for Promotion of Science Fellowship to do research in Japan at Tohoku University, Sendai, Japan.

Barry S. Kues

Listed in Who's Who in the West, 1982-83 edition.

Selected best teacher in Geology Dept., 1981-1982.

Kenneth D. Mahrer

Joined American Association for the Advancement of Science.

Elected member to Sigma Xi--National Research Honorary Fraternity.

Joined New Mexico Geological Society

Joined the Planetary Society

Joined Union of Concerned Scientists

Joined National Association of Geology Teachers

Received Presidents Recognition Award-UNM

Leslie D. McFadden

Accepted Faculty Appointment, Geologist with the United States Geological Survey, Branch of Western Geology, to pursue geologic research in Mojave Desert, California.

Received invitation to serve as a principle speaker at the Geological Society of America Penrose Conference, for 1983, in Tucson, Arizona.

Stephen G. Wells

Accepted Faculty Appointment, Geologist, with U.S. Geological Survey, Western Minerals Management Branch, Menlo Park, California.

Nominated for cabinet position as Secretary of Energy and Minerals Department, State of New Mexico under Governor Anaya's administration.

4. PUBLICATIONS

Roger Y. Anderson

"A Long Geoclimatic Record from the Permian": Jour. Geophys. Research, 87, No. C9, 7285-7294.

"Deformation-Dissolution Potential of Bedded Salt, Waste Isolation Pilot Plant, Delaware Basin, New Mexico": in ed. W. Lutze Scientific Basis for Nuclear Waste Management V, Materials Research Soc. Symposia Proceedings, North-Holland, Elsevier Sci. Publ. Co., 449-458.

"Continuous Subaqueous Deposition of the Permian Castile Evaporites, Delaware Basin, Texas and New Mexico": in Hanford, C. R., Loucks, R. G., and Davies, G. R., (Eds.) Depositional and Diagenetic Spectra of Evaporites, Soc. Econ. Paleontologists and Mineralogists, Core Workshop, Calgary, Canada, 324-353.
Coauthor: W. E. Dean, Jr.

"Pleistocene-Holocene Climate of the Estancia Basin, Central New Mexico": New Mexico Geol. Soc. Guidebook, 33 Field Conf.,
Coauthor: L. N. Smith.

"Orbital and Climatic Control of Permian Evaporite Deposition": Geol. Soc. America 95th Annual Meeting (abs), v. 14, No. 7, 432-433.

"Petrology and Geochemistry of Fine-grained Sediments Accumulated in Sediment Traps": in Abstracts of International Workshop on Fine-grained Sediment (Deep-water Processes and Environments), Geol. Soc. London and Geol. Assoc. of Canada, Halifax, 16-18 Aug.
Coauthor: E. B. Nuhfer

"Resuspension in Inland Lakes as a Process for the Alteration of Sediment": International Assoc. of Sedimentologists, 11th Inter. Congress on Sedimentology, Hamilton, Ontario, p. 3.
Coauthor: E. B. Nuhfer.

"Accidents, Pulses, and Annuation in Lacustrine Systems": in American Quaternary Association (abs), Annual Meeting, Seattle. IN PRESS.

"Meromictic Lakes and Varved Lake Sediments in North America": U.S. Geological Survey Circular.
Coauthors: W. E. Dean, Jr., J. P. Bradbury, D. Love.

"Orbital Forcing of Evaporite Sedimentation" in Berger. A. and Imbrie, J. (Eds.) Milankovich and Climate, Elsevier.

Douglas G. Brookins

"Study of polyhalite from the WIPP site, New Mexico," 4th Int. Sym. Sci. Nuc. Wste. Mngt., (1982), p. 257-264.

"Uranium-lead radiometric age determinations of naturally occurring U(VI) minerals: application to radwaste storage," ibid., p. 265-272.

"A natural analogue for storage of radwaste in crystalline rocks," ibid., p. 231-238.
Coauthors: M. S. Abashian, L. H. Cohen, and H. A. Wollenberg

"Geologic systems for long-term radioactive waste isolation," Lawrence Berkeley Labs. Rpt. (1982) 429, 58 p.
Coauthors: L. H. Cohen, H. A. Wollenberg, M. S. Abashian, S. Flexser and M. Shea.

"Geochemistry of clay minerals for uranium exploration in the Grants Mineral Belt, New Mexico," Mineralium Deposita, v. 17, (1982) p. 37-53.

"Uranium and thorium abundances, whole rock chemistry and trace element chemistry, Zuni Mountains, New Mexico," The Mountain Geologist, v. 19, (1982) p. 83-90.

"Potassium, uranium and thorium radiogenic heat contribution to heat flow in the Precambrian silicic rocks of the Zuni and Florida Mountains, New Mexico, USA," Jour. Volcan. Geothermal Res., v. 13, (1982) p. 189-197.

"Suitability of crystalline rocks for radwaste storage: I. Investigations of two plutons, Colorado," Geol. Soc. Amer. Prog. w. Abs., v. 14, (1982) p. 305.
Coauthors: M. S. Abashian, L. H. Cohen, A. E. Williams, H. A. Wollenberg and S. Flexser.

"Suitability of crystalline rocks for radwaste storage," II. Study of the Idaho Springs Formation, Colorado, ibid., p. 301.
Coauthors: M. S. Abashian, L. H. Cohen and L. H. Wollenberg

"The Age of the Fruitland and Kirtland Formations, San Juan Basin, New Mexico," ibid., p. 348.
Coauthor: J. K. Rigby

"Rare earth element geochemical studies of hydrothermal fluorite-carbonate deposits, Mineral County, Montana," ibid, p. 304-305.
Coauthor: K. M. Emanuel

"Rare earth element geochemical studies of hydrothermal fluorite-carbonates I: deposits in Mineral County, Montana," Isochron/West, n. 34, (1982) p. 17-18.

"Sr isotope initial ratios from hydrothermal vein deposits of fluorite and carbonates II: deposits in the Zuni Mountains, New Mexico," Isochron/West, n. 33, (1982) p. 15-17.
Coauthor: K. M. Emanuel

"The Sandia Granite, New Mexico: biotite metamorphic and whole rocks Rb-Sr ages," Isochron/West, n. 33, (1982) p. 19-21.
Coauthor: A. Majumdar

"New K-Ar dates from the Fruitland and Kirtland Formations (Cretaceous), San Juan Basin, New Mexico," Isochron/West, n. 33, (1982) p. 17-19.
Coauthor: J. K. Rigby

"Geologic systems as analogs for long-term radioactive waste isolation," Lawrence Berkeley Laboratories Rpt., (1982) 15 p.
Coauthors: H. A. Wollenberg, L. H. Cohen, S. Flexser and M. S. Abashian

"Geochemical studies at WIPP Site, New Mexico," Amer. Chem. Soc. Abs. Book, (1982) p. 681.

"Low level radwaste disposal in poisoned land/inland seas," Amer. Nuc. Soc. Ann. Abs., (1982) p. 47.
Coauthors: H. A. Vogler and J. J. Cohen

"A strontium isotope ratio (87Sr/86Sr) method for quantifying atmospheric and weathering input to ecosystems: Biosciences 33 (1982), p. 23-30. Coauthors: J. A. Gosz, and D. I. Moore

"Geochemistry of the Dakota Formation of northwestern New Mexico: relevance to radioactive waste studies," Nuc. Tech., 59 (1982) p. 421-428.

"Migration and retention of elements at the Oklo natural reactor," Environmental Geology (in press).

"Rb-Sr geochronological investigation of Precambrian samples from drill holes GT-1, GT-2, EE-1 and EE-2, Los Alamos dry hot rock program, Fenton Hill, New Mexico," Jour. Volcan. Geother. Res. 14 (1983) p. 18-35.
Coauthor: A. W. Laughlin

"Uranium and other trace element geochemistry of the Hopi Buttes volcanic province northeastern Arizona," Econ. Geol., v. 77, (1982) p. 1210-1220.
Coauthors: C. E. Suda and R. S. Della Valle

"Geochemical studies of discharge water from an uranium acid leach process," N. M. Geol. Soc. Gdbk. 33, (1982) p. 367-372.
Coauthor: P. A. Longmire

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"Radiometric ages of Precambrian rocks from central New Mexico," NM Geol. Soc. Gdbk 33, (1982) p. 187-190.

"The Sandia Granite: single or multiple plutons," N.M. Geol. Soc. Gdbk, 33, (1982) p. 221-224.
Coauthor: A. Majumdar

"Investigations in uranium hydrogeochemistry-the effects of water treatment on observed uranium concentrations in natural water samples," Modern geology, v. 8, (1982) p. 115-119.
Coauthor: C. E. Olsen

"Geochronologic studies in Maine I. Preliminary Rb-Sr study of the Casco Bay Group, Maine," Isochron/West, n. 34, (1982) p. 9-12.

"Geochronologic studies in Maine II. Precambrian rocks from Penobscot Bay," Isochron/West, n. 34 (1982) p. 13-16.

"K-Ar ages for the Kirtland formation (Cretaceous), San Juan Basin, New Mexico," Isochron/West, n. 34, (1982) p. 19-20.
Coauthor: J. K. Rigby

"Trace metal and radionuclide migration in ground water from acid and alkaline leaching uranium tailings in the Colorado Plateau," Geol. Soc. Amer. Abs. with Prog., v. 14, (1982) p. 549.
Coauthor: P. A. Longmire

"Early diagenesis of uranium mine stope backfill," Fifth Internat. Sym. Uranium Mill Tailings (1982) p. 27-37.
Coauthors: P. A. Longmire and B. M. Thomson

"Trace metal and radionuclide migration in groundwaters from acid leaching uranium tailings in the Grants Mineral Belt, New Mexico," Fifth Internat. Sym. Uranium Mill Tailings (1982) p. 315-333.
Coauthor: P. A. Longmire

"Rubidium-strontium minimum ages of sedimentation, uranium mineralization, and provenance, Morrison Formation (Upper Jurassic), Grants Mineral Belt, New Mexico," I., in Energy Minerals, Amer. Assoc. Petrol. Geol. Reprint Series 25, E. A. Beaumont, Ed., (1982) p. 146-156.
Coauthor, M. J. Lee

"Radioactive waste disposal in rocks: the message from Oklo," N.M. Jour. Sci., 22 (1982) 65.

"Possible use of playas for low level radioactive waste disposal" N.M. Jour. Sci., 22 (1982) 78.
Coauthor: H. A. Vogler

"Natural analogue for high level radioactive waste disposal: intrusion of the Alamosa River Stock into tuffaceous and andesitic rocks of the Platoro Complex, Colorado," N.M. Jour. Sci., 22 (1982) 74.
Coauthors: M. S. Abashian and M. G. Murphy

"Natural analogue for high level rad-waste disposal: intrusion of the Eldora-Bryan stock into Idaho Springs Formation, Colorado," N.M. Jour. Sci., 22 (1982) 66.
Coauthor: M. S. Abashian.

"Geochronologic study of the Idaho Springs Formation, Colorado," N.M. Jour. Sci., 22 (1982) 65.
Coauthor: M. S. Abashian

Geochemical studies of the Grants Mineral Belt, New Mexico, in "The Significance of Trace Elements in Solving Petrogenetic Problems and Controversies," S. S. Augusthitthius, Ed. (in press).
Coauthor: R. S. Della Valle

Trace element studies of the Iklo natural reactor, Republic of Gabon, in "The Significance of Trace Elements in Solving Petrogenetic Problems and Controversies," S. S. Augustithius, Ed. (in press).

"Natural analogues: Alamosa River monzonite intrusive into tuffaceous and andesitic rocks." in 6th Int. Sym. Sci. Basis Nuc. Wste. Mngt. (D. G. Brookins, Ed.), Elsevier Scientific Pub. Co., New York. (1983), p. 299-306.
Coauthor: M. S. Abashian, L. H. Cohen, A. E. Williams, H. A. Wollenberg and S. Flexser.

"Use of poisoned lands/inland seas for low level radioactive waste disposal," in 6th Int. Sym. Sci. Basis Nuc. Wste. Mngt. (D. G. Brookins, Ed.), Elsevier Sci. Pub. Co., New York, in press (1983), p. 581-588.
Coauthors: J. J. Cohen and H. A. Vogler.

"Geochronologic and geochemical study of volcanic ashes from the Kirtland Formation (Cretaceous), San Juan basin, New Mexico," Geol. Soc. Amer. Prog. w. Abs., 15 (1983) p. 307.
Coauthor: J. K. Rigby

"Rb-Sr ages from the Penobscot Bay Region, Maine," Geol. Soc. Amer. Prog. w. Abs., 15 (1983), p. 147.

"Revised K-Ar dates from the Kirtland Formation, San Juan Basin, New Mexico," Isochron/West, n. 35 (1982) p. 15-16.

"Geochemistry and petrology of evaporites cored from a deep-sea diapir at site 546, DSDP Log 79, Offshore Morocco," in Initial reports of the DSDP project v. LXXIX (in press).
Coauthors: W. T. Holser and E. S. Saltzman

"Exploration, reserve estimation, mining, milling, conversion and properties of uranium," Module 2 in Nuclear Power Series, Kansas State Univ., 164 p., Pub. 1982.
Coauthors: D. G. Brookins, J. A. Wethington, and J. F. Merklin

"Eh-pH diagrams for the rare earth elements (REE) at 25°C, 1 bar pressure (to Geochem. Jour.)," (in press).

"Playas for the siting of low level radio-active waste," studies in the Estancia Valley, New Mexico, Amer. Nuc. Soc. Trans., v. 44, p. 64-65.
Coauthors: D. G. Brookins and H. A. Vogler

"Trace element distribution in sedimentary type uranium deposits: SEG-AIME Sym. Primary Dispersion of Elements around Ore Deposits," (in press).
Coauthors: R. S. Della Valle, and D. G. Brookins

"Uranium hydrogeochemistry and stream seidment pilot survey of a portion of McKinely County, north of Grants, New Mexico," Uranium, (in press).
Coauthors: C. E. Olsen and D. G. Brookins

"The Mount Taylor uranium deposit, San Mateo, New Mexico," Uranium, (in press).
Coauthors: W. C. Riese and D. G. Brookins

"Whole rock Rb-Sr age of the Juan Tabo Series, Sandia Mountains, New Mexico," Isochron/West, (in press).
Coauthors: D. G. Brookins and A. Majumdar

"Rb-Sr geochronologic study of the Ellsworth Schist, Maine, and comparison with the Coldbrook Group, New Brunswick," Isochron/West," (in press).

"Geochronologic studies of granites and metamorphic rocks, Sandia Mountains," N.M. Geol. Soc. Abs. and Prog., Spring 83 Meeting (Socorro, NM), 1983, p. 3.
Coauthors: A. Majumdar and D. G. Brookins

"Geochronologic study of evaporites, southeastern New Mexico," ibid., 1983, p. 4, (in press).

"Geochronologic studies of igneous rocks from the Florida Mountains, New Mexico," ibid., 1983, p. 17-18.
Coauthors: R. K. Matheney and D. G. Brookins

"Geochemical study of Estancia Valley playas, New Mexico," ibid., 1983, p. 19-20.
Coauthors: D. G. Brookins and H. A. Vogler

"Rubidium-strontium and potassium-argon dating of emplacement and metamorphism of the Arrigetch Peaks and Mount Igikpak plutons, Survey Pass Quadrangle, Alaska," U.S. Geol. Surv. Circ. 804-B, p. B18-B19.
Coauthors: M. L. Silberman, D. G. Brookins, S. W. Nelson, and D. Grybeck

"Geology and geochemistry of the Snowbird Deposit, Mineral County, Montana," Econ. Geol., in press.
Coauthors: M. C. Metz, D. G. Brookins, P. E. Rosenberg, and R. E. Zartman

"Scientific basis for nuclear waste management report," Materials Res. Soc. Bull., v. 7, n. 6, p. 15 (1983).

"Investigations in uranium geochemistry: distribution of uranium as a function of sediment particle size," Uranium (in press).
Coauthors: D. G. Brookins and C. E. Olsen

"Trace metal and radionuclide absorption during diagenesis of acid leach uranium trailings, Colorado Plateau," Geol. Soc. Amer. Prog. w. Abs. (1983).
Coauthors: P. A. Longmire, B. M. Thomson, and D. G. Brookins

BOOKS

Physical Geology (Charles E. Merrill Pub. Co., Columbus, OH). Co-authors: B. C. Burchfiel, R. J. Foster, E. A. Keller, L. W. Mintz, W. N. Melhorn, H. V. Thurman.

Scientific Basis for Nuclear Waste Management VI, (Elsevier Scientific Publishing Co., Inc., New York). Editor, 792 p.

Geochemical Aspects of Radioactive Waste Disposal (Springer-Verlag NY, Inc.), New York (in press).

Jonathan F. Callender

Structural Analysis and Stratigraphic Problems of Precambrian Rocks of the Picuris Range, New Mexico," Geological Society of America Bulletin, 1982, v. 93, p. 138-149.
Coauthor: R. J. Holcombe.

"Map of Late Tertiary and Quaternary Tectonics and Volcanism, New Mexico," Geothermal Resources of New Mexico, Scientific Map. Series, 1983, 1:500,000.
Coauthors: W. R. Seager and C. A. Swanberg.

"Albuquerque Country II," New Mexico Geological Society Guidebook 33, 1982, 370 p.
Coeditors: J. A. Grambling and S. G. Wells.

715 "Geotectonics," American Geophysical Union, v. 15, nos. 4-6, 1981, and v. 16, nos. 1 and 2, 1982, Technical Editor.
Coeditor: D. Milton.

Socorro Region II, New Mexico Geological Society Guidebook 34, 1983, 360 p., in press.
Coeditor: Charles E. Chapin.

Transposition Structures in Precambrian Rocks of New Mexico," New Mexico Geological Society Guidebook 34, 1983, in press.

Evolution of Rio Grande rift, U.S.A.," 27th International Geological Congress, Moscow, 1984, extended abastract, in press.

Abstract:
"Evidence for Low-angle Faulting Along Western Margin of the Sandia Uplift, Rio Grande Rift, New Mexico," Geological Society of America, Abstracts with Programs, Cordilleran/Rocky Mountain Section.

Wolfgang E. Elston

"New radiometric ages on volcanic rocks from the Mogollon-Datil volcanic field, New Mexico: Isochron/West, No. 35, p. 13-14, 1982.
Co-authors: T. J. Bornhorst, D. P. Jones, P. E. Damon, M. Shafiqullah.

"Española, Taos, Chama, a climb through time, by W. R. Muehlberger and Sally Muehlberger, New Mexico Bureau of Mines and Mineral Resources, Scenic trip to the Geologic Past No. 13, 99 p." Reviewed in American Scientist, v. 70, p. 644, 1982.

"Morphological Characterstics of ash-flow tuff (ignimbrite) and related pyroclastic deposits," Report of Planetary Geology Program 1981 (H. E. Holt, editor), National Aeronautics and Space Administration Technical Memorandum 84211, p. 174-176, 1982. Paper read at NASA Planetary Geology Principal Investigators Conference, Pasadena, California, January 11, 1982.
Co-author: C. W. Criswell.

"Vertical structure of basaltic lava flows: Implications for surface sampling and interpretation," Report of Planetary Geology Program - 1981 (H. E. Holt, editor), National Aeronautics and Space Administration Technical Memorandum 84211, p. 156-159, 1982. Paper read at NASA Planetary Geology Program Principal Investigators Conference, Pasadena, California, January 12, 1982.
Co-authors: J. C. Aubele, L. S. Crumpler.

"K_2O Variations in mid-Tertiary volcanic rocks of southwestern North America: An alternative to the K-h hypothesis," Geological Society of America Abstracts with Programs, v. 14, p. 483, 1982. Paper read at Annual Meeting, Geological Society of America, New Orleans, Louisiana, October 21, 1982.

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Co-authors: E. G. Deal, M. J. Logsdon.

"Mogollon-Datil Volcanic Field," Geologic Highway Map of New Mexico: New Mexico Geological Society, 1983. Editor: R. E. Clemons.

"Cenozoic volcanic centers in the New Mexico segment of the Pedregosa Basin: Constraints on oil and gas exploration in southwestern New Mexico," 1983, N.M. Energy Research and Development Institute, Final Technical Rept. 2-66-3104.

Rodney C. Ewing

"Zirconolites from Sri Lanka, South Africa and Brazil," Proceedings of the Symposium on the Scientific Basis for Nuclear Waste Management, vol. 6, 1982, pp. 249-256.
Coauthors: R. F. Haaker, T. J. Headley, P. Hlava

"Lanthanide, Y, Th, U, Zr and Hf Minerals: Selected Structure Descriptions," Mineralogical Association of Canada Short Course Handbook, 8, 1982, pp. 239-232.
Coauthor: B. C. Chakoumakos

"Long-term Radioactivity Release from Solidified High-Level Waste - Part I: An Approach to Evaluating Experimental Data" Proceedings of the Symposium on the Scientific Basis for Nuclear Waste Management, vol. 11, 1982, pp. 45-56.
Coauthors: W. Lutze and F. K. Altenhein

"Leachability of Natural Zircon, $ZrSiO_4$, as a Function of Alpha Dose" Proceedings of the Symposium on the Scientific Basis for Nuclear Waste Management, vol. 11, 1982, pp. 389-398.
Coauthors: R. F. Haaker and W. Lutze

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Coauthors: R. B. Greegor, F. W. Lytle and R. F. Haaker

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Coauthor: T. J. Headley

Abstracts

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Coauthors: W. Lutze and F. K. Altenhein

"The Harding Pegmatite: A Summary of Recent Research" The American Mineralogist, vol. 67, 1982, p. 644.
Coauthors: B. Chaukomakos, C. Cook, M. Register, D. G. Brookins, G. P. Landis

Jeffrey A. Grambling

"Stratigraphic and structural relationships of multiply deformed Precambrian metamorphic rocks in the Rio Mora area, New Mexico," Geological Society of America Bulletin, 1982, v. 93, p. 127-137.

"Precambrian geology of Canon del Trigo, Manzano Mountains, central New Mexico," New Mexico Geological Society Guidebook, 1982, v. 33, p. 217-220.

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"Precambrian Stratigraphy of Manzanita and North Manzano Mountains, New Mexico," New Mexico Geological Society Guidebook, 33rd field conference, 1982, pp. 191-196.
Coauthors: W. J. Cavin, J. R. Connolly, D. L. Edwards, and M. A. Parchman.

"Mineralization in Precambrian Rocks in the Manzanita-North Manzano Mountains, Central New Mexico," New Mexico Geological Society Guidebook, 33rd field conference, 1982, pp. 303-304.
Coauthors: M. S. Fulp, W. J. Cavin, J. R. Connolly, D. L. Edwards, and M. A. Parchman.

Abstract

Woodward, L. A., 1982, "Structure of Disturbed Belt of west-central Montana," Geol. Soc. America Abstracts with Programs, 1982, v. 14, no. 6, p. 355.

Crayton J. Yapp

"A Reexamination of Cellulose Carbon-bound Hydrogen δD Measurements and Some Factors Affecting Plant-water D/H Relationships," Geochimica et Cosmochimica Acta 46, pp. 955-965.
Coauthor: S. Epstein

"A Model for the Relationships Between Precipitation D/H Ratios and Precipitation Intensity," EOS 63 Transactions of the American Geophysical Union, p. 775 (Abstract)

"Climatic Significance of the Hydrogen isotope Ratios in Tree Cellulose," Nature 297, pp, 636-639.
Coauthor: S. Epstein.

"A Model for the Relationships Between Precipitation D/H Ratios and Precipitation Intensity," Journal of Geophysical Research 87, C12, pp. 9614-9620.

5. RESEARCH PROJECTS OR CREATIVE WORK IN PROGRESS

Roger Y. Anderson

National Science Foundation, Research Grant, "Measurement of the Effects of Mt. St. Helens Tephra on Lakes Using Automated Sediment Traps": Two Years, $54,805. (Paul Karas RA)

"Measurement of Climatic Signatures in Lake Sediments Using automated Sediment Traps": U.S. Geological Survey, Paleoclimate Program, Cooperative project, travel expenses, but no funding.

Douglas G. Brookins

Sponsored Research

Sandia Laboratories: $34,500 for study of caliche in conjunction with problems of uranium mill tailings management (3-81: 3-82).

National Science Foundation: $99,000 for study of Sr isotopes for study of atmospheric versus soil uptake by plants and trees, Sangre De Cristo Mountains UNM-Biology Study Area; phase 2, with J. Gosz, Biology Dept. (6-81: 6-82).

National Science Foundation: $102,000 for study of Sr isotopes for study of atmospheric versus soil uptake by plants and trees, Sangre de Cristo Mountains UNM-Biology Study Area; phase 3, with J. Gosz, Biology Department (6-82:6-83).

732 Lawrence Livermore National Laboratory: $20,845 for study of poisoned land/inland seas for siting considerations for low level radioactive wastes (3-81:4-82).

Lawrence Berkeley Laboratory: $4500 for radwaste natural analogues studies (NRC funded to LBL); phase 2 (11-80:6-82).

Lawrence Berkeley Laboratory: $4500 for radwaste natural analogues studies (NRC funded to LBL); phase 3 (11-82:11-83).

U.S. Bureau of Mines: $64,000 for uranium mill tailings-mined backslope studies; with Dept. Civil Engineering, UNM (B. Thomson, Co-PI) (3-82:2-83).

U.S. Dept. Energy: $24,998 for study of playas for consideration for siting of low level radioactive and other hazardous chemical wastes (7-82:6-83).

Proposals Submitted or in Preparation

"Alkali and Alkaline Earth Budget at the Oklo Natural Reactor," to: American Chemical Society, Petroleum Research Fund.

"Playas for Hazardous Waste Disposal: Geochemical Constraints," to: USEPA or DOE.

"Uranium Mill Tailings Disposal by Mineslope Backfill II," to: USBM.

"Sr Isotopic and Trace Element Study of Western U.S. Basalts" to NSF.

"Geochemical Study of the Florida Mountains, New Mexico" to NSF.

"Geochemical Studies of WIPP Evaporites" to SNL.

Un-Sponsored Research

Distribution of uranium in geologic materials as a function of size, speciation, mineralogy (with C. E. Olsen, MS-UNM 82, of LASL).

Studies on the geochemistry and provenance of the Morrison Formation, San Juan Basin (with R. T. Hicks, MS-UNM 81 of NMEID; and R. M. Lowy, MS-UNM 82).

Geochronologic and geochemical study of evaporites: (a) evaporites of northwestern coastal Morocco (with W. T. Holser), (b) evaporites of the Delaware Basin, New Mexico (with W. T. Holser, R. Y. Anderson, C. J. Yapp).

Geochronologic and geochemical study of Precambrian rocks of New Mexico: emphasis on Sandia Mountain Precambrian rocks, plus Manzano Mountains, Zuni Mountains, Truchas Mountains (J. A. Grambling area), Pedernals, florida Mountains* (*including Precambrian and Phanerozoic rocks). (MS students A. Majumdar, R. K. Matheney).

Clay mineralogic studies in the Datil area, in the Grants Mineral Belt, and the Estancia Valley (with H. A. Vogler, UNM).

Supervision of Graduate Students

MS Theses Completed 1982

Karl M. Emanuel "A Geochemical, Petrographic and Fluid Inclusion of the Zuni Mountains Fluospar District, Cibola County, New Mexico."

Clayton E. Olsen "Geostatistical and Geochemical Investigations of the Uranium Distributions in Stream Sediments and in Surface and Ground Waters from the Estancia Valley, the Black Hawk Mining District, and an Area North of the Grants Mineral Belt, New Mexico: Applications to Methods for Geochemical Exploration."

Jeannie Theresa Place "Geology and Geochemistry of the Mariano Lake Uranium Mine, McKinley County, New Mexico."

Robert M. Lowy, "Petrology and Provenance of Westwater Canyon Member, Upper Jurassic Morrison Formation, Western San Juan basin, New Mexico."

MS Thesis work in progress (note: expected completion dates in parentheses)

Mark S. Abashian "The Eldora-Bryan Stock as a Natural Analogue to Buried Radioactive Wastes: a Study of the Chemical and Petrographic Changes in the Idaho Springs Formation Resulting from Intrusion of the Eldora-Bryan Stock, Colorado" (1983).

Andrew Leonard "Geology and Geochemistry of Uranium Deposits in the Datil Mountain Area, Catron County, New Mexico" (1983).

Ronald K. Matheney "Age and Thermal History of Plutonic Rocks, Florida Mountains, Luna County, New Mexico" (1984).

Patrick A. Longmire "Geochemical and Hydrologic Investigation of Mine Stope Backfilling with Uranium Mill Tailings" (1983).

Herbert A. Vogler "Trace Element Geochemistry of the Estancia Valley Playas, Torrance County, New Mexico" (1983).

Jeanna S. Hudson "A Geochemical and Petrographic Study of Late Cretaceous to Early Tertiary Andesites and Dacites in the Central Peloncillo Mountains, Hidalgo County, New Mexico" (1984).

Mark T. Murphy...Study of Platoro Caldera Complex, Colorado: Trace Element and Petrographic and Isotopic Study" (1984).

Member of supervisory committee for the following students

R. Abitz, H. Stein, S. McKinley, G. Sarkar, C. Condit, R. Miller, and T. Leyenberger.

Jonathan F. Callender

Sponsored Research

"Structural Petrology, Metamorphism and Tectonic History of Precambrian Rocks in the Picuris Range, New Mexico, Natural Science Foundation EAR-8012506
(3/15/81-8/31/84) $84,083

Books in preparation

Socorro Country, New Mexico Geological Society Guidebook 34. Coeditor: C. E. Chapin.

Geology of New Mexico, publisher undetermined.

Unsponsored Research

Structural evolution of Rio Grande Rift. Precambrian geology of central New Mexico. Structural implications for nuclear and chemical waste disposal.

Papers in preparation

Transposition Layering in Precambrian Rocks of the Southern Rocky Mountains.

Tectonic Environments of Middle Proterozoic Rocks of the Southern Rocky Mountains.

Structural Evolution of the Rio Grande Rift (invited paper, Continental and Oceanic Rifts, International Geological Congress, 1984).

Wolfgang E. Elston

Proposals funded

NSF Grant 80-07836 "Cenozoic volcanism and extensional orogeny in the New Mexico segment of the Basin and Range province," Sept. 1, 1980 to August 31, 1983, $74,872.

NASA Grant NGR 32-004-062, Supplement 17, "Application of Volcanology to Lunar and Planetary Geology," May 1, 1982 to April 30, 1983. $32,000

Sandia Laboratory Grant 50-6872 "Piceance Basin, Colorado" May 15 - Dec. 31, 1982 $7,952

New Mexico Energy Research and Development Institute Grant 68R-2102, March 3, 1980 to September 30, 1982. "Assessment of Geothermal Potential of Southwestern New Mexico," $26,810

Cooperative research program with U.S. Geological Survey on geology of the Springerville and White Mountain Baldy volcanic fields, Arizona, involving complete support by USGS of one Ph.D. dissertation (D. Nealey) and partial support of a second Ph.D. dissertation (Condit). Nov. 1, 1978 - Oct. 31, 1982. $45,000

Houston International Minerals Co. (Formerly Tenneco Minerals): Research project on manganese - tungsten veins of New Mexico: support for one Ph.D. dissertation (Sarkar) June 1, 1981 - December 31, 1982. $5,900

Proposals submitted

NSF proposal EAR 83-06397, "Cenozoic volcanism and extensional orogeny in the New Mexico segment of the Basin and Range province," September 1, 1983 to August 31, 1986. $171,499

NSF proposal EAR 83-06573, "Ore deposits associated with volcanic centers and Basin and Range faults, southwestern New Mexico." August 1, 1983 to July 31, 1986. $137,822

Rodney C, Ewing

Unsponsored Research

Studies on the genesis of pegmatites, particularly the Harding Pegmatite and those of the Petaca District, New Mexico.

Crystallography and crystal chemistry of Nb-Ta-Ti oxides, particularly alteration effects of metamict varieties.

Long-term release of radionuclides from various radioactive waste forms.

Crystal structure of iimoriite.

Application of EXAFS/XANES spectroscopy to mineralogical problems.

Research Proposals Submitted

"The Metamict State and Alteration of Complex Ti-Nb-Ta Oxides" submitted to the NSF (with Boeing Research).

$200,000/2 years.

"Radiation Effects and Annealing Kinetics in Crystalline Silicates, Phosphates and Complex Nb-Ta-Ti Oxides" submitted to Basic Energy Sciences of the Department of Energy.

$119,493/1st year

"The Dissolution Kinetics of Natural Glasses and the Prediction of Their Long-Term Stability: Application to the Evaluation of the Long-Term Stability of Borosilicate, Radioactive Waste Glasses" submitted to the Nuclear Regulatory Commission and Basic Energy Sciences of the Department of Energy.

$325,525/3 years

Papers in Preparation

The crystal structure of Iimoriite - $(Y, REE)_2Si0_4C0_3$ for The American Mineralogist.

Coauthors: R. F. Haaker, T. Dickinson and C. Campana

Long-Term Radioactivity Release from Solidified High-Level Waste Part II: Parametric Study of Waste Form Properties, Temperature and Time. Proceedings Volume of the Sixth International Symposium on the Scientific Basis for Nuclear Waste Management, Boston, 1982.

Coauthors: W. Lutze and F. K. Altenhein

Long-Term Radioactivity Release from Solidified High-Level Waste Part III: The Effect of Canister Lifetime. Submitted to the Second International Symposium on Ceramics in Nuclear Waste Management sponsored by the American Ceramic Society, April 24-27, Chicago.

Coauthors: W. Lutze and F. K. Altenhein

Long-Term Radioactivity Release from Solidified High-Level Waste Part IV: The Effect of Leaching Mechanism and Surface-Area-To-Solution-Volume. Submitted to the symposium on the Scientific Basis for Radioactive Waste Management sponsored by the Materials Research Society, November, 1987.

Coauthors: W. Lutze, F. K. Altenhein, B. Grambow and E. Freude

Ti-Site Geometry in Metamict, Annealed and Synthetic Complex Ti-Nb-Ta Oxides by X-ray Absorption Spectroscopy. Submitted to Nuclear Instruments and Methods

Coauthors: R. B. Greegor, F. W. Lytle, R. F. Haaker

740 Alteration Effects and Leach Rates of Basaltic Glasses: Implications for the Long-Term Stability of Nuclear Waste Form Borosilicate Glasses. Submitted to Journal of Noncrystalline Solids.

Coauthors: G. Malow and W. Lutze

Jeffrey A. Grambling

Sponsored Research

"Iron-magnesium partitioning between staurolite and chloritoid in metamorphic rocks," Sandia National Laboratories.

Oct. 1, 1981-Sept. 30, 1982 $21,000

"Effects of minor elements on metamorphic phase relations," National Science Foundation.

March 15, 1982-Aug. 30, 1983 $28,700

"Geochronology of Precambrian metamorphic rocks in the Pecos Wilderness near Gascon, New Mexico," New Mexico Bureau of Mines and Mineral Resources.

June 1, 1982-May 30, 1983 $900

"Geology and economic potential of possible stratabound precious and trace-metal mineralization, northern New Mexico" Anaconda Minerals, Inc.

June 1, 1983-May 30, 1984 $10,000

"Fluid behavior during regional metamorphism," UNM Research Allocation Committee.

July 1, 1983-June 30, 1984 $799

"Effects of minor elements on metamorphic phase relations," National Science Foundation.

November 1, 1983-October 30, 1986 $98,521

"Completion of geologic mapping in the Truchas-Rio Mora area," New Mexico Bureau of Mines and Mineral Resources.

June 10, 1983-August 15, 1983 $5,615

Unsponsored Research

"Geology of Precambrian rocks near Salida, Colorado: study of transposition and false stratigraphy."

"Coexisting paragonite and sillimanite in Precambrian quartzite and schist, New Mexico."

"Precambrian geology of Canon del Trigo, New Mexico."

"Rare earths and heavy metals as indicators of hydrothermal fluids in metamorphic rocks."

"Regional gradients in the composition of metamorphic fluids in pelitic schist: a mineralogic, petrologic and isotopic study."

Proposal Submitted

"Precambrian geology of the Salida, Colorado, area: a mineralized Proterozoic greenstone belt," submitted to Anaconda Minerals, Inc., 1982, $14,865.

Proposals in Preparation

"A study of partially melted and mobilized metasediments from Aspen Basin, New Mexico: applications to geothermal research," in preparation for Department of Energy, 1983 (with R. Metcalf).

Stephen P. Huestis

Unsponsored research

Treatment of variable thermal conductivity in heat flow inverse problems.

Linear programming methods for three-dimensional gravity problems (with M. E. Ander).

The inverse problem for the distribution of crustal radiogenic heat production.

Albert M. Kudo

Unsponsored Research

Petrogenesis of the Crandall intrusions, Absaroka Mountains, Wyoming.

Petrogenesis of the Paliza Canyon Formation and the Bearhead Rhyolite, Jemez Mountains, New Mexico.

Elephant Butte-Fra Cristobal basalts: Geologic Map and geochemistry, New Mexico.

Petrology and geochemistry of volcanics and intrusions of the Bearhead Peak quadrangle and the dating of the Heart Mountain detachment fault, Absaroka Mountains, Wyoming.

Petrology of the andesites and their cognate inclusions, northeastern Japan.

Barry S. Kues

Papers in Preparation

"A chiton from the Flechado Formation (Middle Pennsylvania) of northern New Mexico," New Mexico Journal of Science, in review.

"A new Late Triassic invertebrate and vertebrate fauna from the Chinle Formation, eastern New Mexico [abs.]," Geological Society of America. Abstract with Program in Review. Coauthors: K. K. Kietzke and S. G. Lucas.

"Cephalopod aptychi from the Los Moyos Limestone, Madera Group (Middle Pennsylvanian), near Albuquerque, New Mexico," New Mexico Geology, in review.

"New Mexico Paleontology," in Williams, J. L. (ed.) "New Mexico in Maps, Second Edition," University of New Mexico Press, in review.

"Mosasaur remains from the Lewis Shale (Upper Cretaceous), southwestern Colorado," Journal of Paleontology, in review. Coauthors: S. G. Lucas.

"Nonmarine mollusks from the Chinle Formation, Dockum Group (Upper Triassic), of eastern New Mexico," Journal of Paleontology, in review.

"Nonmarine ostracodes and a spirorbid worm from the Chinle Formation, Dockum Group (Upper Triassic), of eastern New Mexico," in preparation.

744 "Pleurotomariacean gastropods from the Flechado Formation (Middle Pennsylvanian) near Taos, New Mexico," in preparation.

"Gastropods and scaphopods from the Upper Pennsylvanian-Lower Permian Red Tanks Member, Madera Formation, in central New Mexico," in preparation.

"Annotated catalogue of New Mexico fossils" [Book], in preparation.

Coauthor: S. A. Northrop

Kenneth D. Mahrer

Research Proposals Submitted

"Modeling Surface Deformation from Subsurface Crack Growth in a Heterogeneous Crust," Sandia-University Research Programs (SURP). $30,000

"Correlation Between the Landform and the Local Geomagnetic Field Northwest of the Sandia Mountains near Placitas, NM," University Research Allocation Committee (RAC). $500

"Landform Effects on the Local Geomagnetic Field Northwest of the Sandia Mountains," Sigma Xi National Research Honorary Fraternity. Investigators: S. Newsome and C. Bradleys. $800

"Gravity and Magnetics of the Rio Grande Rift in the vicinity of Elephant Butte Reservoir, Sierra Co., New Mexico," Sigma Xi - National Research Honorary Fraternity. $900

Investigator: B. Honea.

"Gravity, Magnetics and Subsurface Geology in and Near Northern Albuquerque, NM," RAC. $900

Consultant and contributor in Research Proposal, "Shallow Groundwater Systems and Uranium Mining and Milling Activity: Applications of Geomorphology and Quarternary Geology to Ground Water Management, Principal Investigator, Dr. S. Wells. $127,000

Unsponsored Research

Surface Topography vs. Deformation Fields for Buried Strike-Slip Faults

Assessment of Geophysical Field Techniques for Locating Precious Metal Deposits, near Taos, New Mexico.

Geophysical Field Studies of Coronado State Monument, Kuaua Ruins, Bernallilo, N.M.

A Simple Method for Approximating the Surface Deformation from a Long Narrow Kinked Fracture or Intrusive Body

Geophysical and Geological Studies North of Albuquerque

Computer Program for Calculating Two-Dimensional Magnetic Anomalies, to be submitted for publication in Tekniques, published by the Tektronix Co.

Computer Program for Calculating Two-Dimensional Gravity Anomalies to be submitted for publication in Tekniques, published by the Tektronix Co.

Computer Program for Calculating Resistivity Anomalies, to be submitted for publication in Tekniques, published by the Tektronix Co.

Computer Program for Analysis of Seismic Refraction Data, to be submitted for publication in Tekniques, published by the Tektronix Co.

Applying the Haskel-Thomson Layer Matrix method to Resistivity Exploration of the Upper Crust.

Effect of crack shape on surface deformation for buried, open cracks.

Geomagnetic Surveying in an Alluvial Fan -- a possible tool for delineating heavy mineral deposition, with C. Bradley.

Anticlastic Bending of Plate and subduction zone shapes.

Sponsored Research

"Modeling Surface Deformation from a Buried Crack in Heterogeneous Crust," American Chemical Society, Petroleum Research Fund, Sept. 1982 - Sept. 1984. $10,000

"Seismic Refraction Study of Arroys in Three Guns Canyon, New Mexico," Monticello Residence Committee of Tijeras Canyon, June 1982. $100

"Correlation Between the Landform and the Local Geomagnetic Field Northwest of the Sandia Mountains near Placitas, N.M.," University Research Allocation Committee (RAC) March-June 1982. $500

"Seismic Studies in the Cima Volcanic Field, Mojave Desert, California, U.S. Geological Survey.

June 1983 $1,500

Theoretical and Practical Applications of Seismic Refraction and Electrical Resistivity Exploration Techniques: Highway Engineering/Site Investiation, NM State Highway Department. $2,000

Papers in Preparation

"A Simple Approximation for the Surface Deformation from a long, narrow Kinked Fracture or Inclusion"

"A Magnetic Anomaly Associated with Arroyos in an Alluvial Fan."

"A Note on Shape vs. Surface Deformation for a Buried Fracture or Inclusion"

"An Approximation Method for Finding the Surface Deformation from a Buried Strike-Slip Fault in a Mildly Uneven Half-Space."

New Course Creation

Geo 491 Earthquake Prediction, Winter '82, with Dr. L. Teufel of Sandia Labs.

Geo 522 Geodynamics: Applications of Continuum Physics to Geoscientific Problems - Spring '83.

Geo 491 Seminar on Advanced Topics in Exploration Geophysics - Spring '83.

Leslie D. McFadden

Sponsored Research

"Soils-Geomorphological Studies of Quaternary Surficial Deposits in the Mojave Desert, California," United State Geological Survey.

October 1, 1981-September 30, 1982 $18,200

"A Proposal to Establish a New Laboratory for the Quaternary Studies Program in the Department of Geology," University of New Mexico Alumni Foundation, Inc.

July 1 - December 31, 1982 $35,480

"Geomorphology, Quaternary Geology, and Soils of the Tpotla-Cottonwood Wash Area Applied to Archeological Sites of the UII," Office of Contract Archeology.

November 1, 1981-March 1, 1982 $3,000

"Development of A Soils Chronosequence for a Suite of Fluvial and Eolian Deposits in Northwestern New Mexico," Research Allocations Committee of the University of New Mexico.

April 21, 1982-June 15, 1983 $1,950

Unsponsored Research

Studies on soil-geomorphological relationships in the San Augustin Plains region, New Mexico.

Development of soils in a well dated sequence of Quaternary deposits in the Transverse Ranges, Southern California.

Soil-geomorphological and soil-stratigraphic relationships in the Pecos River region, New Mexico.

Research Proposals Submitted

"Soils-geomorphological Studies of Quaternary Surficial Deposits in the Mojave Desert, California," to the U. S. Geological Survey. $15,900

"Soil-geomorphological Studies in the Cajon Pass Area, Transverse Ranges, Southern California," through the California Institute of Technology. $4,000

Papers in Preparation:

"The Rate and Depth of Accumulation of Pedogenic Carbonate in Soils: Formulation and Testing of a Compartment Model" for a Special Paper, Geological Society of America, with J. C. Tinsley.

"Temporal Changes in the Composition of Pedogenic Iron Oxyhydroxides in Soils Developed in Quaternary Alluvium, Southern California" for Quaternary Research, with D. M. Hendricks.

"Quaternary Geology, Geomorphology and Soils of the Tpotla and Cottonwood Drainage Basins, UII Lease, Northwestern New Mexico," for a chapter in The Economy and Interaction Along the Lower Chaco River: The Navajo Mine Archeological Program, Mining Area III, with S. G. Wells and T. F. Bullard.

"Implications of Soil-Geomorphic Studies for Latest Cenozoic Landscape Development in the San Bernardino Mountains, Southern California," for the Contemporary Research in Soil Geomorphology session at the 79th Annual American Association of Geographers Meeting, with J. C. Matti and J. C. Tinsley.

"A Chronosequence of Cumulic Soils Formed in Eolian Parent Materials on Flows of the Late Cenozoic Cima Volcanic Field, Mojave Desert, California," for the 1983 Geological Society of America Cordilleran-Rocky Mountain Section Meeting, with S. G. Wells and J. C. Dohrenwend.

"Sediment Evolution in the Cima Volcanic Field, Eastern Mojave Desert, California," ibid, with S. G. Wells, J. C. Turrin and J. C. Dohrenwend.

"K-Ar Ages of Late Cenozoic Basaltic Volcanism in the Cima Volcanic Field, California," ibid, with S. G. Wells, J. C. Turrin, and J. C. Dohrenwend.

"Types and Rates of Degradation of Volcanic Landforms in Desert Climates: Examples from the Cima Volcanic Field, Mojave Desert, California," ibid, with S. G. Wells, J. C. Turrin, and J. C. Dohrenwend.

"Clay Mineral Authigenesis in a Mediterranean Climate: Temporal Changes in Clay Composition of Soils Formed in Quaternary Lithic Arkosic Fluvial Terrace and Fan Deposits in the Tranverse Ranges, Southern California," for Quaternary Research, with D. M. Hendricks.

Stephen G. Wells

Sponsored Research

"Geomorphic Criteria for Selecting Stable Uranium Tailings Disposal Areas (Phase I), New Mexico Energy and Mineral Department.

May 1, 1982 - June 1, 1982 $55,087

"Geomorphic Criteria for Selecting Stable Uranium Tailings Disposal Areas (Phase II)," New Mexico Energy and Mineral Department.

June 1, 1982-February 28, 1983 $23,766

"Geomorphology, Quaternary Geology, and Soils of the Tpotla-Cottonwood Wash Area Applied to Archeological Sites of the UII," Office of Contract Archeology, University of New Mexico.

November 1, 1981-March 1, 1982 $3,000

"A proposal to Establish a New Laboratory for the Quaternary Studies Program in the Department of Geology," University of New Mexico Alumni Foundation, Inc.

July 1-December 31, 1982 $35,480

"Soils-Geomorphological Studies of Quaternary Surficial Deposits in the Mojave Desert, California," U.S. Geological Survey.

May 1,1982-December 31, 1982 $7,200

"Evolution Landscape Stability for Research Allocations Committee, UNM.

April 21, 1982-June 15, 1983 $1,996

Unsponsored Research

Desert Hillslope Evolution during the Quaternary Fluviokarst Processes in Humid and Semiarid Climates, Kentucky and New Mexico.

Rates and Processes of Quaternary Landscapes Change: Colorado Plateau and Basin and Range Provinces.

Fluvial Processes in Semiarid Alluvial Valley Floors.

Research Proposal Submitted

"Geomorphic Criteria for Selecting Stable Uranium Tailings Disposal Areas, Phase II," to Nuclear Regulatory Commission. $90,676

Papers in Preparation

"Origin and Evolution of Deserts," a book to be published by University of New Mexico Press in 1983.

Co-editor: D. R. Haragan.

"Quaternary Geology, Geomorphology, and Soils of the Tpotla and Cottonwood Drainage Basins, UII Lease, Northwestern New Mexico," for a chapter in The Economcy and Interaction along the Lower Chaco River: The Navajo Mini Archeological Program, Mining Area III

Coauthors: L. D. McFadden and T. F. Bullard

"Quaternary Deposits and Landscapes of the Chaco River Area, Southeasten Colorado Plateau" for Geological Society of America Bulletin, invited paper.

Coauthors: T. F. Bullard and L. N. Smith.

"Model of Quaternary Desert Hillslope Evolution" for Geological Society of America GEOLOGY.

Coauthors: J. Pickle, S. Sares, R. Ford, J, Grimm, G. Martinez, and G. Weadock.

"Glacial Landforms of the Southern Sangre de Cristo Mountains, New Mexico" for New Mexico Geology.

Coauthors: J. Pickle, S. Sares, R. Ford, J. Grimm, G. Martinez, and G. Weadock.

"Geomorphology and Quaternary History of the Chaco Dune Field, Northwestern New Mexico," for Geological Society of America Bulletin coauthors: J. D. Schultz and T. F. Bullard.

"Types and Rates of Degradation of Volcanic Landforms in Desert Climates: Examples from the Cima Volcanic Field, Mojave Desert, California: for Geological Society of America Abstracts with Program, Rocky Mountain-Cordilleran sections, with J. Dohrenwend, L. McFadden and B. Turrin.

"A Chronosequence of Cumulic Soils Formed in Eolian Parent Material on Flows of the Late Cenozoic Cima Volcanic Fold, Mojave Desert, California" for the Geological Society of America Abstracts with Program, Rocky Mountain-Cordilleran sections.

Coauthors: L. McFadden, G. Dohrenwend, and B. Turrin.

"K-Ar Ages of Late Cenozoic Basaltic Volcanism in the Cima Volcanic Field, California" for the Geological Society of America Abstracts with Program, Rocky Mountain-Cordilleran sections.

Coauthors: B. Turrin, J. Dohrenwend, and L. McFadden.

"Pediment Evolution in the Cima Volcanic Field, Eastern Mojave Desert, California" for the Geological Society of America Abstracts with Program, Rocky Mountain-Cordilleran sections.

Coauthors: J. Dohrenwend, B. Turrin, and L. McFadden.

Lee A. Woodward

Research grant from the New Mexico Bureau of Mines and Mineral Resources for $4,000 for field work to prepare a memoir on the geology and mineral resources of Sierra Nacimiento, New Mexico. For calendar year 1982.

Crayton J. Yapp

Sponsored Research

"Stable Isotope Investigations of the Hydrology of the Upper Rio Grande Drainage Basin," Sandia National Laboratories.
October 1, 1981 - September 30, 1982 $12,000

"Stable Isotope and Chemical Study of the Mineral System Goethite-Hematite in Iron-Rich Sedimentary Rocks," UNM Research Allocations Committee.
September 15, 1982 - June 30, 1983 $1,180

Unsponsored Research

Isotopic studies of formation waters and associated hydrocarbons from natural gas wells in the San Juan Basin, New Mexico.

Isotopic studies of playa waters and groundwaters in the Estancia Basin, New Mexico.

Isotopic studies of micas from Precambrian metamorphic rocks in the region of Truchas Peak, New Mexico.

Research Proposals Submitted

"A Hydrogen Isotope and Chemical Study of the Sedimentary Iron Oxides Goethite and Hematite with Applications to the Origins of Ironstones and Iron Formations," submitted to NSF-Geochemistry: $65,754

"Investigation of the Impact of Climatic Variation on River Discharge Using Tree Cellulose D/H Ratios," submitted to NSF-Climate Dynamics: $63,032

"Stable Isotope Study of Formation Waters and Associated Hydrocarbons in the San Juan Basin, New Mexico," submitted to the ACS-Petroleum Research Fund: $35,000

Papers in Press or in Preparation

"Effects of A100H-Fe00H Solid Solution on Goethite-Hematite Equilibrium," accepted for publication in Clays and Clay Minerals.

"Stable Hydrogen Isotopes in Iron Oxides - Isotope Effects Associated with the Dehydration of a Natural Goethite," accepted for publication in Geochimica et Cosmochimica Acta.

"Stable Hydrogen Isotope Variations in the Upper Rio Grande Drainage Basin," in preparation.

6. ACTIVITIES IN LEARNED AND PROFESSIONAL SOCIETIES

Roger Y. Anderson

Invited Presentations:

Houston Geological Society, Continuing Education Symposium on Salt Structures, Evaporite Source Rocks, and Sedimentation, April, 1982. Presented paper "Deformation-dissolution Processes in the Delaware Basin, West Texas and New Mexico." Previously published paper "Deep-seated Salt Dissolution in the Delaware Basin, Texas and New Mexico" reprinted in symposium volume.

AMQUA (American Quaternary Association) Annual Meeting, Seattle, on Character and Timing of Rapid Environmental and Climatic Changes. Session address "Accidents, Pulses, and Annuation in Lacustrine Systems," July, 1982.

Fifth International Symposium on the Scientific Basis for Nuclear Waste Management, Berlin, West Germany. Presented paper "Deformation-dissolution Potential of Bedded Salt, Waste Isolation Pilot Plant Site, Delaware Basin, New Mexico, May, 1982.

Other Presentations:

International Symposium on Milankovitch and Climate, NATO Conference, Lamont-Doherty Geology Observatory, New York, December, 1982. Presented paper "Orbital Forcing of Evaporite Sedimentation."

Geological Society of America, annual meeting, New Orleans, Louisiana 1982. Presented paper "Orbital and Climatic Control of Permian Evaporite Deposition.

Institute of Ocean Sciences, Wormley, England, May, 1982. Presented talk "Dissolution of Evaporites as related to Nuclear Waste Disposal."

Other Activities:

Member: AAAS, Geological Society of America

Member: Student Publications Board, 1982-1983

Member: A & S Tenure Committee

Chairperson: A & S Promotion Committee for Science and Water

Meetings Attended:

Geological Society of America, New Orleans, 1982.

International Conference on Milankovich and Climate Lamont-Doherty Geology Obs., New York, November 30 - December 3, 1982.

Papers Read:

1982 "Orbital and Climatic Control of Permian Evaporite Deposition, Delarare Basin, Texas and New Mexico," Geological Society of America, Annual Meeting, New Orleans, October 1982.

1982 "Orbital Forcing of Varved evaporite Sedimentation": Interantional Symposium on Milankovitch and Climate, Palisades, N.Y., Nov.-Dec. 1982.

Douglas G. Brookins

Professional Presentations

"Caliche Cover for Stabilization of Abandoned Uranium Mill Tailings," (5th Symposium on Uranium Mill Tailings Management; Fort Collins, CO).

"Aqueous Geochemical Interactions between Ground Water and Uranium Minestope Backfilling-Grants Mineral Belt, New Mexico: Applications of Eh-pH Diagrams," (Fifth Symposium on Uranium Mill Tailings Management: Fort Collins, Colorado). Coauthors: P. A. Longmire, R. T. Hicks.

"Suitability of Crystalline Rocks for Radwaste Storage: I. Investigation of Two Plutons, Colorado," (Rocky Mountain Section of the Geological Society of America, annual meeting, Bozeman, Montana). Coauthors: M. S. Abashian, L. H. Cohen, A. E. Williams, H. A. Wollenberg, S. Flexser.

"Suitability of Crystalline Rocks for Radwaste Storage: II. Study of the Idaho Springs Formation, Colorado," (Rocky Mountain Section of the Geology Society of America, annual meeting, Bozeman, Montana).

Coauthors: M. S. Abashian, L. H. Cohen, H. A. Wollenberg.

"The Age of the Fruitland and Kirtland Formations, San Juan Basin, New Mexico," (Rocky Mountain Sec. Geology Society of America, annual meeting, Bozeman, Montana).

Coauthor: J. K. Rigby.

759 "Rare Earth Elemental Geochemical Studies of Hydrothermal Fluorite-Carbonate Deposits, Mineral County, Montana," (Rocky Mountain Section Geology Society of America, annual meeting, Bozeman, Montana).

Coauthor: K. M. Emanuel.

"Geochemical Studies at the WIPP Site, New Mexico," (American Chemical Society, annual meeting, Las Vegas, Nevada).

"Low Level Radwaste Disposal in Poisoned Lands/Inland Seas," (American Nuclear Society, annual meeting, Los Angeles, California).

Coauthors: H. A. Vogler, J. J. Cohen.

"Trace Metal and Radionuclide Migration in Ground Water from Acid and Alkaline Leaching Uranium Tailings in the Colorado Plateau," (Geological Society of America, ann. mtg., New Orleans, Louisiana).

Coauthor: P. A. Longmire.

"Early Diagenesis of Uranium Mine Stope Backfill," (5th Symposium on Uranium Mill Tailings Management, Fort Collins, Colorado).

Coauthors: B. M. Thomson, P. A. Longmire.

"Trace Metal and Radionuclide Migration in Groundwaters from Acid Leaching Uranium Tailings in the Grants Mineral Belt, New Mexico," (5th Symposium on Uranium Mill Tailing Management, Fort Collins, Colorado).

Coauthor: P. A. Longmire.

"Radioactive Waste Disposal in Rocks: The Message from Oklo," (N.M. Academy of Science Annual Management, Socorro, New Mexico).

"Possible Uses of Playas for Low Level Radioactive Waste Disposal" (N.M. Academy of Science Annual Management, Socorro, New Mexico).

Coauthor: H. A. Vogler.

"Natural Analogue for High Level Radioactive Waste Disposal: Intrusion of the Alamosa River Stock into Tuffaceous and Andesitic Rocks of the Platoro Complex, Colorado," (N.M. Academy of Science Annual Management, Socorro, New Mexico).

Coauthors: M. T. Murphy, M. S. Abashian.

"Natural Analogue for High Level Radioactive Waste Disposal: Intrusion of the Eldora-Bryan Stock into Idaho Springs Formation, Colorado:, (N.M. Academy of Science Annual Management, Socorro, New Mexico).

Coauthor: M. S. Abashian.

"Geochronologic Study of the Idaho Springs Formation, Colorado," (N.M. Academy of Science Annual Management, Socorro, New Mexico).

Coauthor: M. S. Abashian.

"Use of Poisoned Land/Inland Seas for Low Level Radioactive Waste Disposal," (Sixth International Symposium Scientific Basis for Nuclear Waste Management; Boston, Massachusetts).

Coauthors: H. A. Vogler, J. J. Cohen.

761 "Natural Analogues: Alamosa River Monzonite Intrusive into Tuffaceous and Andesitic Rocks," (Sixth International Symposium Scientific Basis Nuclear Waste Management; Boston, Massachusetts).

Coauthors: M. S. Abashian, L. H. Cohen, H. A. Wollenberg, A. E. Williams, and S. Flexser.

"Introductory Remarks," (Sixth International Symposium Scientific Basis for Nuclear Waste Managment; Boston, Massachusetts).

"Symposium Closing Remarks," (Sixth International Symposium Scientific Basis for Nuclear Waste Management; Boston, Massachusetts).

"Geochronologic Studies of Fenton Hill HDR Drill Cores, Los Alamos," (Conference on Geothermal Energy, Los Alamos Scientific Laboratory, Los Alamos).

Coauthor: A. W. Laughlin.

"Geochemical and geochronologic study of volcanic ashes from the Kirtland Formation (Cretaceous), San Juan Basin, New Mexico" (Joint Rocky Mountain - Cordilleran Geological Society America Annual Meeting, Salt Lake City, Utah)

Coauthor: J. K. Rigby.

"Trace metal and radionuclide adsorption during diagenesis of acid leach uranium tailings, Colorado Plateau" (Joint Rocky Mountain - Cordilleran Geological Society America Annual Meeting, Salt Lake City, Utah).

Coauthors: P. A. Longmire, B. M. Thomson.

"Playas for the siting of low level radioactive waste: studies in the Estancia Valley, New Mexico" (American Nuclear Society Annual Meeting).

Coauthor: H. A. Vogler.

"Geochronologic studies of granites and metamorphic rocks, Sandia Mountains," (Annual Spring Meeting, New Mexico Geological Society, Socorro, NM).

Coauthor: A. Majumdar.

"Geochronologic study of evaporites, southeastern New Mexico" (Annual Spring Meeting, New Mexico Geological Society, Socorro, NM).

"Geochronologic studies of igneous rocks from the Florida Mountains, New Mexico" (Annual Spring Meeting, New Mexico Geological Society, Socorro, NM).

Coauthor: R. K. Matheney.

"Geochemical study of Estancia Valley playas, New Mexico" (Annual Spring Meeting, New Mexico Geological Society, Socorro, NM).

Coauthor: H. A. Vogler.

Meetings attended

Materials Research Society

a. Symposia planning meeting, Atlanta, Georgia; January 82.

b. Program Review Committee, Symposium on the Scientific Basis for Nuclear Waste Management, Albuquerque, NM; June 23, 24, 1982.

c. Symposia chairmen meeting, Boston, Mass., September 23, 24, 1982.

d. Sixth International Symposium on the Scientific Basis for Nuclear Waste Management, Boston, Mass., November 1-4, 1982.

e. Publications Committee (1982-1984), Material Research Society.

American Chemical Society, annual meeting, Las Vegas, NV, April 82.

American Nuclear Society, annual meeting, Los Angeles, CA, June 82.

Rocky Moutain Section, Geological Society of America, annual meeting, Bozeman, Montana, May 1982.

New Mexico Academy of Science, Socorro, NM, annual meeting, October 15-15, 82.

Fifth Symposium on Uranium Mill Tailing Management, Fort Collins, CO, December 82.

Geological Society of America--Cordilleran--Rock Mountain Joint Meeting, Salt Lake City, Utah, May 83.

N.M. Geological Society--Annual Spring Meeting, Socorro, New Mexico, April 83.

American Nuclear Society--Annual Meeting, Detroit, Michigan, June 83.

Offices Held

Chairman, Program Committee, Symposium D, Materials Research Society.

Member, Program Review Committee, Symposium D, Materials Research Society.

Nominated for Councillor, Association of Exploration Geochemists.

Publications Committee, Materials Research Society.

Membership Committee, Materials Research Society.

Jonathan F. Callender

Professional Presentations

"Transposition in Precambrian Metamorphic Rocks of New Mexico: Implications for Stratigraphic Interpretations," University of New Mexico, Geoscience Seminar, September 30, 1982.

"Potential Precambrian structural control of the Jemez volcanic field," Valles Caldera Workshop, Los Alamos National Laboratory, October 5, invited speaker.

"Precambrian structural and lithologic control on regional aeromagnetic anomalies, F.O.A.M. III, San Antonio, Texas, January 28, 1983, invited speaker.

"Evidence for low-angle faulting along western margin of the Sandia Uplift, Rio Grande rift, New Mexico," Geological Society of America Cordilleran/Rocky Mountain Section, May 4, 1983.

Activities in Professional Societies

Managing Editor and Science Editor (1983), New Mexico Geological Society.

Technical Editor, Geotectonics, American Geophysical Union and Geological Society of America.

Project Correspondent, U.S. Geodynamics Committee.

Blue Line Committee, Association of Earth Science Editors.

Member, Rio Grande Rift Consortium.

Chairman, Earth Sciences Section, International Science and Engineering Fair, 1983.

Reviewed manuscripts and proposals for the following:

Economic Geology

Geological Society of America Bulletin

Geology

Journal of Geophysical Research

Los Alamos National Laboratories

National Science Foundation

Prentice-Hall Company

Saunders College Publishing Company

University of California, Institute of Geophysics and Planetary Physics

American Geophysical Union

New Mexico Bureau of Mines and Mineral Resources

Wolfgang E. Elston

Attended NASA Planetary Geology Program Principal Investigator's Conference, Jet Propulsion Laboratory, Pasadena, California, January 11-14.

Coauthored papers: (1) Criswell, C. W. and Elston, W. E., "Morphological characteristics of terrestrial ash-flow tuff (ignimbrite) deposits" (2) Aubele, J. C., Crumpler, L. S., and Elston, W. E. "Vertical structures of basaltic lava flows: Implications for surface sampling and interpretations."

Invited speaker, Albuquerque Geological Society, February 2, "The UNM Geology Department."

Participant, field trip to Mohave Desert, Geological Society of America, Cordilleran Section, April 17-18.

Attended annual meeting, Geological Society of America, Cordilleran Section, Anaheim, California, April 19-21, 1982.

Attended Annual Meeting, New Mexico Mining Association, Carlsbad, New Mexico, October 5-6.

Attended annual meeting, Geological Society of America, New Orleans, Louisiana. Read paper: "K_2O variations in mid-Tertiary volcanic rocks in southwestern North America: An alternative to the K-h hypothesis," October 18-21.

Elected to Board of Directors, New Mexico Mining Association. Attended meeting of Board of Directors, Carlsbad, New Mexico, November 4.

Attended meeting, American Geophysical Union, San Francisco, California, December 10-15. Invited participant, symposium on "Models for Motions of North America and Plates of the Pacific Basin and the Tectonic History of the Western Cordillera - A search for correlation." Read paper: "Subduction of young oceanic lithosphere and extensional orogeny in southwestern North America during mid-Tertiary time."

Secretary/Treasurer, New Mexico Section, American Institute of Professional Geologists.

Elected President, New Mexico Section, American Institute of Professional Geologists, to serve in 1983.

Rodney C. Ewing

Professional Presentations

"Radiation Damage in Natural Materials" University of Paris (XI), Orsay, France, January 25.

"Potential Release of Radionuclides from Nuclear Waste Forms Deposited in Salt Formations" at Workshop on Evaluation of Systems Variables in Long-Term Performance of Nuclear Waste Solids, University of Florida, Gainesville, Florida, February 4 (given by W. Lutze).

"The Use of Natural Analogues to Predict the Long-Term Stability of Radioactive Waste Forms" Department of Mineralogy and Geology, University of Queensland, Australia, March 5; School of Science, Griffith's University, Australia, March 4; Geological Society of Australia, Queensland Section, March 17.

"The Harding Pegmatite: Taos County, New Mexico" Department of Geology and Mineralogy, University of Queensland, Australia, April 8; Macquarie University, Sydney, Australia, April 15.

"Radioactive Waste Forms: Properties and Problems" University of Sydney, Australia, April 16.

"Natural Glasses: Analogues for Radioactive Waste Glasses" Power Reactor and Nuclear Fuel Development Corporation, Tokai-Mura, Ibaraki, Japan, April 26.

"Long-Term Radioactivity Release from Solidified High-Level Waste" MRS Symposium 5, West Berlin, Germany, June 7 (given by W. Lutze).

"Investigation of Titanium in Metamict Nb-Ta-Ti Oxides using Extended X-ray Absorption Fine Structure Technique" MRS Symposium 5, West Berlin, Germany, June 8 (poster presentation).

"Leachability of Natural Zircon, $ZrSiO_4$, as a Function of Alpha Dose" MRS Symposium 5, Berlin, Germany, June 8 (poster presentation).

"Geology of the Grand Canyon" Seminar at Hahn-Meitner Institute, West Berlin, Germany, September 8.

"Transmission Electron Microscopy Study of Radiation Effects in Natural Materials": seminar Hahn-Meitner Institute, West Berlin, September 13.

"TEM Study of the Metamict State" 13th General Meeting of the International Mineralogical Association, Varna, Bulgaria, September 23, (poster presentation).

"The Geology of the Grand Canyon" Geochemistry Department Seminar, Hahn-Meitner Institute, West Berlin, November 15.

"Radiation Effects in Crystalline Materials" Institute fur Nukleare Entsorgungstechnik, Kernforshungszentrum Karlsruhe, West Germany, November 9.

Activities in Professional Societies:

Past President of the New Mexico Geological Society

Program committee member of the Fifth Internation Symposium on the Scientific Basis for Nuclear Waste Management sponsored by the Materials Research Society, Berlin, Germany.

Associate Editor of the Proceedings for the Symposium on the Scientific Basis for Nuclear Waste Management. (Published by Elsevier-North Holland).

Member DOE Panel "Scientific Needs of the Technology of Nuclear Waste Containment" (chaired by D. Turnbull, Harvard University).

Elected as councilor for the Materials Research Society (1983-1985).

Recipient of an Oak Ridge Associated Universities Contract to support travel and research at Oak Ridge National Laboratory.

Reviewed manuscripts and proposals for the following:

The American Mineralogist

National Science Foundation

Science

Journal of Radioactive Waste Management

Jeffrey A. Grambling

Professional presentations

Regional gradients in the composition of metamorphic fluids in pelitic schist," to Department of Geology, UNM, September 16.

"Mn andalusite in kyanite-sillimanite rocks from Rio Mora, New Mexico," to Annual Meeting, Geological Society of America, October 21.

"Precambrian geology of Canon del Trigo, Manzano Mountains," to New Mexico Geological Society, November 4.

"Mn and Cr-rich marker horizons in Proterozoic metamorphic rocks, New Mexico," to Geological Society of America, May 4.

"Geochemistry of minor element and rare earth-rich horizons in Precambrian metamorphic rocks of the southern Sangre de Cristo Mountains, New Mexico," to Geological Society of America, May 4.

Activities in Professional Societies:

Secretary, New Mexico Geological Society, 1982.

Treasurer, New Mexico Geological Society, 1983.

Reviewed manuscripts for: The American Mineralogist, The Canadian Mineralogist, Geological Society of America Bulletin.

Review proposals for the National Science Foundation.

Member: Geological Society of America, Mineralogical Society of America, Mineralogical Association of Canada, American Geophysical Union, Sigma Xi, New Mexico Geological Society.

Chaired session on Precambrian geology, Geological Society of America, Salt Lake City Meeting, May 4.

William T. Holser

"Geochemistry of Conodont Apatite" a paper presented (coauthors: Jack Kovach and Judith Wright-Clark) at the Third Meeting of the European Conodont Society, Lund, Sweden, August 30 - September 7.

Chaired session and presented papers, Annual Meeting of the Geological Society of America, New Orleans, Louisiana, October 16-22: "Organic Carbon and Sulfur in Black Shales and Secular Variations in δ^{13} and $\delta^{34}S$" (coauthors:

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T. F. Anderson and M. A. Arthur): "Chemical Event in the Carbon Cycle of the Early Permian Precisely Timed by Varved Sediments" (coauthors: Mordeckai Magaritz and R. Y. Anderson); "Secular Changes in δ^{13} and $\delta^{34}S$, Global Sedimentation, pO_2 and pCO_2 during the Phanerozoic" (coauthors: E. S. Saltzman and T. B. Lindh); "Geochemistry of Conodont Apatite -- Progress Report" (coauthors: Judith Wright-Clark).

"Inventory of Evaporite Components of the World--Temporal Changes in Ocean Chemistry." Invited lecture to Geosciece-Bureau Seminar, New Mexico Institute of Mining and Technology, March 24.

"Evaporite Deposition Through Time and its Implications for Ocean Chemistry" Invited lecture in Sediments, Ores, and Cycles, a symposium honoring Robert M. Garrels, Harvard University, April 24.

"Stable Isotopes in Phanerozoic Oceans: Seminar presented at Rice University, March 29, and at NASA Johnson Space Laboratory, March 30.

"Evaporites in the Opening of the North Atlantic" Seminar presented to the U.S. Geological Survey, Denver Federal Center.

"Tracking Changes in Oceanic Composition and Circulation Through the Phanerozoic," invited plenary lecture opening the national meeting of the Geological Association of Canada and associated societies, Victoria, B. C., May 11.

Invited paticipant, Dahlem Konferenz on "Earth History, How Smooth, How Spasmodic?," Berlin, May 1-6., 1983 "Modelling of Oscillations of the Natural Sulfur Cycle," appointed organizer for this section of the workshop on Evolution of the Sulfur Cycle, convened by the Scientific Committte on Protection of the Environment (SCOPE/UNEP), to be held August, 1984, at Pushchino, USSR.

"The ^{13}C- ^{34}S crossplot: A measure of shifts in atmospheric and sedimentary composition," submitted for presentation at the 1983 national meeting of the Geological Society of America. Coauthors: E. S. Saltzman, T. B. Lindh, and G. W. Brass.

"Secular Variations of REE, Th, and U in Marine Fossil Apatite as a Measure of Redox in Phanerozoic Oceans," submitted for Colloquium K.03 Paleogeography of the Oceans, 27th International Geological Congress, Moscow, August, 1984. Coauthor: J. Wright-Clark.

Klaus Keil

Offices held:

Convener and organizer, one-day Symposium on "Geological aspects of high-level nuclear waste disposal in igneous rocks,," held in conjunction with the Geological Society Meeting, Rocky Mountain Section, Bozeman, Montana, May 1982.

Member, Advisory Committee on Comparative Planetology, International Union of Geological Sciences.

Chairman of session at Meteoritical Society Meeting, St. Louis, Missouri, September 13-16, 1982.

Associate Editor, Journal of Geophysical Research, American Geophysical Union.

Meetings attended:

Attended Rocky Mountain Sectional Meeting, Geological Society of America, Bozeman, Montana, organized and chaired "Symposium on the disposal of high-level nuclear waste in igneous rocks." May 6-8, 1982.

Attended Meteoritical Society Meeting, St. Louis, Missouri, September 13-16, 1982.

Presentations at professional society meetings:

See Publications: Professional talks presented and Professional talks coauthored.

Kenneth N. Kettenring

Advanced to Active Member, American Association of Petroleum Geologists. Attended July, 1982, AAPG meeting in Calgary, Alberta, Canada and May 1983 AAPG meeting in Dallas Texas; New Mexico Geological Society 33rd Annual Field Conference; meetings of Albuquerque Geological Society.

Albert M. Kudo

Attended and involved with reading of paper at the Annual Meeting of the Geological Society of America, in New Orleans, Louisiana, October 17-21.

Barry S. Kues

Attended New Mexico Geological Society Annual Field Conference, November 4-6, 1982.

Attended and gave paper at Geological Society of America Cordilleran-Rocky Mountain Section Meeting, May 1-5, 1983.

Kenneth D. Mahrer

Attended American Geophysical Union Convention, San Francisco, California, December 10-15.

Attended New Mexico Geological Society Spring Conference, Socorro, New Mexcio, April 24.

Member of Society of Exploration Geophysicists International Science and Engineering Fair Standing Committee.

Continued active membership in American Geophysics Union, Society of Exploration Geophysists, The Stop Continental Drift Society, Seismological Society of America and American Association for the Advancement of Science.

Leslie D. McFadden

Professional Presentations:

"Simulated Calcic-Horizon Development in Alluvial Soils" invited presentation for the Symposium on Surficial Deposits of Southwestern United States: Stratigraphy, Chronology, and Depositional Environments. A Memorial Symposium to Denis E. Marchand, at the Geological Society of America Cordilleran Section Meeting, Anaheim, California, April 19-21.

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"Late Quaternary Pedogenesis and Alluvial Chronologies of the Los Angeles Basin and San Gabriel Mountains Areas, Southern California" a field trip organized for the Geological Society of America Cordilleran Section Meeting, Anaheim, California, April 22, 23.

"Temporal Changes in the Clay Mineralogy of Quaternary Alluvial Soils Forming in a Xeric Climate, Southern California" a poster-session presented at the Seventh Biennial Conference of the American Quaternary Society, Seattle, Washington, June 28-30.

Stephen G. Wells

Professional Presentations:

"Quaternary Deposits and Landscapes of the Chaco River Area, Southeastern Colorado Plateau" invited paper to the Geological Society of America Symposium on Surficial Deposits of the Southwestern U.S., Anaheim, California, April 18-24.

"Chronology, Rates, and Magnitudes of Holocene Landscape Changes in the Southeastern Colorado Plateau: Implications for Paleoclimatic Changes" a paper presented at American Quaternary Association General Conference, Seattle, Washington, June 20-30.

"A Model of Quaternary Desert Hillslope Evolution," a paper presented at Geological Society of America annual meeting, New Oreleans, Louisiana, October 18-21.

Lee A. Woodward

Reviewed paper for Society of Mining Engineers ("A new chlorite mine in an old Montana gold district" by R. B. Berg).

Associate Editor for Geological Society of America Bulletin.

Presented invited talk on "Tectonics and hydrocarbon potential of the thrust and fold belt of southwestern New Mexico" to the West Texas Geological Society in Midland, Texas, March 9.

Presented invited paper at symposium of Geological Society of America in Bozeman, Montana, May 7.

Field trip leader for New Mexico Geological Society, November 4-6.

Member of roadlogging committee, New Mexico Geological Society Field Conference, Albuquerque Country.

Presented invited talk on Overthrust Belt to Arizona State University Geology Colloquium on December 8.

7. OTHER PROFESSIONAL ACTIVITIES

Roger Y. Anderson

Peer review of manuscripts and proposals

National Science Foundation grants (3)

Science

American Jour. of Science

Other Activities:

Consultant, State of New Mexico, Environmental Evaluation Group, on geotechnical aspects of the WIPP site.

Interview with Tom Brokaw, NBC Nightly News, discussed WIPP site and aspects of radioactive waste disposal.

Approximately 10 interviews with magazine or newspaper reporters, on WIPP site and radioactive waste disposal.

Douglas G. Brookins

Other professional activities

Invited lecturer, Department of Earth sciences, California State University at Los Angeles, "Dating of Sedimentary Rocks," February.

Informal meeting with scientists from Oak Ridge National Laboratory and Science Applications, Inc., Albuquerque, New Mexico, March.

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Attended meeting on uranium mill tailings backfill; sponsored by United Nuclear Corporation and New Mexico State Environmental Improvement Division. Albuquerque, New Mexico, March.

Continued as Co-Editor for the international journal, Uranium (Elsevier Scientific Publishing Company, Amsterdam, The Netherlands).

Reviewed papers for the following journals: Geology, Science (2), Mathematical Geology, Uranium (6), American Association of Petroleum Geology Bulletin, Economic Geology, Journal Sedimentary Petrology, Earth Plan-Sci. Lttrs.

Reviewed proposals for the U.S. Department Energy, National Science Foundation, American Chemical Society.

Participant in the International Geologic Correlation Program (IGCP), sponsored by UNESCO.

Nominated for Councillor, Association Exploration Geochemists.

Presented talk on "Geologic Aspects of Radioactive Waste Disposal," to West Mesa High School, Albuquerque, New Mexico.

Interviews on different aspects of radioactive waste disposal to: Science News (Washington, DC), Avalanche Journal, (Lubbock, Texas), Carlsbad Hurricane (Carlsbad, New Mexico), New Mexico Sun (Albuquerque, New Mexico), excerpts from UNM Press Release on radwaste carried by UPI and given on KOB-TV and on KUNM.

Invited lecture, UCLA, March 1983, "The Oklo Natural Reactor: An Update with Applications to Radioactive Waste Disposal."

Jonathan F. Callender

Interviews: KUNM-TV, Albuquerque Journal, Albuquerque Tribune, New Mexico Business Week.

Field trips: Houston Geological Society, New Mexico Natural History Museum, Princeton University, University of Vermont, Marathon Oil Corp., Sierra Club.

Consultancies: New Mexico Environmental Improvement Division, New Mexico Natural History Museum, Marathon Oil Corporation, Albuquerque Museum; Golden Associates, Washington.

UNM Community College, "Geology of New Mexico."

Chairman, Earth and Space Section, International Science and Engineering Fair, 1983.

Wolfgang E. Elston

Member, NASA - U.S. Geological Survey - Universities Galilean Satellites Mapping Team. Attended meeting of team, Jet Propulsion Laboratory, Pasadena, California, January 13.

Invited Speaker, Los Alamos National Laboratory Geoscience Colloquium, "Mid-Cenozoic volcanism and tectonism of Basin and Range province," February 4.

Speaker, El Dorado Gold Mining Club, Albuquerque, "Types of gold deposits in New Mexico," February 18.

Speaker, UNM Geology Colloquium, "Tertiary volcanism of the Basin and Range province: Modes of eruption and tectonic significance," February 25.

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Represented UNM at founding conference of Rio Grande Rift Consortium (organizer: R. E. Riecker, Los Alamos National Laboratory), Santa Fe, New Mexico, March 11-18.

Speaker, Senior Citizens Daycare Center, Asbury Methodist Church, "Mount St. Helens," May 24.

Conference with geologists of Tenneco Minerals concerning Ph.D. dissertation project funded by Tenneco; Tucson, Arizona, June 1-2.

Invited participant, workshop on "Geothermal Energy from Hot Dry Rocks," Los Alamos Scientific Laboratory. Participated in preparation of geologic aspects of workshop report, June 21-23.

Speaker, Senior Daycare Center, Senior Multiservice Center, Albuquerque, "Mount St. Helens," September 16.

Field conference with U.S. Geological Survey on cooperative project in Springerville - White Mountain Baldy area, Arizona, September 20-22.

Invited participant, workshop on "Valles Caldera," Los Alamos National Laboratory. Participated in preparation of workshop report on geological and geochemical aspects of deep drilling in the Valles Caldera for geothermal energy and scientific purposes, October 6-7.

Invited participant, Advisory Board, American Geological Institute Minority Participation Program, New Orleans, LA, October 18; leader on field trip for secondary school students under AGI Minority Participation Program, October 19.

Field trips with Caswell Silver Distinguished Lecturer, Prof. Douglas Coombs (Univ. of Otago, New Zealand) to Valles caldera, November 10, and southwestern New Mexico, November 12-14.

Reviewed research proposals for National Science Foundation, University of California Institute of Geophysics and Planetary Physics, Southwest Center for Science and Engineering.

Reviewed manuscripts for Geological Society of America, Instituto de Geologia (Mexico).

Served as External Examiner on M.Sc. thesis (Neil Godden), University of New England, New South Wales (Australia).

William T. Holser

"Chemical Changes in the Ocean During the Phanerozoic" invited presentation to the UNM Geology Department, February 4.

"Evaporite Rocks in the North Atlantic and Morocco" invited presentation, UNM Geology 401 Lecture Series, September 16.

Referred proposals and papers for the following:

National Science Foundation

Petroleum Research Fund

Geochemica et Cosmochemica Acta

Journal of Sedimentary Petrology

Science

Canadian Journal of Earth Sciences

Nature

Editor, Translation of book from Russia: A. V. Ronov, The Earth's Sedimentary Shell (Quantitative Patterns of Strucutre, Composition, and Evolution). In press for International Geological Review; to be re-issued as a book by American Geological Institute.

Stephen P. Huestis

Instructor, Geophysics section of Fundamentals of Geoscience Course, Sandia Laboratories.

Reviewed Proposal for NSF

Reviewed Manuscript for Prentice-Hall

Seminar-UNM Department of Geology, January 27: "Introduction to Geophysical Inverse Theory."

Klaus Keil

Consultant, Sandia National Laboratories, Albuquerque, N.M.

Reviewed three proposals submitted to NASA for funding.

Reviewed eleven scientific papers submitted for publication in Geochimica et Cosmochimica Acta, Meteoritics, Science, Nature, and Chemical Geology.

Several interviews with UNM Lobo, Albuquerque Tribune and Journal.

Served on Program Committee for 13th Lunar and Planetary Science Conference, held in Houston, Texas.

Member, Editorial Board, Journal "Chemical Geology."

Member, Editorial Board, Colorado School of Mines Quarterly, Golden, Colorado.

Chairman, Lunar and Planetary Science Council, Universities Space Research Association, Houston, Texas.

Member, Antarctic Meteorite Working Group, National Science Foundation - National Aeronautics and Space Administration.

Member, Editorial Board, Tschermak's Mineralogisch-Petrographische Mitteilungen, Vienna, Austria.

Carried out extensive survey of existing electron microprobes, including field visits to 3 manufacturers, for the purpose of purchasing a new instrument for the Department of Geology and Institute of Meteoritics.

Assisted in the design and supervision of the construction of new laboratories in the Geology Building (Northrop Hall), UNM.

Organized field trip to Meteorite Crater, Arizona, and Harding Pegmatite, New Mexico for students and staff.

Associate Editor, Journal of Geophysical Research.

Organized and executed through President Perovich's office an agreement for scientific collaboration in meteorite research on Spanish meteorites between the Institute of Meteoritics, UNM, and the National Museum of Natural Sciences, Madrid, Spain, the Geological Institute of the Superior Council of Scientific Investigations, Madrid Spain, the Geological Museum of Barcelona, Spain, and the Department of Geosciences, University of Houston, Texas.

Together with Dr. E. R. D. Scott, hosted and organized the Brown Bag Seminar of the Institute of Meteoritics, with the following speakers and topics (student speakers are underlined).

Addi Bischoff (Mineralogical Institute, University of Munster, West-Germany): Thermal metamorphism of feldspar clasts in impact melt rocks from Lappajarvi Crater, Finland, January 22.

Dr. A. Kracher (UNM): Influence of sulfur on the formation of iron meteorites, March 5.

Dr. C. Allen (UNM): Effects of target water on shock lithification, March 11.

A. Rubin (UNM): Microchondrules: Their occurrences in new kinds of type 3 chondrites and their bearing on the origin of chondrules, March 11.

Dr. E. R. D. Scott (UNM): Origins of ordinary and carbonaceous type 3 chondrites and their components, March 11.

Dr. G. J. Taylor (UNM): Structure and fragmentation of the parent asteroids of ordinary chondrites, March 11.

J. McKinley (UNM): Geologic history of the Apollo 16 region, March 11.

Dr. P. H. Warren (UNM): Graphic granite from the Moon, March 11.

Dr. A. Kracher (UNM): The role of sulfur in the evolution of iron meteorite parent melts, March 11.

Dr. A. Binder (Mineralogical Institute, University of Munster, West-Germany): Mare basalt magma genesis, March 12.

Dr. W. Muller (Mineralogical Institute, Technical University, Darmstadt, West-Germany): Transmission electron microscopy of the Leoville carbonaceous chondrite, March 23.

Dr. J. Arndt (Mineralogical Institute, University of Tubingen, West-Germany): Diaplectic glass and fusion-formed glass: A comparative study of shocked anorthosite from Manicouagan Crater, Canada, March 26.

Dr. P. H. Warren (UNM): Pristine non-mare rocks and the igneous differentiation of the Moon, March 31.

E. A. Sveum (UNM): Nucleosynthesis in supernovae, April 9.

R. B. Trumbull (UNM): Nature and origin of the iridium anomaly at the Cretaceous-Tertiary boundary, April 23.

S. McKinley (UNM): ALH A77156: An enstatite chondrite (E4) from Antarctica, April 27.

Dr. S. Kissin (Department of Geology, Lakehead University, Thunder Bay, Ontario, Canada): Sulfide minerals in type IAB iron meteorites, April 28.

J. McKinley (UNM): The thermal history of meteoritic chondrules, April 30.

Dr. G. J. Taylor (UNM): The three ages of brecciation, September 3.

Dr. Stuart Agrell (Department of Earth Sciences, Cambridge University, Cambridge, England): Metamorphosed hydrothermal system near Marysvale, Utah, October 4.

Dr. P. H. Warren (UNM): Models of bulk moon composition: A review, October 12.

Dr. Gero Kurat (Museum of Natural History, Vienna, Austria): Mobilization processes in the upper Mantle, November 19.

Dr. R. S. Clarke, Jr. (Smithsonian Institution, Washington, D.C.): The Wethersfield meteorite falls, December 2.

Professor K. Runcorn (Department of Physics, University of Newcastle Upon Tyne, England): Lunar paleomagnetism and its implications, December 3.

Hosted visits of scholars from abroad and the USA to the institute, for the purpose of research and teaching.

Dr. P. Englert, Department of Nuclear Chemistry, University of Cologne, Cologne, West-Germany, February 1.

Professor R. Coleman, Department of Geophysics and Planetary Sciences, University of California, Los Angeles, California, February 2.

Professor A. Binder, Mineralogical Institute, University of Munster, Munster, West-Germany. Dr. Binder presented a talk as part of our Brown Bag Seminar, March 11-12.

Professor W. Muller, Mineralogical Institute, Technical University, Darmstadt, West-Germany. Dr. Muller presented a talk as part of our Brown Bag Seminar, March 22-23.

Dr. R. Ostertag, Mineralogical Institute, University of Munster, Munster, West-Germany, March 22-23.

Professor V. Szebehely, Mathematics Department, University of Texas, Austin, Texas, March 23.

Professor J. Arndt, Mineralogical Institute, University of Tubingen, Tubingen, West-Germany. Dr. Arndt presented a talk as part of our Brown Bag Seminar (see above), March 24-26.

Dr. H. Taguchi, Nippon Steel Company, Tokyo, Japan, March 26-27.

Professor F. Freund, Mineralogical Institute, University of Cologne, Cologne, West-Germany, March 31-April 5.

Professor K. Runcorn, Geophysics Department, Newcastle upon Tyne, England, April 15-16.

Dr. S. Kissin, Department of Geology, Lakehead University, Thunder Bay, Ontario, Canada. Dr. Kissin presented one talk as part of our Brown Bag Seminar and one additional talk on "Sphalerite geothermometry and cosmobarometry," April 28-30.

Professor Louis Lindner, University of Amsterdam, Holland, July 8.

Dr. Carle Pieters, Department of Earth and Space Sciences, Brown University, July 16.

Tom See, L. B. Johnson Space Center, Houston, Texas, August 16-22.

Dr. Stuart Agrell, Department of Geosciences, Cambridge University, Cambridge, England, August 25 - October 15.

Dr. H. N. Planner, Los Alamos National Laboratory, Los Alamos, New Mexico, September 23.

Professor Vladimir Mejer, Department of Geology, Zagreb University, Zagreb, Yugoslavia, October 10-24.

Professor K. Runcorn, Department of Physics, University of Newcaste Upon Tyne, England. Dr. Runcorn also presented a talk before our Brown Bag Seminar, December 3.

Professor F. Freund, Department of Physics, Arizona State University, Tempe, Arizona, December 3.

Dr. Jack Boyd, NASA Ames Research Center, Moffett Field, California, December 6.

Hosted New Mexicans for Space Exploration, by sponsoring an evening to honor "Space Week" in the Department of Geology

and Institute of Meteoritics. This included a talk by Dr. P. W. Keaton of Los Alamos National Laboratory regarding a research station on the Moon, and a brief review of the activities in the Institute of Meteoritics, including a tour of facilities and the Museum, July 20.

Albert M. Kudo

Teaching two afternoon sessions at Sandia National Laboratory on Geochemistry and Ore Deposits (part of Fundamentals of Geoscience). Gave professional seminars on current research in igneous petrology at Tohoku, Hokkaido, Tokyo, Kyoto, and Kanazawa Universities in Japan.

Reviewed manuscript for Journal of Geophysical Research.

Gave invited talk at University of Nevada, Las Vegas, May 27, 1983.

Barry S. Kues

Talks

Talk on fossils of New Mexico to Methodist Church Group, January 7, 1982.

Talk on dinosaurs to Mesa Vista Elementary School Class, January 20, 1982.

Lectures to U.N.M. General Studies 122 class on paleontology and evolution, February 15, 17, 1982.

Testified before New Mexico Senate Rules Committee on Natural History Museum, February 16, 1982.

Talk on fossils and dinosaurs to Puesta del Sol Elementary School class, March 10, 1982.

Talk to Texas Tech graduate museology class on accession and cataloging procedures in Department of Geology Paleontological collections, April 1, 1982.

Talk to Rio Rancho Rockhound Club on New Mexico Paleontology, April 6, 1982.

Talk to John Baker Elementary School classes on dinosaurs, May 11, 1982.

Talk to Mark Twain Elementary School class on dinosaurs, June 28, 1982.

Talk to Apache Elementary School class on dinosaurs, June 29, 1982.

Talk to Arroyo del Oso Elementary School class on dinosaurs, July 1, 1982.

Talk to Parents Without Partners Club on dinosaurs and New Mexico Natural History Museum, September 22, 1982.

Lectures to U.N.M. General Studies 121 class on paleontology and evolution, September 22 and 29, 1982.

Gave talk and led workshop on Bisti area fossils, and led field trip to Bisti area for New Mexico Audubon Society Annual Conference, October 9-10, 1982.

Talk on New Mexico vertebrate paleontology to Albuquerque Gem and Mineral Society, October 25, 1982.

Talk on New Mexico vertebrate fossils to Palo Duro Senior Citizens Group, November 3, 1982.

Testified at B.L.M. Public Hearing on Environmental Impact Statements of northwestern New Mexico, January 14, 1983.

Talk on dinosaurs to Mesa Vista Elementary School class, January 25, 1983.

Talk on Bisti Badlands Controversy to Plateau Science Society Annual Meeting, January 29, 1983.

Talk on New Mexico fossils to Albuquerque Rockhound Club, February 1, 1983.

Talk on dinosaurs to Armijo Elementary School class, February 3, 1983.

Lectures on paleontology and evolution to UNM General Studies 122 class, February 23, 1983.

Talk on New Mexico fossils to Albuquerque Academy Bear Canyon Program, February 20, 1983.

Talk on New Mexico fossils to Manzano High School honors class, March 24, 1983.

Talk on dinosaurs and the Natural History Museum to Belaire Elementary School classes, April 6, 1983.

Judge in Earth and Space Sciences Division, International Science and Engineering Fair, Albuquerque, May 11, 1983.

Testified at U.S. House of Representatives Committee on Insular and Consular Affairs hearings in Santa Fe, on importance of San Juan Basin fossils, May 21, 1983.

Talk on the history of life in New Mexico to New Mexico Zoological Society, May 26, 1983.

Advised representative of Public Lands Subcommittee, U.S. House of Representatives, on location and importance of "Fossil Forest" area in northwestern New Mexico, preparatory to the drafting of legislation to protect it, June 3, 1983.

Reviews

Reviewed five manuscripts for the Journal of Paleontology

Reviewed proposal to make Bisti badlands a National Natural Landmark, for National Park Service.

Reviewed proposed federal regulations for collection of geologic, paleontologic and hobby mineral specimens for Bureau of Land Management.

Participated in drafting and reviewed final draft of state mitigation plan for paleontological materials, for New Mexico Energy and Minerals Department.

Reviewed 3 Environmental Impact statements relating to northwestern New Mexico for B.L.M.

Consultancies

Consulted with lawyers for Sierra Club on San Juan Basin paleontology, February 5, 1982.

Consulted with Carnegie Museum and New Mexico Natural History Museum personnel on progress of Ghost Ranch dinosaur excavation, June 23, 1982.

Consulted with National Wilderness Society representatives on importance of fossils in Bisti Badlands area, November 5, 1982.

Media

Television interview with Newsweek Magazine on Bisti badlands, February 11, 1982.

Participated in and provided background information for a television story on New Mexico dinosaurs, KGGM-TV, April 28, 1982.

Phone interview, KOB radio, on Bisti Wilderness Study area, October 26, 1982.

Advised KGGM-TV personnel on proposed 30 minute documentary film on New Mexico fossils, November 1, 1982.

Consulted with Power-Rector Productions, San Francisco, about a possible documentary film on the Bisti Badlands for Walt Disney Cable TV Network, February 10, 1983.

Consulted with Constantine Productions, Santa Fe, about a proposed TV documentary on the Bisti Badlands, February 25, 1983.

Other

Identified fossils for the public, led tours through Geology Museum and paleontology labs, traveled to fossil sites to advise and identify fossils (throughout year).

Kenneth D. Mahrer

Attended Business Expo '82, Albuquerque, NM, June 8.

Attended Electronics Expo '82, Albuquerque, NM, June 18.

Consultant for Terra Southwest Exploration Co.

Consultant to Monticello Residence Committee of Tijeras Canyon.

Attended International Word Processing Convention, Albuquerque, NM, October 5.

Attended Ideas in Science and Electronics Convention, Albuquerque, New Mexcio, April 12.

Consultant USGS Cima Volcanics Project, Mojave Desert, June 1983.

Reviewed Physical Geology by Dolgoff for Allen and Unwin Publishers.

Consultant to New Mexico Highway Department Geology Division--Use of Seismics and DC Resistivity in Site Evaluation.

Consultant to New Mexico Highway Department Geology Division--Using Mini Computers for Seismic Refraction Data Analysis.

Leslie D. McFadden

Reviewed manuscript for U.S. Geological Survey Professional Paper. Consultant to the Office of Contract Archeology.

Stephen G. Wells

Editor and field-trip speaker, New Mexico Geological Society Field Conference.

Committee Member, American Geomorphological Field Group.

Symposium Co-chairman and Participant, Geological Society of America, Cordilleran Section, Anaheim, California.

Session Co-chairman, Geological Society of America, Annual Meeting, New Orleans, Lousiana.

Consultant to Environmental Improvement Division, Department of Health and Environment, Santa Fe, New Mexico.

Consultant to Simons, Li and Associates, Inc., Fort Collins, Colorado.

Consultant to Office of Contract Archeology, University of New Mexico.

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Reviewed manuscripts and proposals for the following:

New Mexico Geological Society

Geological Society of America

U.S. Geological Survey

National Science Foundation

Crayton J. Yapp

Reviewed proposal for Southwest Resource Center for Science and Engineering.

Reviewed manuscripts for Nature, American Mineralogist.

Outside reviewer for tenure decision in the Mineralogy and Petrology Department, Technical University of Munich.

Informally consulted with NM Environmental Improvement Division and U.S. Nuclear Regulatory Commission on sampling procedures and stable isotope data evaluation.

Served as a judge at the 34th Annual International Science and Engineering Fair, May 9-13, Albuquerque Convention Center, Albuquerque, NM.

Presented a talk to the UNM geology department's 401 seminar, Albuquerque Public Schools, on behalf of reviewed term papers written by outstanding local secondary school students.

8. NON-TEACHING UNIVERSITY SERVICE

Roger Y. Anderson

Chairperson, Promotion Advisory Committee for Natural Science and Mathematics, College of Arts and Sciences.

Member, Tenure Advisory Committee for College of Arts and Sciences.

Chairperson, UNM Committee on Paleoecology.

Chairperson, Departmental Search Committee for Sedimentologist.

Douglas G. Brookins

Elected to UNM Faculty Senate (1982-84).

Committee on Nuclear Energy Education.

Committee on joint Geology-Chemical Nuclear Engineering Program.

NM Energy Conference (U.S. Representative Manuel Lujan, Coordinator), Albuquerque, New Mexico.

Albuquerque Public School Summer Program with UNM; advised and worked with two APS students.

Judge, NM Junior Academy of Science, Regional Meeting, Albuquerque, NM.

Two departmental committees: Graduate committee

Rb-Sr laboratory use committee

UNM-APS Science Advisory Communication.

UNM-NCSS Nuclear Education Working Group.

Jonathan F. Callender

Non-departmental:

College Enrichment Program, Athletic Department Recruiting Program, Century Club, Calling Campaign, Project Los Alamos, BRSG/SURP Review Committee.

Departmental:

Undergraduate advisor; Chairman of the following committees: Undergraduate, Petrology Collections, Caswell Silver Lecture Series, Microscopes; Member of Scholarship Committee; Senior Thesis, M.S. and Ph.D. advisor; member of M.S. and Ph.D. committees, including two at N.M.I.M.T., Socorro, New Mexico.

Wolfgang E. Elston

Acting Chairman, Department of Geology, January 1 to December 31.

At request of Associate Provost for Research, represented UNM at conference to explore cooperative programs between Mexican National Petroleum institute, Los Alamos National Laboratory, and UNM, February 4-5.

Member, President's Committee on Excellence. Attended meetings February 19, March 3, May 13, December 3, retreat in Santa Fe, New Mexico, March 25-26.

Member, Research Policy Committee; Chairman, Subcommittee on Research Administration.

Secretary/Treasurer, Board of Directors, Caswell Silver Foundation; attended Board Meetings February 13, October 3.

Member, Departmental Search Committee for Caswell Silver Distinguished Professor.

UNM 25-Year Service Award.

Member ad hoc committee of College of Engineering and Department of Geology to plan an interdisciplinary M.S. program in Geochemical Engineering.

At request of Associate Provost for Research, represented UNM at Industry-University Technology Transfer Conference, Los Angeles, California, November 30 - December 1.

At request of Associate Provost for Research, prepared position papers on proposed interdisciplinary program in Materials Science.

Continued informal cooperative program with Aachen Technical Institute, West Germany (Technische Hochshule Aachen), hosted Professor H. G. Foerster (Aachen) and supervised thesis research of two Aachen graduate students (W. Winter, J. Vogel) in projects in New Mexico.

At request of Dean of Library Services, prepared memoranda suporting establishment of Science and Engineering Library at UNM.

Prepared information for possible cooperative program in geological sciences with King Abdul Aziz University, Saudi Arabia, for transmittal by Dean Napolitano, School of Medicine.

Wrote Annual Report of Department of Geology.

Wrote Annual Report of Caswell Silver Foundation.

Participated in UNM Basic Skills Program, taught Physical Science (Geology 100), 1981-82.

Advisor to Albuquerque Natural History Museum; advised in preparation of travelling exhibit on volcanoes of New Mexico.

Two inspection trips to Harding Mine, Taos County, owned by UNM. Arranged for maintenance work.

Principal advisor to the following Ph.D. candidates: Gautam Sarkar, Christopher Condit, Sheila Seaman Williams, David Nealey (shared with K. Keil). Principal advisor to following M.S. candidates: Glen Atwood, Thomas Woodard, Jeanna Hudson, Frank Smith, Richard Abitz, Charles Criswell, Delores Cates, Randy Albright.

Faculty Advisor, Student Chapter, American Institute of Mining and Metallurgical Engineers.

Jeffrey A. Grambling

Member of following departmental committees: Graduate Admissions and Financial Aid, Geology; supervisor of Thin Section Laboratory, Geology, served on 12 M.S. and Ph.D. committees, 1983.

Serving on 8 M.S. and 3 Ph.D. thesis committees.

Stephen P. Huestis

Department committees - Computer use (Chairman); Undergraduate curriculum.

Faculty advisor - 2 M.S. students; 1 Ph.D. student.

Co-advisor - 1 Ph.D. student in Mathematics Department.

Klaus Keil

Administration of the Institute of Meteoritics and its collections.

Chairman and member of several thesis and dissertation committees in the Department of Geology.

Served on UNM - University of Sao Paulo, Brazil joint research and exchange program committee.

Participated in Parents Day, UNM.

Served as Director of the Caswell Silver Foundation, Department of Geology, UNM.

Chaired search committee for Caswell Silver Distinguished Professor, Department of Geology, UNM.

Served on Several M.S. and Ph.D. comprehensive examination committees.

Assisted in design and supervision of renovation of basement into laboratories, Department of Geology Building.

Served on Department of Geology Committee to revise requirements for geology Ph.D. program at UNM.

Conducted tour of Meteorite Museum for UNM Alumni Board Orientation, June 19.

Served on UNM Honorary Degree Committee.

Kenneth N. Kettenring

Informal advising of several graduates and undergraduates.

Helped host visiting speakers. Served on seven comprehensive examination committees.

Albert M. Kudo

Member University Library Committee.

Chairman of UNM-Science Colloquium Committee.

Chairman of UNM-Sandia Colloquium Committee.

Thesis advisor of 5 students.

Member of over 10 thesis and dissertation committees.

Admissions Committee, Society of Sigma Xi, Albuquerque Chapter.

Member of Departmental Scholarship and Graduate Admissions Committee.

Barry S. Kues

Assistant Chairman, Geology Department.

Geology Department representative on Arts and Sciences Graduate Committee.

Geology Department representative on Arts and Sciences Teaching Resources Committee.

Geology Department liaison with Zimmerman Library.

Chairman, Geology Department Graduate Admissions and Petitions Committee.

Chairman, Geology Department Publications Committee; revised departmental brochure.

General advisor for Geology graduate students.

Wrote part of, and assembled Department of Geology self-study--part of the review of departmental programs conducted by the UNM Graduate School.

On thesis committees of several Geology Department graduate students; also on thesis committees of one Anthropology Department and two Biology Department graduate students.

Kenneth D. Mahrer

Member of Caswell Silver Distinguished Professor Search Committee.

Member of Department of Geology graduate admissions and petitions committee.

Member of Department of Geology graduate financial committee.

Member of Department of Geology publicity committee.

Member of Department of Geology Popejoy prize nominating committee.

Member of Department of Geology computer use committee.

Facutly Member on 6 M.S. students comprehensive exams.

Faculty advisor to Geology Club.

Curator Department of Geology geophysical equipment.

Faculty member of ad hoc organization called F.A.D.S. to promote faculty/student interactions.

Participated in Freshman Orientation '82 for Office of The Dean of Students, June 17 and August 12, 1982, January 10 and June 22, 1983.

Faculty Representative to College Fair '82 for Office of School Relations, Winrock Center, October 23.

Consultant to Associate Dean of Students (P. Woods) on Freshman Orientation Program.

Geology faculty representative to UNM Senior Day, November 13.

Faculty Advisor to C. Bradley, M.S. student.

Participant in film, "What Have I Gotten Myself Into," for Dean of Students Office-Freshman Orientation Program.

Department of Geology Faculty Representative-UNM 1983 Commencement Exercises, May 1983.

Leslie D. McFadden

Served as Chairman of the Department Scholarship Committee.

Co-organizer of the Department Quaternary Studies Laboratory, with S. G. Wells.

Stephen G. Wells

Served on following Departmental Committees:

Undergraduate Committee.

Departmental vehicles Committee.

Field equipment Committee.

Photogeology and map room Committee.

Caswell Silver Distinguished Visiting Professor Committee

Thesis advisor for 10 M.S. level graduate students.

Helped organize newly funded Quaternary Studies Laboratory with L. McFadden.

Lee A. Woodward

Chairman of 5 thesis committees, member of several others.

Crayton J. Yapp

Member of the University of New Mexico's Faculty Senate.

In charge of Departmental Reading Room.

Member of departmental Scholarship Committee.

Serving on six M.S. thesis committees.

Local chairman of AAPG Distingushed Lecture Series.

9. PUBLIC SERVICE

Roger Y. Anderson

Identification of rocks, minerals and fossils for the public.

Douglas G. Brookins

Elected to Board of Trustees, Congregation Albert

Elected Vice President, Congregation Albert for 1983-1984.

Talks to West Mesa High School, Optomist Club, and Statesman Club on radioactive waste disposal.

Jonathan F. Callender

Advisor to Albuquerque High School students for various science fairs.

Led fund-raising field trip, New Mexico Museum of Natural History.

Talks to Albuquerque public schools and Cedar Grove School (Edgewood).

Talks to Albuquerque Gem and Mineral Club, New Mexico Mountain Club, Sierra Club.

Chairman, Earth and Space Science Section, International Science & Engineering Fair.

Wolfgang E. Elston

Served on Board of Directors, Family Support Center of New Mexico (Ronald MacDonald House).

Gave advice to members of the public on mining, earthquakes, volcanic eruptions, identification of rocks and minerals, etc.

May 9-13, judge, American Association of Petroleum Geologists, 34th Annual International Science and Engineering Fair, Albuquerque Convention Center, Albuquerque, NM.

Jeffrey A. Grambling

Judge, 34th Annual International Science and Engineering Fair, May 9-13, Albuquerque Convention Center, Albuquerque, NM.

Treasurer, New Mexico Geological Society.

Stephen P. Huestis

Presentation at Albuquerque Public Schools "Convocations": "Earthquake, Volcanoes, Tidal Waves-Natural Hazards of Continental Drift," March 5.

Judge, 34th annual International Science & Engineering Fair.

Klaus Keil

Many private showings of moon rocks to interested citizens, school classes, civic groups, etc., many of which were after working hours and on weekends.

Many private showings of the meteorite museum to interested citizens, school classes, civic groups, etc., many of which were after working hours and on weekends.

Investigated without charge many rocks suspected to be meteorites and brought to the Institute by citizens.

Assisted Laura Trauth, a local high school student, in the study of "The chemical and physical properties of rings in prehistoric alligatorian and crocodillion fossil teeth," which she submitted as a Science Fair Project.

Presented talk on "Jupiter, Saturn and their Moons: Results of the Voyager fly-by missions" to Albuquerque Senior Citizens Rock Hound Club, Albuquerque, New Mexico.

Met with Senator Harrison "Jack" Schmitt to discuss future of planetary science in US and NASA funding.

Presented talk on meteorites to children at Foothill Child Development Center.

Hosted the visit to UNM of a local high school student through teacher B. Trujillo.

Presented talk to Breakfast Club, Four Seasons, Albuquerque, on "Volcanism in the Solar System."

Presented talk to New Mexicans for Space Exploration, Albuquerque, N. M., on "Volcanism in the Solar System."

Kenneth N. Kettenring

May, 1983, Judge for Earth and Space Science Section, 34th Annual International Science and Engineering Fair.

Albert M. Kudo

Chairman of judges, NM Northwest Regional Science Fair, Spring Break.

May 9-13, special judge, Ocean Science and Engineering, 34th Annual International Science and Engineering Fair, Albuquerque Convention Center, Albuquerque, NM.

Barry S. Kues

Member, Policy Advisory Committee for New Mexico Museum of Natural History; chairman of bylaws and personnel screening subcommittees.

Secretary, New Mexico Museum of Natural History Foundation

Many professional activities listed in part 7 were also of a public service nature

Kenneth D. Mahrer

Invited to participate in the Jicarilla Summer Youth Employment Program (SYEP) part of Jicarilla CETA program.

May 9-13, judge for the Society of Exploration Geophysics, 34th Annual International Science and Engineering Fair, Albuquerque Convention Center, Albuquerque, New Mexico.

Coach in Stanford University Summer Basketball Camp, Stanford, California.

Judged National Forensic League's District Finals, January 29.

Taught course for NM Highway department on Use of Seismic Refraction and D. C. Resistivity, summer 1983.

Stephen G. Wells

Organized and led fund-raising field trip to Carlsbad Caverns National Park, for New Mexico Museum of Natural History.

Elected to community committee Monticello Residents Committee, Bernalillo County.

Provided service to Sierra Club of New Mexico.

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APPENDICES

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I: GRADUATES FOR 1982-1983

The following students completed degrees during the report period.

B.A.

None

B.S.

Deborah Arens
Arthur B. Bernstein
Christopher Bradley
David A. Denbow
Thomas P. Gugliotta
David W. Janney
Sara J. Laurent
Brian Letherer
Randy E. Neale
Carla Rachkowski
Douglas Rappuhn
Thomas B. Reynolds
D. Michael Roark
Susan Mary Rhoades
Paul H. Schulter
Michael W. Selke
David Szklarz
William Whaley
Bruce L. Willing

M.S.

Paul Winston Bauer, "Precambrian Geology of the Southern Manzano Mountains, New Mexico." Ph.D. Program, UNM

Karl Michael Emanuel, "A Geochemical Petrographic and Fluid Inclusion Study of the Zuni Mountains Fluorspar DIstrict, Cibola County, New Mexico." NICOR Mineral Ventures, Albuquerque

Kevin Paul Guilbeau,"Geology, Geochemistry, and Petrogenesis of the Upper Keres Group, Ruiz Peak Area, Jemez Mountains." Shell Oil Company, New Orleans

Ellen Elisabeth Lambert, "Geology and Petrochemistry of Ultramafic and Orbicular Rocks, Zuni Mountains, Cibola County, New Mexico."

Robert Michael Lowy,"Provenance & Sediment Dispersal Patterns Westwater Canyon Sandstones, Western San Juan Basin." Consultant, Albuquerque, New Mexico

Richard Peter Lozinsky, "Geology & Late Cenozoic History of the Elephant Butte Area, Sierra County, New Mexico." Ph.D. Student, New Mexico Institute of Mining and Technology

Mark Gregory Picha, "Stratigraphy and Structural Geology of Part of the Hagas Embayment and Montezuma Salient, Sandoval County, New Mexico." Shell Oil Company, Houston, Texas

Thomas William Woodard,"Geology of the Lookout Mountain area, Northern Black Range, Sierra County, New Mexcio." Superior Oil Company, Reno Nevada

Ph.D.

Horace Truman Holcombe, "Terrain Effects in Resistivity and Magnetotelluric Surveys." Geotechnical Consultant Inc., San Diego, California

Alan Edward Rubin, "Petrology and Origin of Brecciated Chondritic Meteorites." Smithsonian Institute, Washington, D.C.

II: CONTRACTS AND GRANTS

NSF = National Science Foundation

EMD = Energy & Minerals Department, New Mexico

NAME	GRANTOR	ENDING DATE	AMOUNT
Anderson, Roger Y.	NSF	5/31/84	64,805.00
Brookins, Douglas G.	UC Berkeley	3/30/83	4,000.00
Brookins, Douglas G.	DOE	9/30/83	24,928.00
Brookins, Douglas G.	Sandia Nat'l Labs	9/30/83	24,670.00
Brookins, Douglas G. B. M Thomson*	USBM	5/31/83	64,800.00
Brookins, Douglas G. J. A. Gosz**	NSF	6/30/84	99,999.00
Callender, Jonathan F.	NSF	8/31/84	84,083.00
Elston, Wolfgang E.	NSF	8/31/83	84,872.00
Elston, Wolfgang E.	Sandia Nat'l Labs	5/17/82 12/31/82	5,721.00
Elston, Wolfgang E.	NASA	4/30/83	32,002.00
Grambling, Jeffrey A.	NSF	8/31/83	28,700.00
Grambling, Jeffrey A.	Sandia	9/30/82	21,000.00
Keil, Klaus	NASA	7/31/83	56,782.00
Keil, Klaus	Sandia Nat. Lab	9/30/82	7,119.00
Keil, Klaus	Sandia Nat. Lab	9/30/82	30,139.00
Keil, Klaus	NASA	1/31/83	97,995.00
Keil, Klaus	NASA	2/28/83	107,988.00
Keil, Klaus	NSF	6/30/83	180,000.00
Keil, Klaus	Sandia Nat. Lab	9/30/83	40,944.00
Mahrer, Kenneth D.	American Chemical Soc	8/31/83	7,000.00
Wells, Stephen G.	EMD	12/31/83	78,852.00
Yapp, Crayton J.	Sandia	9/30/82	12,000.00
		TOTAL	$1,135,960.00

*Dept. of Civil Engineering
**Dept. of Biology

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RESEARCH ALLOCATION COMMITTEE GRANTS

Wells, Stephen G.	1,196.00
McFadden, Les D.	1,560.00
Yapp, Crayton	1,080.00

III: LECTURERS

The following scientists visited the Department of Geology to present lectures and to discuss their research with faculty and students.

1. Dr. Kenneth Kettenring, University of New Mexico. "Recent Depositional History of the San Pedro Shelf."
   September 9, 1982
2. Dr. Colin Wilson, University of Auckland, New Zealand. "The Taupo Eruption of New Zealand, 186 A.D."
   September 9, 1982
3. Dr. William T. Holser, Caswell Silver Distinguished Professor. "Evaporite Rocks in the North Atlantic and Morocco."
   September 16, 1982
4. Dr. Larry Haskin, Caswell Silver Distinguished Lecturer, Washington University, St. Louis. "Does Fractional Crystallization Really Control Lava Composition?"
   September 23, 1982
5. Dr. Larry Haskin, Washington University, St. Louis. "Electrochemistry of Silicate Melts - A New Geochemical Tool."
   September 24, 1982

6. Dr. Jon Callender, University of New Mexico.
"Transposition Layering in Precambrian Rocks of New Mexico."
September 30, 1982

7. Dr. Stuart Agrell, Cambridge University, England.
"Metamorphosed Hydrothermal System Near Marysvale, Utah."
October 4, 1982

8. Fred Phillips, New Mexico Institute of Mining and Technology, Socorro, New Mexico. "Applications of $^{36}_{Cl}$ to Groundwater Hydrology."
October 7, 1982

9. Jim Connolly, University of New Mexico. "Geology of the Precambrian Rocks of the Tijeras Canyon Area, Bernalillo County, New Mexico."
October 28, 1982

10. Dr. G. Jeffrey Taylor, University of New Mexico. "Moon Rocks, Meteorites and the Primitive Earth."
November 4, 1982

11. Dr. Douglas Coombs, University of Otago, Dunedin, New Zealand. "Exotic Terranes of New Zealand."
November 11, 1982
"Low Grade Metamorphic Facies."
November 11, 1982

12. Dr. E.R.D. Scott, University of New Mexico. "Origin of Chondrules by Preaccretionary Melting of Silicate Matrix Material."
November 12, 1982

13. Dr. John Dohrenwend, U.S.G.S. "Pedimentation in the Western Great Basin: Observations and Tectonic Implications."
November 18, 1982

14. Spencer Lucas, University of New Mexico. "Problems of the Paleocene-Eocene Boundary."
December 2, 1982

15. Dr. S. Keith Runcorn, University of Newcastle Upon Tyne, England. "Lunar Paleomagnetism and It's Implications."
December 3, 1982

16. Patrick Longmire, NMEID. "Environmental Geochemical Studies in the Grants Mineral Belt."
December 9, 1982

17. Dr. Paul Warren, University of New Mexico. "Moon Rocks From Antarctica!"
January 21, 1983

18. Dr. S.P. Huestis, University of New Mexico. "Introduction to Geophysical Inverse Theory."
January 27, 1983

19. Jim Connolly, University of New Mexico. "Nuclear Waste: Tuff Problems at the Nevada Test Site."
February 4, 1983

20. Dr. F. Freund, Arizona State University. "Why and How H_2O and CO_2 Molecules Dissolve in Dense Oxides and Silicates."
February 10, 1983

21. Paul H. Warren, University of New Mexico. "Nuts, Bolts and Volts of Neutron Activation Analysis."
February 11, 1983

22. Dr. Roger Hewins, Rutgers University. "Petrology of Diogentites and Related Meteorites."
February 21, 1983
"Origin of Chondrules-Constraints From Crystallization Experiments"
February 22, 1983

23. Dr. Albert Shultz, University of Arizona. "Role of Mixed Provenance and Local Tectonics in the Depositional History of an Ancient Alluvial Sequence, Fountain Formation, South-Central Colorado."
February 21, 1983

24. Dr. C.T. Prewitt, SUNY-Stony Brook. "Structural Modifications in Chain Silicates."
February 24, 1983

25. Dr. A. A. Levinson, University of Calgary, Canada. "The Geochemistry of Gold in the Secondary Environment."
February 28, 1983

26. Dr. Robyn Wright, Rice University. "Point Lookout Formation, San Juan Basin, New Mexico: Depositional and Progradational Style."
March 1, 1983

27. Dr. Steven J. Lambert, Sandia National Laboratories. "Geochemical and geological studies at the WIPP site."
March 2, 1983

28. Dr. Karen Kleinspehn, Princeton University.
"Conglomerate Fan Delta Sequences of Late Carboniferous to Early Permian Age in Western Spitsbergen."
March 3, 1983

29. Paul H. Warren, University of New Mexico. "Seventh Foray: Whitlockite-Rich Lithologies, A Diopside-Bearing Troctolitic Anorthosite, Ferroan Anorthosites, and Kreep."
March 4, 1983
"Regolith Breccia ALHA81005: Evidence of Lunar Origin, and Nature of Pristine and Nonpristine Clasts."
March 4, 1983

30. Alfred Kracher, University of New Mexico. "Dusty Olivines in the Vigarao (CV3) Chondrite: Evidence for an Ubiquitous Reduction Process."
March 9, 1983

31. Addi Bischoff, Institut fur Meteoriten Kunde, Munster, West Germany. "Ca-Al-Rich Chondrules and Inclusions in Ordinary Chondrites: Evidence for a Related Genesis of Ordinary and Carbonaceous Chondrites."
March 9, 1983

32. Edward Scott, University of New Mexico. "Petrologic Similarities Among Chondrules in H, LL, CO, CM, and E Chondrites."
March 9, 1983

33. Klaus Keil, University of New Mexico. "Chondrules in Enstatite Chondrites-Nature and Source of Enstatite."
March 9, 1982

34. Robert Riecker, Los Alamos National Laboratory, Caswell Silver Distinguished Lecturer. "Disaster! Issues for the Geosciences."
March 10, 1983

35. Dr. Jeffrey N. Grossman, University of California, Los Angeles. "Composition and Origin of Chondrules."
March 10, 1983

36. Dr. A.M. Kudo, University of New Mexico. "Japanese Volcanoes."
March 24, 1983

37. Dr. L.D. McFadden, University of New Mexico. "Applications of Soil Chronosequence Studies to Numerical Age Determinations of Displaced Landforms in Tectonically Active Terrains."
March 31, 1983

38. H. Drewes, USGS, Denver. "The Change in Style of Deformation Across the Southern Overthrust Belt and its Genetic Implications."
April 7, 1983

39. Dr. Parizek, Pennsylvania State University. "Environmental Cost of Coal."
April 13, 1983

40. J.M. Ferry, Arizona State University. "The Role of Fluids in Petrogenesis During Metamorphism."
April 14, 1983

41. Dr. William T. Holser, Caswell Distinguished Professor. "Stable Isotope Variations in Phanerozoic Oceans." April 14, 1983

42. Dr. Ian Campbell, University of Alberta, Canada. "Erosion Rates and Sediment Yield: A Problem in Scale: Red Deer Drainage Basin, Alberta." April 20, 1983

43. Hans Claassen, USGS. "Understanding Waste-glass Leaching Mechanisms Through Natural Ground Water Syustems." April 21, 1983

44. James R. Connolly, University of New Mexico. "Regional Thrust Decollement and Volcanism in the Pancake Range, Nye County, Nevada and Implications for Volcanism." April 27, 1983

45. Michael J. Jercinovic, University of New Mexico. "Alteration of Basaltic Hyaloclastite in North-Central British Columbia." April 27, 1983

46. Dr. C.J. Yapp, University of New Mexico. "Stable Hydrogen Isotope Variations in Meteoric Waters of the Upper Rio Grande Drainage Basin." April 28, 1983

47. Dr. Kurt Fredriksson, Smithsonian Institution. "Micro-Irghizites: New Tektites and the Missing Link." May 3, 1983

48. G.V. Gibbs, Virginia Polytechnic Institute. "Experimental Studies of the SiO Bond in the Silica Polymorphs." May 5, 1983

49. Dr. Paul Warren, Institute of Meteoritics. "Petrology of Allan Hills A81005, and Implications of a Meteorite From the Moon." May 27, 1983

50. Addi Bischoff, Institut Fur Meteoritenkunde, Munster, West Germany. "Al-Rich Chondrules and Fragments in Ordinary Chondrites."
June 7, 1983

51. Dr. Cyrena Goodrich, Cornell University. "Highly Reduced, Iron-, Titanium-, and Phosphorus-Rich Silicate Inclusions in Natural Iron-Carbon Alloys From Disko Island, Greenland." June 14, 1983

IV: STUDENT SCHOLARSHIPS AND AWARDS 1982 - 1983

ALBUQUERQUE GEM AND MINERAL CLUB SCHOLARSHIP

Ellen Lambert	$200.00
Gautam Sarkar	$200.00
Harlan Stein	$200.00

AMERICAN GEOLOGICAL INSTITUTE

Gregory Martinez	$500.00

ANACONDA

David Codding	$7,000.00
Michael Williams	$7,000.00

ARCO

Mark Longden	$1,500.00
Bill Banowsky	$1,500.00

ARGONNE NATIONAL LABS

Jerry Miller	$12,000.00

GENERAL THOMAS D. CAMPBELL MEMORIAL SCHOLARSHIP

Douglas Rappuhn	$900.00
Margaret Gawthrop	$900.00

GEOLOGY PUBLIC SERVICE SCHOLARSHIP

Michael Williams	$500.00

GEOLOGY RESEARCH AND SCHOLARSHIP FUND

Thomas Bullard	$500.00
William Criswell	$600.00
Richard Ford III	$300.00

Kevin Guilbeau	$400.00
Ellen Lambert	$300.00
Ronald Matheny	$250.00
Gautam Sarkar	$200.00
Larry Smith	$500.00
Harlan Stein	$100.00
Jo Ann Weber	$250.00
Gregory Martinez	$250.00
Michael Williams	$500.00

GRADUATE STUDENT ASSOCIATION (SRAC)

Ron Matheney	$150.00

HARRY AND MABEL F. LEONARD SCHOLARSHIP FUND

Suzanne Orbock	$150.00
Christopher Young	$900.00
Rosemary Glenn	$900.00
Dave Madsen	$900.00
Paul Schluter	$500.00
Susan Rhoades	$500.00
Mary Jo Gilbert	$500.00
Carla Rachkowski	$500.00
Stuart Van Deusen	$300.00
Stephan Todd	$300.00

Russell Keenan	$300.00
Joseph Fritts	$300.00
Steven Tanner	$150.00
Robert Marvin	$150.00
James Effinger	$150.00
Diane Nowlin	$150.00
Michael Jackson	$300.00

LOS ALAMOS GEOLOGICAL SOCIETY

Susan Orbock	$65.00
Susan Rhoades	$65.00
Steven Todd	$50.00

MOUNTAIN BELL GRANT

Tamara Dickinson	$250.00

NEW MEXICO BUREAU OF MINES

Gerald Kepes	$1,800.00

NEW MEXICO GEOLOGICAL SOCIETY SCHOLARSHIP

Margaret Krebs	$100.00
Paul Schulter	$100.00
Gautam Sarkar	$500.00
Rodney Metcalf	$500.00
Richard Abitz	$500.00
Dave Plummer	$500.00

RALPH STONE RESEARCH AWARD (GSA)

John Pickle	$500.00

RODNEY C. RHODES MEMORIAL SCHOLARSHIP

William Criswell	$100.00
Kevin Guilbeau	$100.00

SANDIA NATIONAL LABORATORIES

Dave Madsen	$7,000.00

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UNM - UNIVERSITY CHALLENGE ASSISTANTSHIP

Larry Smith	$5,600.00

J. PAUL FITZSIMMONS OUTSTANDING SOPHOMORE AWARD

Christopher Young

SHERMAN A. WENGERD OUTSTANDING JUNIOR AWARD

Dave Madsen

STUART A. NORTHROP OUTSTANDING SENIOR AWARD

Sam Conner

VINCENT C. KELLEY OUTSTANDING FIELD GEOLOGIST AWARD

David Denbow

V: TEACHING AND RESEARCH ASSISTANTSHIPS

1982 - 1983

NAME	TA/RA	PROJECT DIRECTOR	FUNDING
M. Abasian	RA	Brookings	NSF
R. Abitz	TA/RA	Elston	NSF
B. Banowsky	TA/RA	Woodward	Arco
P. Bauer	RA	Callender	NSF
M. Bersch	TA	Grambling	Department
A. Bischoff	RA	Keil	NASA
C. Bryan	Fellow	Elston	NSF
T. Bullard	TA	Wells	Department
D. Cates	PA	Elston	Harding Mine
D. Codding	RA	Grambling	Anaconda
E. Colvard	TA	Brookins	General College
B. Coxe	TA	Grambling	Department
B. Criswell	TA	Elston	Department
T. Dickinson	RA	Keil	NASA
R. Ford	TA	Kettenring	Department
J. Grimm	TA/RA	Wells	Natural Science
M. Jercinovic	RA	Keil	NASA
G. Kepes	TA	Woodward	General College
K. Looff	TA	Woodward	Department
M. Longden	TA/RA	Woodward	Department/Arco
R. Matheney	RA	Brookins	U.S. Bureau of Mines

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NAME	TA/RA	PROJECT DIRECTOR	FUNDING
R. McCarty	TA/RA	Callender	NSF
J. McKinley	RA	Keil	NASA
S. McKinley	RA	Keil	NASA
R. Metcalf	TA	Grambling	Natural Science
M. Murphy	RA	Brookins	
N. Ordway	RA	Holser	Caswell Silver
D. Plummer	TA	Woodward	Department
S. Recca	RA	Keil	NASA
S. Sares	TA	Wells	Department
S. Seaman	TA	Elston	Natural Science
F. Smith	TA	Elston	Department
L. Smith	TA	Wells	Graduate School
H. Vogler	RA	Brookins	D.O.E.
D. Ward	TA	Callender	Department
M. Williams	RA	Grambling	NSF/Anaconda
C. Williams	RA	Keil	NASA

VI: REPORT OF GRADUATE ADMISSIONS COMMITTEE

Summary of Admissions

A total of 355 students applied for admission into the Geology Department graduate program for the spring and fall semester of 1983. This is an increase of 30% over the total number of 1982 applicants, and the number of completed applications (serious applicants) evaluated in 1983 increased by 69% over 1982 (see Table 1). About one-third of the total applicants (139 students) were accepted into our program. Detailed information on the characteristics of 1983 applicants is presented in Tables 2 and 3. As most of these students applied for the fall 1983 semester, there is little information yet on how many will actually enroll, but based on past years we expect 20 to 25% of those accepted into our program to begin their graduate work at UNM. Applicants for graduate study are judged on the basis of grades, recommendations, Graduate Record Exam scores, broadness of background in geology and related sciences, statement of goals in geology, and other evidence of potential for success in our program.

For at least the past four years the number of students applying for entry into our graduate program has increased, but this year has produced the most dramatic increase in applications the department has ever experienced. Along with an increase in the number of applicants has come an increase in their quality, as judged by Grade Point Average and Graduate Record Exam

scores. There are several reasons for the increase in applications. Efforts by the department to widely disseminate information on its programs, combined with word-of-mouth encouragement of potential applicants by faculty at other institutions and UNM alumnie have undoubtedly helped. In addition, the recent slump in the mineral petroleum industries, which traditionally have provided the majority of employment opportunities for geology graduates, has had the effect of encouraging undergraduate students to continue on for a graduate degree, rather than seeking employment at the bachelor's level. Some applicants have been employed in industry and have decided to return to school to pursue graduate degrees in order to enhance their training.

Graduate Record Exam (GRE) Scores and Grade Point Average (GPA)

GRE scores of students accepted for the Fall, 1983 semester averaged in the 76th percentile on the verbal part of the exam, 83rd on quantitative, and 76th on the Geology advanced test. Thus, students accepted into our program represent the upper 20 to 25% of all students taking the exam. About 28% of students accepted scored in the 90th percentile or above on the Geology advanced test. The mean GPA for accepted students is 3.40; the average for students not accepted is 2.99. The Geology Department maintains admissions standards well above the minimum requirements of the Graduate School.

Financial Aid

The financial aid the department can offer to potential graduate students is instrumental in allowing us to compete in attracting excellent students to UNM. The department offered one Silver-Kelley Fellowship this year; the offer was accepted by Sara Brothers, Harvard University, who will begin her studies in fall, 1983. Charles Bryan, who studied last year at UNM under a National Science Foundation Fellowship, will also begin as a Silver-Kelley Fellow this fall. In addition, the department offered a total of 21 Teaching Assistantships and three Research Assistantships to potential students in 1983. Of these, four accepted our TA-ship offers and two accepted RA-ship offers, making (with the new Silver-Kelley Fellow) a total of seven new graduate students for 1983 who will be fully supported.

Most students to whom we offer TA-ships decided not to attend UNM. In some cases our offer was not competitive with offers made by other institutions, despite the fact that the Geology Department adds several hundred dollars of its funds to the stipend allowed by the Graduate School for an assistantship. Also, because of the limited number of TA-ships allocated to the Geology Department, we were not able to make offers to some excellent students who received offers from, and decided to attend, other universities. As the number of excellent applicants to our program increases, as it has done in the past few years, the relatively low and stable number of TA-ships we can offer will result in the loss of an increasing number of excellent potential

students, some of whom would have attended UNM if support had been available.

Table 1. SUMMARY OF APPLICATIONS TO GEOLOGY DEPARTMENT GRADUATE PROGRAM

	Spring 1983	Spring 1982	Change, '82-'83	Fall 1983	Fall, 1982	Change, '82-'83
Complete applications	28	23	+22%	244	138	+77%
Incomplete applications	18	3		65	108	
TOTAL applications	46	26	+77%	309	246	+26%
Percent of total applicant admitted to program	30%	54%		36%	35%	

Table 2: DEPARTMENT OF GEOLOGY - SUMMARY OF GRADUATE APPLICANT DATA FOR: SPRING, 1983

A. Applicants to Graduate Program	Male	Female	TOTAL	Minority	Foreign	Total PhD	Total MS
Accepted	13	1	14	1	1	5	9
Not accepted	11	3	14	2	2	1	13
TOTALS	24	4	28	3	3	6	22
Additional Incomplete Applications	14	4	18	1	5	--	--
TOTAL APPLICANTS	38	8	46	4	8	--	--
Total Enrolled	8	1	9	0	0	1	8
UNM Student Enrolled	--	--	0	--	--	--	--
B. Financial Aid Data (Assistantships and FelloWships)							
Aid Offered	1	0	1	0	0	0	1
Aid accepted	1	0	1	0	0	0	1
% accepting our offer	100%						

C. Graduate Record Exam Data

	Verbal	Quantiative	Analytical	Advanced: Geology	GPA
a) Accepted applicants					
Average raw score	600	614	594	681	3-20 BS
Average percentile	75	71	--	77	2-52 MS
b) Applicants not accepted					
Average raw score	451	588	513	547	2.78 BS
Average percentile	43	62	--	41	

c) Precent accepted who scored over 90% in Advanced-Geology GRE = 36%

Table 3: DEPARTMENT OF GEOLOGY - SUMMARY OF GRADUATE APPLICANT DATA FOR: FALL, 1983

A. Applicants to Graduate Program	Male	Female	TOTAL	Minority	Foreign	Total PhD	Total MS
Accepted	80	31	111	4	5	20	91
Not accepted	93	40	133	4	7	13	120
TOTALS	173	71	244	8	12	33	211
Additonal Incomplete Applications	52	13	65	--	--	--	--
TOTAL APPLICANTS	225	84	309	--	--	--	--
Total Enrolled	available August, 1983						
UNM Student Enrolled	--	--	--	--	--	8	1
B. Financial Aid Data (Assistanships and Fellowships)							
Aid Offered	17	6	23	1	--	5	18
Aid accepted	5	1	6	--	--	1	5
% accepting our offer	26%						

C. Graduate Record Exam Data

	Verbal	Quantiative	Analytical	Advanced: Geology	GPA
a) Accepted applicants					
Average raw score	597	677	610	651	3.40 BS
Average percentile	76	83	--	76	3.78 MS
b) Applicants not accepted					
Average raw score	503	582	528	557	2.99 BS
Average percentile	55	63	--	42	2.59 MS

c) Percent accepted who scored over 90% on Advanced-Geology GRE = 28%

VII: GEOLOGY ALUMNI FELLOWSHIP FUND CONTRIBUTORS 1982-1983

Sidney R. Ash

Fredrick and Phyllis Bachhuber

Roy L. Berry

Saleh M. Billo

Martin Louis Bregman

Dr. Jon Callender

Rufus Carter

Alan T. Dahlstrand

Dr. and Mrs. Wolfgang Elston

James R. Ezell

Thomas A. Fitzgerald

George H. Fullas

David and Gudrun E. Gaskill

David B. Givens

Malcom L. Goode

Craig S. Goodknight

Frank Gorham

Patrick J. F. Gratton

Philip T. Hayes

David Jagnow

James Jameson

Dr. Klaus Keil

David Harry Kraig

Jottn Gregory Kuhn

Jean La Paz

George O. Lotspeich, Jr.

James Lee Martin

Keith N. Meador

David Logan Paffett

William T. S. Pope

William L. Shaffer

Richard W. & Barbara Simms

William Spear

Martin Steinpress

Ralph G. Stevenson

Marguerite Swanson

Lawerence H. Wagner

Jimmie L. Warren

Dr. and Mrs. Stephen Wells

Dr. & Mrs. Sherman Wengerd

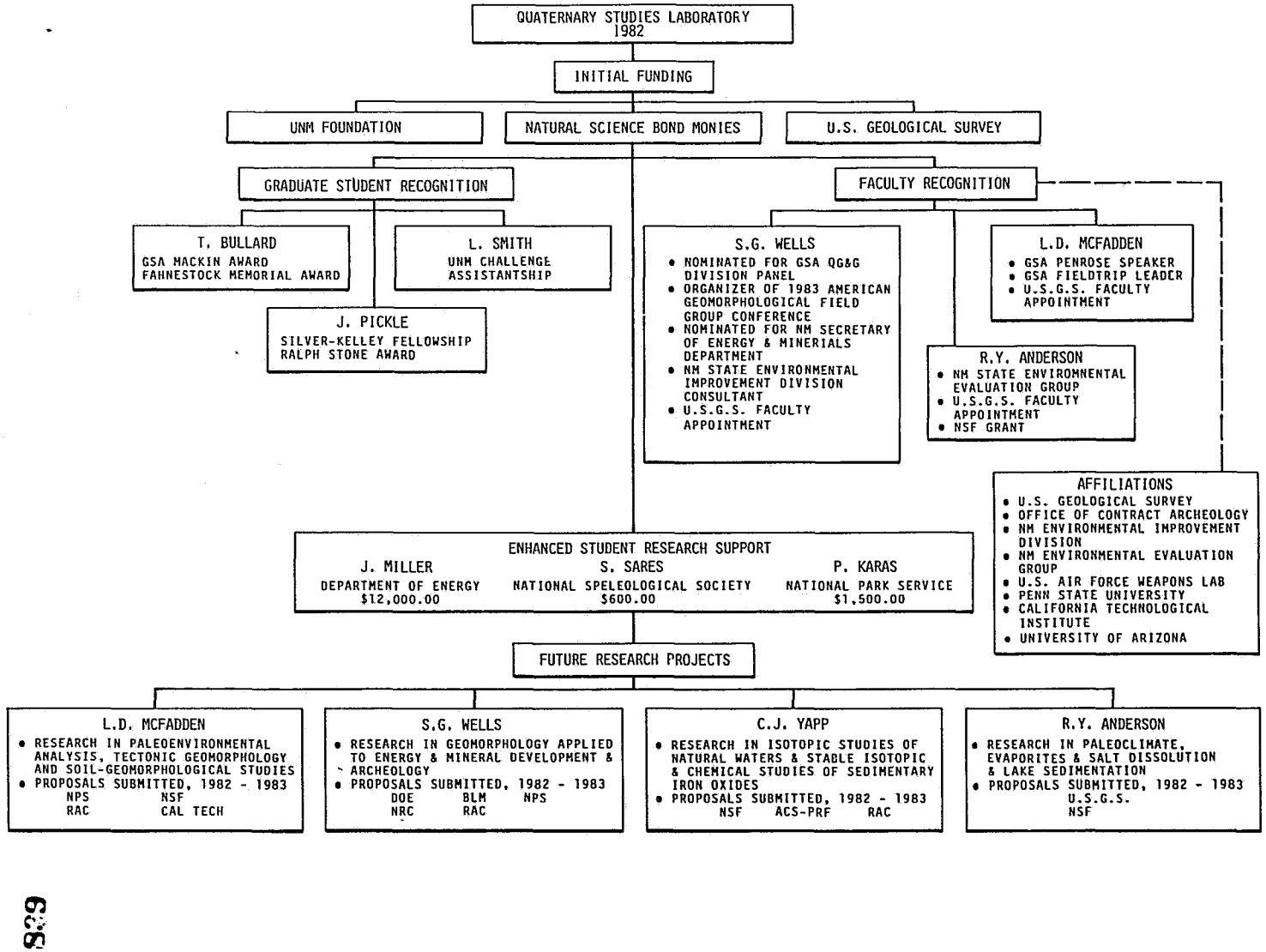
Dr. and Mrs. Lee Woodward

VIII: GIFT LIST

Sandra Feldman	$ 500.00
Mobil Oil	$ 4,000.00
AMOCO (Donald Schroeter)	$ 1,500.00
EXXON (J. S. Deck)	$ 1,000.00
Phillips Petroleum	$ 1,000.00
Vincent C. Kelley	$17,000.00
Patrick J. F. Gratton	$ 1,000.00
Edwin Roedder	$ 1,325.00
Atlantic Richfield Foundation	$ 1,500.00
Atlantic Richfield Company (Alan Sim)	$ 2,000.00
Rufus Carter	$ 100.00
Albuquerque Geological Society	$ 350.00
Sandia National Laboratories	$ 200.00
Lawerence Teufel	$ 1,800.00
Robert Sharp	$ 400.00

IX: COMPANIES INTERVIEWING GEOLOGY STUDENTS 1982 - 1983

DATE	COMPANY	CAREER SERVICES	GEOLOGY DEPARTMENT
September 28	Exxon		xx
September 29	Exxon		xxx
October 11	Shell		xxx
October 12	Shell		xxx
October 13	Mobil		xxx
October 14	Shell	xx	
March 24	Defense Mapping Agency	xx	


QUATERNARY STUDIES LABORATORY
1982
INITIAL FUNDING
UNM FOUNDATION
NATURAL SCIENCE BOND MONIES
U.S. GEOLOGICAL SURVEY
GRADUATE STUDENT RECOGNITION
FACULTY RECOGNITION
T. BULLARD
GSA MACKIN AWARD
FAHNESTOCK MEMORIAL AWARD
L. SMITH
UNM CHALLENGE ASSISTANTSHIP
J. PICKLE
SILVER-KELLEY FELLOWSHIP
RALPH STONE AWARD
S.G. WELLS
• NOMINATED FOR GSA QG&G DIVISION PANEL
• ORGANIZER OF 1983 AMERICAN GEOMORPHOLOGICAL FIELD GROUP CONFERENCE
• NOMINATED FOR NM SECRETARY OF ENERGY & MINERIALS DEPARTMENT
• NM STATE ENVIRONMENTAL IMPROVEMENT DIVISION CONSULTANT
• U.S.G.S. FACULTY APPOINTMENT
L.D. MCFADDEN
• GSA PENROSE SPEAKER
• GSA FIELDTRIP LEADER
• U.S.G.S. FACULTY APPOINTMENT
R.Y. ANDERSON
• NM STATE ENVIRONMENTAL EVALUATION GROUP
• U.S.G.S. FACULTY APPOINTMENT
• NSF GRANT
AFFILIATIONS
• U.S. GEOLOGICAL SURVEY
• OFFICE OF CONTRACT ARCHEOLOGY
• NM ENVIRONMENTAL IMPROVEMENT DIVISION
• NM ENVIRONMENTAL EVALUATION GROUP
• U.S. AIR FORCE WEAPONS LAB
• PENN STATE UNIVERSITY
• CALIFORNIA TECHNOLOGICAL INSTITUTE
• UNIVERSITY OF ARIZONA
ENHANCED STUDENT RESEARCH SUPPORT
J. MILLER
DEPARTMENT OF ENERGY
$12,000.00
S. SARES
NATIONAL SPELEOLOGICAL SOCIETY
$600.00
P. KARAS
NATIONAL PARK SERVICE
$1,500.00
FUTURE RESEARCH PROJECTS
L.D. MCFADDEN
• RESEARCH IN PALEOENVIRONMENTAL ANALYSIS, TECTONIC GEOMORPHOLOGY AND SOIL-GEOMORPHOLOGICAL STUDIES
• PROPOSALS SUBMITTED, 1982 - 1983
NPS NSF
RAC CAL TECH
S.G. WELLS
• RESEARCH IN GEOMORPHOLOGY APPLIED TO ENERGY & MINERAL DEVELOPMENT & ARCHEOLOGY
• PROPOSALS SUBMITTED, 1982 - 1983
DOE BLM NPS
NRC RAC
C.J. YAPP
• RESEARCH IN ISOTOPIC STUDIES OF NATURAL WATERS & STABLE ISOTOPIC & CHEMICAL STUDIES OF SEDIMENTARY IRON OXIDES
• PROPOSALS SUBMITTED, 1982 - 1983
NSF ACS-PRF RAC
R.Y. ANDERSON
• RESEARCH IN PALEOCLIMATE, EVAPORITES & SALT DISSOLUTION & LAKE SEDIMENTATION
• PROPOSALS SUBMITTED, 1982 - 1983
U.S.G.S.
NSF

XI PROJECTIONS AND PLANS

(Taken from Self-Study, Spring 1982)

The previous chapters in this self-study have provided a detailed summary of the strengths, accomplishments and deficiencies of the Department of Geology. Our greatest strengths are the people involved in our program -- students, faculty and alumni. We have a consistent record of excellent teaching at the undergraduate and graduate level, and our undergraduates and graduates are among the best in the university. We have revised our undergraduate and graduate curricula and have seen a dramatic increase in the quality and quantity of applicants for the graduate program. Every faculty member is an active scholar in his area of specialization with a record of publication and funding which, in total for the Department exceeds that of any other department faculty in the university, and we have a strong contingent of loyal alumni who regularly step forward in support of the Department. During the past three years we have been privileged to witness the development of two particularly significant sources of support for the Department. Energy, Exploration & Education, Inc. has supported two Visiting Distinguished Professors of Petroleum Geology (both past presidents of the American Association of Petroleum Geologists - one of the largest professional organizations of geologists in the world). The Caswell Silver

Foundation was founded from the gift of a distinguished alumnus, and with its support we have had two Caswell Silver Distinguished Professors as members of our faculty, attracted some of the best graduate students in the country to our program (for example, our first National Science Foundation graduate fellow), and have been able to invite internationally distinguished scholars to visit the Department and present lectures and seminars. Alumni and faculty have responded generously in establishing the Geology Alumni Fellowship Endowment in the UNM Foundation. The state and university have been generous in meeting the Department's needs for major pieces of equipment, and these funds have been used to raise matching funds from outside agencies (National Science Foundation, NASA and the UNM Foundation). While experiencing these changes, we have made every effort to preserve the traditional strengths in our field program, and the Institute of Meteoritics continues to thrive as an important research and graduate instruction part of the Geology Department program. The Department has received nearly every type of recognition available within the University: honorary doctorate (Caswell Silver), Regent's Meritorious Service Medal (Don Power), Regent's Recognition Medal (Vincent C. Kelley), Research Professor Award and Regent's Meritorius Service Medal (Klaus Keil), Popejoy Award for the best UNM dissertation (James L. Gooding), and Graduate Studies Program Challenge Fellowship (Larry Smith). All of these accomplishments are the result of individual efforts that have prospered within the Department of Geology. The critical question, however, is that

with this level of activity, what is the national and international reputation of the department?

The recently published review of research-doctorate programs in the United States, completed by the National Academy of Sciences, provides us with a sobering analysis of what excellence really requires. Reference to this study has been made in previous sections of this self-study, but it is important to once again emphasize some of the principal conclusions that can be extracted from the study. First, despite their eminence within the University of New Mexico, all of the physical science departments are ranked as below average compared to other programs that were reviewed. In comparison to other physical science departments (Chemistry, Physics, Stat./Biostat. and Math) the Geology Department is the highest within UNM, but 58 percent of the programs reviewed ranked higher than the Department of Geology at UNM. Using selected schools for comparison, (see Table 5-1, following page), we see that the UNM Geology department is one of the smallest in the southwest, that our library support is among the worst and that research support from the University is among the lowest. The University of Arizona, for example, ranks well ahead of UNM in all of these areas. Although one may quibble as to how certain parameters are determined, and as to what the most appropriate comparison might be, the message is clear: we have a solid but average department.

The first question is what can the Department of Geology do to improve this ranking. Based on activity of the past three

TABLE 5.1 Program Measures (Raw and Standardized Values) in Geosciences

Prog No.	University - Department/Academic Unit	Program Size (01)	(02)	(03)	Characteristics of Program Graduates (04)	(05)	(06)	(07)	Survey Results (08)	(09)	(10)	(11)	University Library (12)	Research Support (13)	(14)	Published Articles (15)	(16)	Survey Ratings Standard Error (08)	(09)	(10)	(11)
047.	New Mexico, University of-Albuquerque	14	16	NA	NA	NA	NA	NA	2.7	1.7	1.3	0.8	-1.0	.14	892	19		.09	.07	.09	.07
	Geology	48	48						47	48	56	48	37	35	43	44	43				
046.	New Mexico Institute of Mining & Tecnology	24	12	9	.18	7.5	.73	.00	2.5	1.6	1.3	0.6	NA	.21	1967	12		.11	.10	.09	.07
	Geoscience	60	45	42	44	44	47	33	44	47	56	43		38	45	42	42				
002.	Arizona State University-Tempe	19	8	15	.27	6.8	.64	.46	3.1	1.9	1.6	1.1	-0.3	.58	898	32		.08	.06	.08	.07
	Geology*	54	42	45	51	52	39	67	52	53	66	55	44	55	43	47	48				
003.	Arizona, University of Tucson	26	27	40	.30	8.8	.52	.13	3.7	2.2	1.8	1.2	0.9	.62	10111	72		.08	.06	.05	.07
	Geosciences*	63	55	57	53	30	29	43	59	60	74	60	55	57	64	57	63				
017.	Colorado, University of	19	35	39	.25	7.5	.81	.16	3.1	2.0	1.3	1.0	-0.9	.32	3977	79		.09	.05	.08	.06
	Geological Sciences	54	61	57	49	44	54	45	52	55	54	54	38	43	50	59	56				
053.	Oklahoma, University of-Norman	13	5	11	NA	NA	NA	NA	2.6	1.5	0.8	0.8	-0.6	.23	3117	10		.11	.08	.08	.07
	Geology and Geophysics	47	40	43					46	43	37	47	41	39	48	41	41				
079.	Texas, University of-Austin	37	33	50	.36	7.6	.80	.20	3.8	2.2	1.4	1.4	1.6	.32	10789	62		.08	.05	.06	.06
	Geological Sciences	77	60	62	58	43	53	48	60	60	60	64	62	43	66	55	50				
006.	California Institute of Technology	28	60	69	.33	6.5	.64	.36	4.9	2.8	1.2	1.7	NA	.64	6414	145		.04	.05	.06	.05
	Geological and Planetary Sciences	65	78	71	55	55	39	60	74	73	54	73		58	56	76	77				
015.	Chicago, University of	20	16	24	.36	5.7	.86	.43	4.3	2.3	1.2	1.4	0.9	.85	2186	80		.08	.07	.06	.07
	Geophysical Sciences								66	61	54	63	55	68	46	59	63				
023.	Harvard University	13	50	36	.42	6.2	.76	.36	4.1	2.4	0.9	1.5	3.0	.85	2324	96		.08	.06	.08	.06
	Geological Sciences	47	71	55	62	59	49	60	65	64	42	68	75	68	46	63	70				
072.	Stanford University	10	26	23	.26	6.9	.87	.10	3.4	2.1	0.8	0.9	2.0	.40	2790	123		.12	.09	.09	.07
	Applied Earth Sciences*	43	55	49	50	51	59	41	56	57	38	51	66	47	47	70	67				
055.	Oregon, University of Eugene	13	11	15	.46	6.5	.82	.18	3.0	1.9	1.1	1.0	-0.9	.62	617	14		.09	.05	.07	.07
	Geology	47	44	45	65	55	54	47	50	53	47	53	38	57	42	42	43				
083.	Virginia Polytechnic Institute & State Univ	22	13	12	NA	NA	NA	NA	3.7	2.1	1.6	1.3	-0.0	.59	7586	48		.08	.06	.07	.07
	Geological Sciences	58	46	44					59	58	66	61	46	56	47	51	50				

*Indicates program was initiated since 1970.

NOTE: On the first line of data for every program, raw values for each measure are reported; on the second line values are reported in standardized form, with mean = 50 and standard deviation = 10. "NA" indicates that the value for a measure is not available.

years, there is little that the Department itself can do toward improvement. Faculty could perhaps choose more significant research topics, obtain more outside funding, increase efforts to publish results in journals of the highest quality, and devote more time to graduate level education and research, but these are areas in which we already make a significant effort and experience solid success.

The second, and more serious question, is what constraints at the University of New Mexico prevent us from moving forward? We would list them as follows:

1. In general, there is still a low level of support for the physical and natural sciences throughout the University. The Geology Department cannot reach higher levels of recognition unless other science departments move far ahead of their present position. The overall reputation of departments in the sciences reflects directly on the reputation of the Department of Geology, and on the University of New Mexico.
2. In addition to the generally low ranking of science departments in the University, there is a total absence of departments that normally offer support (through their research activities and joint faculty appointments) to a geology program. There are no programs in mineral engineering, petroleum engineering, metallurgy or materials science. This is an unfortunate situation for the largest university in a state in which natural

resources are the primary source of revenue for education.

3. We are limited by the present size of our faculty. An active faculty of sixteen can never have the national impact of a similarly active faculty of thirty. Number of faculty has a strong and direct effect on the degree of recognized excellence and reputation attainable in a department. This is particularly accentuated by the lack of other supporting academic units.
4. The University provides little recognition or encouragement for graduate level instruction. The UNM-9 policy for teaching loads all but ignores the diverse and time-consuming activities that are part of quality graduate level instruction. G.A. and T.A. allotment to the Geology Department are low relative to the number of faculty, the number of graduate students, and number of undergraduate student credit hours generated by the department, compared to other departments at UNM.
5. The University provides comparatively little tangible support for research and publication activities. Though lip-service is given to the concept that teaching and research are equally important departmental roles, the requirements for teaching loads are the same for departments that are productive in research as they are for departments that do little research. Although the Geology Department is very active in research,

publication, and acquiring outside funding, and at the same time maintains a successful program of undergraduate and graduate instruction, our level of support in many areas is less than that given by the university to other natural science departments.

These limitations can only be removed by a concerted effort which involves numerous short term solutions that are part of an overall long term drive toward excellence. That excellence cannot be spread throughout the University, but rather must be nurtured where there is some reasonable hope of success. The Department of Geology is one of the few academic units in the University that warrant that immediate investment.

Our department's needs for the next five years can be divided into those which are immediate and those that are long-term. The short term needs include:

1. Increase in staff support. At the present time a number of staff are supported entirely or in part by our public service or overhead accounts. The immediate needs are: two-thirds support for an administrative assistant; a full-time draftsperson; one-third support for a clerical specialist; up-grading of the clerical specialist V to bookkeeping position; an additional clerical specialist; and one full time curator for the department's research and teaching collections.
2. Two additional FTE T.A.'s in order to attract better graduate students, provide more support for faculty

members, and offer more physical geology laboratory sections (presently not required for students who take physical geology).

3. Two full-time technicians in support of the laboratories that we have acquired or will acquire. The technical support is key to creating a productive faculty. Without this support we waste our recent capital investment in equipment (about 1 million dollars).
4. A 50% increase in our supplies and expense budget ($25,000) in order to support the vehicle and equipment maintenance so necessary to a productive research program, and the increased expense of graduate level education (including graduate student recruitment and handling of application materials).

Our long-term needs are more critical:

1. The addition of four faculty over the next five years. This would provide us with a faulty comparable in size to that of other major departments and allow us to cover a wider range of geologic subdisciplines. Our research activities, grant and contract funding, and number of top quality graduate students would all increase. We propose adding approximately one faculty position per year over the next five years so that their programs can be assimilated into our overall program. One of these appointments should be at the full-professor level to provide the Department the option of hiring an outside chairman beginning in the 1985 academic year. This

option would perhaps allow the department to bring greater attention to its programs and dedication to excellence.

2. A system of teaching load credit in which graduate level instruction and research are given premier consideration. The Geology Department excels within the University in these areas, but is held back from advancing even farther by funding philosophies that are tied largely to number of students in a department's undergraduate courses.
3. At least two more years of continued funding for the purchase of major pieces of equipment.
4. A four year program of building renovation on a floor-by-floor basis to provide us with first class laboratory space for new equipment, to provide space for curated collections, and to up-date instructional facilities. We need to consolidate our laboratories and instructional space in order to accommodate new faculty and more students.
5. The library support for the sciences must be increased and this must include support for a Departmental library.

These requests are not new (see attached memo dated November, 1981). They are part of a consistent plan to improve the status of the Department of Geology and to create the conditions under which we may more easily achieve our goal of excellence on a national scale. Continued delays are not simply a loss of time,

but more importantly the loss of an opportunity. These requests may seem bold in a time of budgetary crisis, but I think that they are modest. The best time to gain on other institutions is when support for their programs is decreasing. The probability of success is high and the investment small compared to that required for major new efforts in areas such as high technology. The investment is also a logical one in a state which depends so heavily on the exploitation of natural resources and the special attractiveness of its environment. The Department is ready to move forward, but it needs the commitment and support of the University.

The Annual Report of the Institute of Meteoritics
July 1, 1982 - June 30, 1983
Klaus Keil, Director

Institute of Meteoritics
Department of Geology
University of New Mexico
Albuquerque, NM 87131

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2. Institute Staff

Dr. Klaus Keil, Director and Professor of Geology
Ms. M.K. Fillmon, Secretary
Dr. G.J. Taylor, Senior Research Scientist
Dr. E.R.D. Scott, Research Scientist
Mr. G.H. Conrad, Microprobe Specialist
Dr. A. Kracher, Postdoctoral Fellow
Dr. P. Warren, Postdoctoral Fellow
Mr. J. Calhoun, Photographer
Mr. T. Servilla, Preparator
Mr. J.R. Connolly, Staff Scientist (part-time)
Mr. M.G. Bersch, Graduate Research Assistant
Mr. A. Bischoff, Graduate Research Assistant
Ms. T.L. Dickinson, Graduate Research Assistant
Mr. M.R. Jercinovic, Graduate Research Assistant
Mr. J.P. McKinley, Graduate Research Assistant
Ms. S.G. McKinley, Graduate Research Assistant
Mr. S.I. Recca, Graduate Research Assistant
Mr. A.E. Rubin, Graduate Research Assistant
Ms. C.V. Williams, Graduate Research Assistant
Ms. D. Ahrens, Undergraduate Research Assistant
Ms. R.V. Glenn, Undergraduate Research Assistant
Mr. S. Johnson, Undergraduate Research Assistant

3. General Department Information

The Institute of Meteoritics, founded in 1944 and one of oldest institutions of its kind in the world, continued to develop vigorously during the report period as one of the leaders in research and teaching of Planetary Sciences, Cosmochemistry and Meteoritics. Several years ago, we invited the Meteoritical Society to hold one of its annual international meetings at the Institute of Meteoritics. We were informed during the report period that our invitation was accepted by the Society and that the 1984 meeting will be held in Albuquerque (July 29-August 4, 1984), with the Institute beings its major sponsor. The Meteoritical Society is the leading international association of meteoriticists, cosmochemists, and planetary scientists. We expect about 250-300 participants

David Lusby
Jim McKinley
Susan McKinley
George Conrad
Tom Servilla
Steve Recco
Mary Fillmon
Jim Connolly
Alfred Kracher
Mike Jercinovic
Rosemary Glenn
John Calhoun
Tommy Dickinson
Ed Scott
Klaus Keil
Jeff Taylor
Cecelia Williams
IMPORTED
Two Fingers
TEQUILA

from all over the world and will hold 2 concurrent sessions of scientific presentations from July 30 - August 2, 1984. The remainder of the time will be devoted to field trips. Considerable organizational work has been done in preparing for this meeting.

The major research, teaching and public service activities of the Institute during the report period may be summarized as follows:

3.1. Research

Research activities of staff and students of the Institute of Meteoritics cover a wide range of topics mostly aimed toward an understanding of the origin and early history of our solar system and the evolution of the planets. Our research during the report period has resulted in the publication of forty-five (45) scientific articles in major national and international journals (see 5.4.1., #s 1-45, of this Report), as well as in the publication of sixteen (16) abstracts of papers presented at national and international conferences (see 5.4.2, #s 46-61). Furthermore, staff and students of the Institute presented the results of their research in the form of thirty-three (33) professional papers at national and international scientific meetings (see 5.4.3., #s 62-94). The extensive involvement of students in original research projects in the Institute of Meteoritics is particularly important for their education. Specifically, students were eleven (11) times senior authors and ten (10) times co-authors of major scientific articles; five (5) times senior authors and three (3) times co-authors of abstracts; presented eight (8) professional talks and co-authored two (2) professional talks before national and international meetings. Staff members of the Institute were on fifty-two (52) professional travel assignments in this country as well as abroad (see 5.2), and students were on eight (8) such assignments. Note that the overwhelming majority of

these travel assignments were on funds provided by outside funding agencies through grants and contracts.

We continued 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. During the report period, grants and contracts totalling $744,817.00 were in effect and $322,410.00 were pending, for a total of $1,077,227.00 (see b.5 of this Report). Funding came from the National Aeronautics and Space Administration, the National Science Foundation, and Sandia National Laboratories

Our research activities attracted many foreign and domestic researchers to the Institute of Meteoritics for the purpose of short-term study, research and lectures. These were:

1. Professor Louis Lindner, University of Amsterdam, Holland. July 8, 1982.
2. Dr. Carle Pieters, Dept. of Earth and Space Sciences, Brown University. July 16, 1982.
3. Tom See, L.B. Johnson Space Center, Houston, Texas. August 16-22, 1982.
4. Dr. Stuart Agrell, Dept. of Geosciences, Cambridge University, Cambridge, England. August 25 - October 15, 1982.
5. Dr. H.N. Planner, Los Alamos National Laboratory, Los Alamos, N.M. Sept. 23, 1982.
6. Professor Vladimir Mejer, Dept. of Geology, Zagreb University, Zagreb, Yugoslavia. Oct. 10-24, 1982.
7. Dr. G. Kurat, Museum of Natural History, Vienna, Austria. Nov. 18-20, 1982.
8. Dr. R.S. Clarke, Smithsonian Institution, Washington, D.C. Nov. 29 - Dec. 4, 1982.
9. Professor K. Runcorn, Dept. of Physics, University of Newcastle Upon Tyne, England. Dec. 3, 1982.
10. Professor F. Freund, Dept. of Physics, Arizona State University, Tempe, Arizona. Dec. 3, 1982.

11. Dr. Jack Boyd, NASA Ames Research Center, Moffett Field, California. Dec. 6, 1982.

12. Dr. Rosemary Vidale, Los Alamos National Laboratory, Los Alamos, N.M. Feb. 8, 1983.

13. Professor Friedemann Freund, Dept. of Mineralogy, University of Cologne, Cologne, West-Germany. Feb. 10, 1983

14. Dr. David Kramer, New Mexico Solar Institute, Las Cruces, N.M. Feb. 10, 1983.

15. Dr. Roger Hewins, Dept. of Geology, Rutgers University, New Brunswick, N.J. Feb. 20-22, 1983.

16. Dr. J.N. Grossman, Institute of Geophysics and Planetary Physics, University of California, Los Angeles, California. March 9-10, 1983.

17. Dr. Charles Nielsen, JEOL, Peabody, Mass. March 23-25, 1983.

18. Dr. Ed Gafney, Los Alamos National Laboratory, Los Alamos, N.M. April 1, 1983.

19. Dr. W.V. Boynton, Lunar Laboratory and Dept. of Planetary Sciences, Univ. of Arizona, Tucson, Arizona. April 14, 1983.

20. Dr. L. Rancitelli, Batelle, Columbus, Ohio. April 14, 1983.

21. Dr. Peter Englert, Institute of Nuclear Chemistry, University of Cologne, Cologne, West-Germany. April 20, 1983.

22. Dr. H. Planner, Los Alamos National Laboratory, Los Alamos, N.M. April 25, 1983.

23. Dr. K. Fredriksson, U.S. National Museum of Natural History, Smithsonian Institution, Washington, D.C. May 2-4, 1983.

24. Dr. P. Pellas, Laboratoire de Mineralogie du Museum d'Histoire Naturelle, Paris, France. May 24-29, 1983.

25. Dr. Ken De Nault, Dept. of Earth Sciences, University of Northern Iowa, Cedar Falls, Iowa. May 25-Aug. 10, 1983.

26. Dr. Cyrena Goodrich, Dept. of Geological Sciences, Cornell University, Ithaca, N.Y. June 13-16, 1983.

27. Dr. George Plant, Canadian Geological Survey, Ottawa, Canada. June 23, 1983.

28. Dr. M. Mann, State Crime Laboratory, Santa Fe, N.M. June 24, 1983.

29. Dr. Cory Conrad, Dept. of Geological Sciences, Cornell University, Ithaca, N.Y. June 30 - July 2, 1983.

Research of staff and students of the Institute of Meteoritics as well as of visiting scholars was also presented in a series of Brown Bag Seminars of the Institute of Meteoritics as follows (names of student speakers are underlined):

1. Dr. G.J. Taylor (IM): The three ages of brecciation. Sept. 3, 1982.

2. Dr. Stuart Agrell (Department of Earth Sciences, Cambridge University, Cambridge, England): Metamorphosed hydrothermal system near Marysvale, Utah. Oct. 4, 1982.

3. Dr. P.H. Warren (IM): Models of bulk moon composition: A review. Oct. 12, 1982.

4. Dr. Gero Kurat (Museum of Natural History, Vienna, Austria): Mobilization processes in the upper mantle. Nov. 19, 1982

5. Dr. R.S. Clarke, Jr. (Smithsonian Institution, Washington, D.C.): The Wethersfield meteorite falls. Dec. 2, 1982.

6. Professor K. Runcorn (Dept. of Physics, University of Newcastle Upon Tyne, England): Lunar paleomagnetism and its implications. Dec. 3, 1982.

7. Dr. P.H. Warren (IM): Moon rocks from Antarctica. Jan. 21, 1983.

8. J.R. Connolly (IM): Nuclear waste-tuff problems at the Nevada Test Site. Febr. 4, 1983.

9. Dr. P.H. Warren (IM): Nuts, bolts and volts of neutron activation analysis. Feb. 11, 1983.

10. Dr. Roger Hewins (Dept. of Geology, Rutgers University, New Brunswick, N.J.): Petrology of diogenites and related meteorites. Feb. 21, 1983.

11. Dr. Roger Hewins (Dept. of Geology, Rutgers University, New Brunswick, N.J.): Origin of chondrules - Constraints from crystallization experiments. Feb. 22, 1983.

12. Dr. P.H. Warren (IM): Seventh foray: Whitlockite-rich lithologies, a diopside-bearing troctolitic anorthosite, ferroan anorthosites, and KREEP. March 4, 1983.

13. Dr. P.H. Warren (IM): Regolith breccia ALHA81005: Evidence of lunar origin, and nature of pristine and non-pristine clasts. March 4, 1983.

14. Dr. A. Kracher (IM): Dusty olivines in the Vigarano (CV3) chondrite: Evidence for an ubiquitous reduction process. March 9, 1983.

15. A. Bischoff (IM): Ca-Al-rich chondrules and inclusions in ordinary chondrites: Evidence for a related genesis of ordinary and carbonaceous chondrites. March 9, 1983.

16. Dr. E.R.D. Scott (IM): Petrologic similarities among chondrules in H, L, LL, CO, CM and E chondrites. March 9, 1983.

17. Dr. K. Keil (IM): Chondrules in enstatite chondrites - Nature and source of enstatite. March 9, 1983.

18. Dr. J.N. Grossman (Institute of Geophysics and Planetary Physics, Univ. of Calif.): Composition and origin of chondrules. March 10, 1983.

19. J.R. Connolly (IM): Regional thrust decollement in the Pancake Range, Nye County, Nevada and implications for volcanism. April 27, 1983.

20. M.J. Jercinovic (IM): Alteration of basaltic hyaloclastite in north-central British Columbia. April 27, 1983.

21. Dr. K. Fredriksson (U.S. National Museum of Natural History, Smithsonian Institution, Washington, D.C.): Microirghizites: New tektites and the missing link. May 3, 1983.

22. Dr. P. Pellas (Laboratoire de Mineralogie du Museum d'Histoire Naturelle, Paris, France): Do SNC meteorites come from Mars? May 27, 1983.

23. Dr. P.H. Warren (IM): Petrology of Allan Hills A81005, and implications of a meteorite from the Moon. May 27, 1983.

24. A. Bischoff (IM): Al-rich chondrules and fragments in ordinary chondrites. June 7, 1983.

25. Dr. Cyrena Goodrich (Dept. of Geological Sciences, Cornell University, Ithaca, N.Y.): Highly-reduced, iron-, titanium- and phosphorus-rich silicate inclusions in natural iron-carbon alloys from Disko Island, Greenland. June 14, 1983.

Research in the Institute of Meteoritics, during the report period, concentrated in a number of major areas, all of which are supported by outside research funds. Brief summaries of our more significant contributions follow:

3.1.1. Primitive components in type 3 chondrites and origin of chondrules (NASA supported).

Type 3 ordinary and carbonaceous chondrites are the least altered meteorites. Most researchers believe that types 4,5 and 6 ordinary chondrites have been thermally metamorphosed, and that C1 and CM carbonaceous

chondrites have been hydrated. The type 3 chondrites, therefore, have the best chance of providing information about processes that occurred in the solar nebula. Much of our research during the past few years has focussed on the identification and characterization of the components in type 3 chondrites. The goal of this work is to figure out how these primitive components formed and what conditions were like in the solar nebula.

During the past year, we have continued our research on the fine-grained, FeO-rich matrix material in chondrites. We have proposed that this material (or something like it) could have been the precursor material from which chondrules were formed by melting. We also reviewed the processes that have been proposed for chondrule formation and showed that those operating on planetary bodies (e.g., impact) could not have formed more than a tiny percentage of chondrules. Chondrules, therefore, probably formed in the solar nebula. The precise process by which they formed remains elusive, but our work on chondrules from ordinary, carbonaceous, and enstatite chondrites shows that the same types of chondrules occur in all chondrite groups. This suggests that chondrules in all these groups share similar nebular origins. We also studied relict grains in chondrules. Presence of such grains in chondrules from all meteorite groups also emphasizes that chondrules in ordinary, carbonaceous, and enstatite chondrites formed by similar mechanisms. Relict grains also shed light on the chondrule-forming process, as their presence in chondrules suggests that either coarse grains were present in the precursor dust or that they were incorporated into chondrules by collisions.

We made an extensive study of chondrules in enstatite chondrites, with emphasis on the concentrations of minor elements in enstatite grains. The data demonstrate that there is no need to resort to models involving the collisions of

molten planetesimals to form chondrules in enstatite chondrites, as Leitch and Smith have proposed.

One of the most exciting discoveries we made during the past year was to demonstrate that Ca-Al-rich inclusions and chondrules are widespread in ordinary chondrites. They differ in certain respects from those in carbonaceous chondrites, but they are generally similar; this reinforces our contention that the primitive components in all chondrite groups formed by similar mechanisms. Trace element analyses (done in collaboration with W.V. Boynton and co-workers) indicate that Ca-Al-rich chondrules in Dhajala are depleted in siderophile elements compared to similar chondrules in Allende. This metal/silicate fractionation may have occurred in the nebula but might have been caused by mild metamorphism of Dhajala, a type 3.9 chondrite. Finally, ion microprobe analysis (done in collaboration with R.W. Hinton, U. Chicago) demonstrate that a hibonite grain in Dhajala has a ^{26}Mg anomaly, the first proof of Mg anomalies (from ^{26}Al) in ordinary chondrites.

3.1.2. Meteoritic breccias: structure and evolution of meteorite parent bodies. (NASA supported)

The study of meteoritic (and lunar) breccias has been a long-standing interest of ours. In a recent review of the subject, we noted that breccias contain (at least in principle) the record of planetary accretion around 4.5 Gyr ago, bombardment up to 3.9 Gyr, and regolith formation and evolution since 3.9 Gyr. To unravel the record of early brecciation, we have concentrated our studies on type 3 chondrites, nearly all of which are breccias in the sense that their components have been metamorphosed to different extents. The prevalence of type 3 breccias suggests that the objects accreting to parent bodies were loosely consolidated and that chondrite parent bodies may today contain substantial amounts of such materials.

We have also continued our work on chondrite regolith breccias (gas-rich breccias). We showed that the matrices of such chondrites are bound by variable amounts of impact-melted material. A survey of ordinary chondrite breccias indicates significant differences in the abundances of fragmental breccias (gas-poor) versus regolith breccias among ordinary chondrite groups. These differences reflect different impact histories of each parent body.

3.1.3. Petrology of Antarctic chondrites and other meteorites. (NASA supported)

We completed a study of 145 small meteorites from Antarctica. This collection contains a number of type 3 chondrites and two specimens of an EH4. We have also studied almost every large specimen of type 3 ordinary chondrites collected in Antarctica. Antarctic meteorites continue to be a rich source of interesting meteorites.

Our group also continued work on iron meteorites. We studied the relationships between IAB and IIICD iron meteorites and concluded that they likely formed by heating of a chondritic source material. The silicate inclusions in these meteorites are probably cogenetic with the metal. We also proposed a model relating the IIIAB iron meteorites to main group pallasites. Finally, we evaluated the role sulfur played in the evolution of the cores of the parent bodies of iron meteorites.

3.1.4. Origin of the Moon (NASA supported)

A primary goal of lunar research is to determine how the Moon formed. We have begun to tackle this problem directly by reviewing available data bearing on the Moon's bulk composition, perhaps the most fundamental constraint on how the Moon formed. Our analysis suggests that the Moon has a

chondritic bulk composition and is not enriched in refractory lithophile elements, though it is depleted in volatiles. We have also assessed the implications of chondritic relative abundances for the petrogenesis of lunar highland rocks. Finally, we have used our knowledge of lunar Mg-suite rocks to shed light on the origin of terrestrial komatiites. It is possible that komatiites formed by high-degree partial melting of anhydrous mantle material. This, in turn, implies that Earth acquired its volatiles during a final stage of accretion, and these volatiles were not mixed into the mantle for several billion years.

3.1.5. Origin of the lunar crust (NASA supported)

One of the most exciting developments in lunar science this year came from the Antarctic Meteorite program with the discovery that ALHA81005 came from the Moon. We described this fascinating little rock, noted its implications for lunar science and pointed out that, although it is almost certainly from the Moon, we cannot rule out an origin from Mercury. Our section contained a pristine clast with ferroan affinities that altered the shape of the ferroan field on a plot of Mg/(Mg+Fe) in olivine or low-Ca pyroxene versus An content of plagioclase.

We also studied more traditional lunar samples in our continuing search for pristine nonmare rocks, concentrating on Apollo 14 samples. As it always does, the search was successful, revealing an interesting assortment of lithologies. The most interesting of these are whitlockite (or merrilite)-rich alkali anorthosites that are strongly enriched in the REE. They appear to have crystallized from a magma with a KREEP REE-pattern, but with about 6 times greater concentrations of REE than those in high-K KREEP.

We completed work on two relatively large clasts of graphic granite from two Apollo 14 breccias; these are probably late-stage products from the

fractionation of a KREEP magma, but the details are obscure. We are working on a suite of Luna 20 and 16 nonmare samples, which were already analyzed by INAA. The goal of our research on the Luna samples is to improve the statistical basis of the longitude- geochemistry correlations we have observed. Finally, we have continued our participation in the consortium study of breccia 67915.

3.1.6. Geologic history and petrologic nature of the central Highlands (NASA supported).

We have been studying rake samples from Apollo 16 stations 4 and 5 in an attempt to understand the petrologic nature of the Descartes Mountains and Cayley Plains, and to unravel the geologic history of the Apollo 16 region. Our petrologic work is completed and we have synthesized available data for Apollo 16 to concoct plausible models for the geologic history. The models serve as a framework for future work on Apollo 16 samples.

3.1.7. Apollo 14 mare basalts and the diversity of mare source regions. (NASA supported)

We studied 47 samples of clasts separated from breccia 14321. Although all had been classified as mare basalts, ten turned out to be impact melt breccias. INAA, (particularly the REE), define five distinct rock groups. Average La concentrations range from 11 (Group 1) to 82 (Group 5) times chondrites. As the REE contents increase, La/Lu (normalized) systematically increases, from 0.7 in Group 1 to 2.2 in Group 5. The REE pattern of Group 5 is identical to KREEP. In contrast, Sc contents are almost constant. Major element compositions of these groups are dramatically less distinctive than are trace element abundances. Petrographic characteristics and mineral compositions are similar for all groups. This is not surprising in light of the uniformity in

major element bulk compositions. All are composed mostly of pyroxene and plagioclase, though some samples have partly resorbed olivine phenocrysts.

The five groups probably represent different lava-flow compositions. The most startling feature of the entire suite is the relatively uniform major element contents coupled with a factor of eight difference in REE contents. Group (or Flow) 5 has the highest REE concentrations and a KREEP pattern. We believe these characteristics can be explained by the production of a single magma by partial melting of a source that contained clinopyroxene in the residue (accounting for the constant Sc concentrations). This magma then assimilated different amounts of KREEP as it passed through higher levels in the lunar mantle and in the crust. Alternatively, sources with similar mineralogies may have contained differing amounts of a trapped KREEP component. Differing degrees of partial melting might be possible, but it seems difficult to maintain such similar major-element compositions. All these possibilities will be modelled quantitatively.

3.1.8. Lunar volcanic and impact glasses (NASA supported).

We have done some preliminary research into the site geometries of Ti and Fe in lunar glasses, using x-ray absorption spectroscopy. Distinct differences in Ti coordination were observed among the three glasses studied (Apollo 17 orange glass, Apollo 15 green glass, and an Apollo 16 glassy impact melt), perhaps due to differences in TiO_2 concentration (0.4 to 8 wt.%) and/or Al_2O_3 (6-25 wt.%).

3.1.9. The alteration of subglacially produced, basaltic hyaloclastites in North-Central British Columbia, with implications for the formation of the Martian regolith. (NASA supported).

In order to obtain a more comprehensive understanding of the alteration processes which effect basaltic glasses, it is necessary to undertake detailed

mineralogical and geochemical studies of the alteration products. Exposure of basaltic glass (sideromelane) in aqueous media results in significant geochemical fractionation from hydrolysis and production of secondary (authigenic) mineralization. The types and magnitudes of these effects are dependant on 1) the physical and chemical properties of the starting material; 2) water chemistry and flow rates; 3) P-T conditions of alteration; and 4) duration of alteration. It is, therefore, possible to infer some details of the alteration environment if the phases which were generated under these conditions have been characterized. This phase characterization involves determinative mineralogy (by x-ray diffraction, optical petrography, and scanning electron microscopy), major element geochemistry (by electron microprobe analysis) and trace element chemistry (by neutron activation analysis).

Basaltic glass can be produced in a variety of eruptive settings as long as a quenching medium (usually water) is available. Magma/water interactions in lakes, rivers, oceans, beneath glacial ice, in permafrost or groundwater can result in explosive volcanism which is capable of producing great quantities of glass. The glassy, fragmental deposits which result from these magma/water interactions have been termed "hyaloclastites" The deposits consist predominately of vitric ash with only a minor contribution by crystalline material As glasses, these deposits are particularly susceptible to rapid reaction with water (hydrolysis), much more so than their crystalline counterpart. It is the understanding of the precise nature of the reaction mechanisms and timing of alteration that remain critical in assessing the genetic significance of weathering products.

Palagonite is the x-ray amorphous, iron-rich silicate gel which forms as a pseudomorphic replacement of sideromelane glass. The chemical composition of this material is inconsistant between samples and may be indicative of the

alteration environment. Authigenic cements such as zeolites, clays, calcite, or opaline silica, have been reported from many locations in association with palagonite and are potentially useful in defining the environment at the time of cementation.

We and others have indicated that the fine material which characterizes both the Viking 1 and Viking 2 landing sites on Mars most likely represents the weathering products of mafic progenitors. The apparent abundance of such products on Mars may be explained by the production of large amounts of glass via magma/ground ice interactions and subsequent palagonitization, analagous to the processes which apply to terrestrial subglacial volcanism. The detailed evaluation of palagonitization of terrestrial subglacial hyaloclastites should provide some insight into the possible Martian pedogenic scenario.

3.1.10. Petrologic and geochemical investigations in support of engineering and design studies for a high-level nuclear waste repository in silicic volcanic tuff, Nevada Test Site (Sandia Natl. Laboratory supported).

The petrography, petrology and geochemistry of any medium considered for storage of commercial high-level nuclear waste (CHLW) are indirectly important parameters in repository design and construction. Thermomechanical and hydrologic properties of the host rock are engineering properties of prime concern; host-rock mineralogy, texture and fabric are important in understanding variations in these properties. A thorough understanding of the geochemistry of the emplacement medium is critical in understanding its response to chemical changes and thermal excursions imposed by emplacement of CHLW.

Sandia National Laboratories (SNL) in cooperation with the U.S. Geological Survey and Los Alamos National Laboratories, has been contracted by the Department of Energy (DOE) to oversee site selection, design and construction

of a CHLW repository in silicic volcanic tuff in the Nevada Test Site (NTS) region about 90 miles northwest of Las Vegas. Work by SNL for the past several years has focused on two locations at NTS, U12g-Tunnel and Yucca Mountain. The U12g-Tunnel (G-Tunnel) is the site of medium-specific thermomechanical experiments and heater tests in welded and non-welded tuff designed to aid in designing experimental and site-characterization techniques and in assessing the feasibility (from a thermal and mechanical veiwpoint) of emplacing nuclear waste in silicic tuffs. Our research involves characterization of the petrology and geochemistry of the tuffs in the G-Tunnel test facility in support of SNL's experiments. Yucca Mountain, located about 21 mi southwest of G-Tunnel, is being considered by DOE as one of several potential locations for construction of a CHLW repository in the continental U.S. SNL, in cooperation with the U.S. Geological Survey and Los Alamos National Laboratory, is involved with siting the repository and is the prime contractor for design and construction. We provide petrologic data on samples of core from Yucca Mountain in support of physical property and thermomechanical tests. An important aspect of our work has been the comparison of the petrology and geochemistry of G-Tunnel rocks in which thermomechanical tests are being performed with that of the tuffs at Yucca Mountain in which the waste repository may be sited. This work is essentially an evaluation of the transferability of data obtained in G-Tunnel tests to the tuffs at Yucca Mountain.

3.2 Teaching

Teaching activites of the Institute of Meteoritics staff concerned formal classes in Physical Geology (101L), Earth Resources (211), Mineralogy I (311L) Petrography of Opaque Ores (512L), Meteoritics and Cosmochemistry (513L), and Electron Microprobe Analysis and Scanning Electron Microscopy (518L). In

addition, many arranged courses were given to certify Department of Geology and Institute of Meteoritics faculty, staff and students as well as visiting scholars as operators of the electron microprobe and the scanning electron microscope. A great deal of emphasis was given to the direction and supervision of graduate student research projects, problems courses, theses and dissertations, as well as the publication of these research results (see 5.4 of this Report). Mr. A.E. Rubin received his Ph.D. degree in Geology with his research done in the Institute of Meteoritics. His dissertation is entitled "Petrology and origin of brecciated chondritic meteorites".

During the report period, the following graduate and undergraduate students did their research in the Institute of Meteoritics and were supported by NASA Grant and Contract funds generated by Institute of Meteoritics staff:

Graduate students
1. M.G. Bersch
2. A. Bischoff
3. T.L. Dickinson
4. M.R. Jercinovic
5. J.P. McKinley
6. S.G. McKinley
7. S.I. Recca
8. A.E. Rubin
9 C.V. Williams

Undergraduate students
1. D. Arens
2. R.V. Glenn
3. S. Johnson

During the report period, the following post-doctoral fellows were in residence in the Institute of Meteoritics for advanced training and research:

1. A. Kracher (Ph.D. Univ. of Vienna, Austria)
2. P.H. Warren (Ph.D. Univ. of California, Los Angeles).

3.3. Public Service

Public service activities of members of the staff of the Institute of Meteoritics as well as students are devoted to maintenance and enlargement of the Institute's outstanding collection of meteorites and to making research

specimens available to Institute members as well as colleagues in the USA and abroad. Many special, private showings of the Collection, the Museum, as well as lunar samples were given, frequently on weekends and after-duty hours. Furthermore, many public lectures on meteorites, lunar geology, and high-level nuclear wase disposal were given in the State of New Mexico, the USA and abroad. Finally many rocks suspected to be of meteoritic origin and brought to the Institute by the public were analyzed without charge, and major efforts were made to educate the interested public in the recognition and recovery of meteorites (see 5.9. of this Report).

Considerable time and effort was devoted by staff members of the Institute to serve as judges during the International Science and Engineering Fair, held in Albuquerque, N.M. Two special tours of the Institute were given for two groups of 35 student Fair participants. These tours included a talk on the mission and research in the Institute, a microscopic and macroscopic study of lunar samples and meteorites, a tour of the Meteorite Museum, and hands-on work with the electron microprobe and scanning electron microscope.

4. Significant Plans and Recommendations.

One important and urgent need for the Institute is the addition of a full-time, permanently employed, Ph.D. level Research Scientist. The present permanent scientific staff of the Institute consists only of the Director (9 months), the Senior Research Scientist (80% time) and one Research Scientist (50% time). All other scientific personnel is on contract and grant salaries. The addition of a second permanent Research Scientist to the staff would allow us to increase our involvement in sponsored research and the cost would ultimately be off-set by increased outside funding that a new person could attract.

5. Composite of Individual Biographical Supplements

5.1. Advanced Studies

M.G. Bersch

1. Continued progress towards Ph.D. degree in Geology with research in Institute of Meteoritics on "Major and minor element distributions in pyroxenes and olivines from pristine lunar highland rocks".

Tammy L. Dickinson

1. Continued progress towards M.S. degree in Geology with research in Institute of Meteoritics on "Petrogenesis of Apollo 14 mare basalts".

M.J. Jercinovic

1. Continued progress towards M.S. degree in Geology with research in Institute of Meteoritics on "Alteration of subglacially-produced hyaloclastites in north-central British Columbia and implications for the surface of Mars".

J.P. McKinley

1. Continued progress towards M.S. degree in Geology with research in Institute of Meteoritics on "Chemistry and petrology of Apollo 16 rake samples: Impact melt sheets, nature of the Cayley Plains and Descartes Mountains, and geologic history."

Cecilia V. Williams

1. Continued progress towards Ph.D. degree in Geology with research in Institute of Meteoritics on "Relationships of chondrules to matrices in chondrites".

5.2. Sabbaticals, Leaves of Absences, Summer Teaching Elsewhere, Travel, etc.

Klaus Keil

1. Washington, D.C. Met with NASA officials to discuss the future funding and programs of the Lunar and Planetary Institute, Houston, Texas. August 9-10, 1982.

2. Mercury, Nevada. Carried out research at the Nevada Test Site. August 16-18, 1982.

3. St. Louis, Missouri. Attended Meteoritical Society Meeting, presented one talk, co-authored five talks, and chaired session. September 12-16, 1982.

4. Washington, D.C. Attended meeting of the NSF-NASA Antarctic Meteorite Working Group. October 7-10, 1982.

5. Taos, New Mexico. Led field trip to Harding Pegmatite for Mineralogy I students. November 6, 1982.

6. Houston, Texas. Attended workshop on the origin of chondrules, Lunar and Planetary Institute, presented one paper and co-authored one paper. November 14-17, 1982.

7. Houston, Texas. Chaired meeting of the Lunar and Planetary Science Council, Lunar and Planetary Institute. January 8-9, 1983.

8. Houston, Texas. Attended meeting of Program Committee for the Lunar and Planetary Science Conference, Lunar and Planetary Institute. January 26-28, 1983.

9. Houston, Texas. Chaired Lunar and Planetary Science Council Meeting, Lunar and Planetary Institute. March 13, 1983.

10. Houston, Texas. Attended Lunar and Planetary Science Conference, presented one talk, chaired a session, co-authored five talks and coauthored three abstracts. March 14-19, 1983.

11. Santa Fe, N.M. Organized and hosted Antarctic Meteorite Working Group Meeting at Bishop's Lodge. April 15-17, 1983.

12. Mercury, Nevada. Carried out research at the Nevada Test Site. April 19-22, 1983.

13. Houston, Texas. Studied lunar meteorite ALHA81005 at Curatorial Facility, L.B. Johnson Space Center, May 16-18,1983.

14. Fort Worth, Texas. Studied Monnig meteorite collection at Dept. of Geology, Texas Christian University, Fort Worth, Texas, and arranged for joint research and loan of samples. May 18-19, 1983.

15. Taos, New Mexico. Presented talk at German Summer School, Dept. of Modern and Classical Languages, Univ. of New Mexico. June 17-19, 1983.

16. La Jolla, California. Attended meeting of Solar System Exploration Committee, Subcommittee on Manned Exploration, at Univ. of California. June 21-24, 1983.

G.J. Taylor

1. Washington, D.C. Presented invited talk at Annual Meeting of the Microbeam Analysis Society and examined meteorites at U.S. National Museum. August 7-11, 1982.

2. Houston, Texas. Attended meeting of the Lunar and Planetary Sample Team at the Lunar and Planetary Institute. August 26-29, 1982.

3. St. Louis, Mo. Attended Meteoritical Society Meeting and presented two talks. September 11-16, 1982.

4. New Orleans, La. Attended workshop on Pristine Highlands Rocks and the Early History of the Moon. October 14-17, 1982.

5. Houston, Texas. Attended meeting of Lunar and Planetary Sample Team at Lunar and Planetary Institute. November 18-21, 1982.

6. Houston, Texas. Attended meeting of Lunar and Planetary Sample Team at Lunar and Planetary Institute. March 10-13, 1983.

7. Houston, Texas. Attended Lunar and Planetary Science Conference and chaired a session. March 14-18, 1983.

8. Houston, Texas. Studied lunar meteorite ALHA81005 at Curatorial Facility, L.B. Johnson Space Center. May 16-17, 1983

9. Houston, Texas. Attended meeting of Lunar and Planetary Sample Team at Lunar and Planetary Institute. June 8-12, 1983.

E.R.D. Scott

1. St. Louis, Mo. Attended Meteoritical Society Meeting, presented one talk and chaired a session. September 13-16, 1982.

2. Houston, Texas. Attended workshop on The Origin of Chondrules and presented an invited paper. November 15-17, 1982.

3. Houston, Texas. Attended Lunar and Planetary Science Conference, presented one paper, chaired a session, and chaired the Leonard Medal Committee of the Meteoritical Society. March 14-18, 1983.

P.H. Warren

1. St. Louis, Mo. Attended 45th Annual Meeting of the Meteoritical Society and presented 1 talk. Sept. 13-17, 1982.

2. Fayetteville, Arkansas. Visited Departments of Chemistry and Geology, University of Arkansas and presented 1 talk. Sept. 17-20, 1983.

3 New Orleans, La. Attended Workshop on Pristine Lunar Highlands Rocks and the Early History of the Moon, presented one talk. Oct. 15-17, and Geological Society of America Annual Meeting, Oct. 18-19, 1982.

4. Los Angeles, California. Visited Dept. of Chemistry, University of California at Los Angeles, to prepare lunar samples for neutron activation analysis. Dec. 17-22, 1982.

5. Los Angeles, California. Visited Department of Chemistry, University of California at Los Angeles, to prepare lunar samples for neutron activation analysis. Jan. 12-20, 1983.

6. Notre Dame, Indiana. Visited Dept. of Earth Sciences, University of Notre Dame, presented 1 talk. March 7-9, 1983.

7. Houston, Texas. Attended Lunar and Planetary Sample Team meeting at Lunar and Planetary Institute, March 11-13; and Lunar and Planetary Science Conference at L.B. Johnson Space, presented 1 talk, and studied lunar samples at curatorial building. March 14-18, 1983.

8. Baltimore, Maryland. Attended American Geophysical Union Spring Meeting, presented 1 invited talk. May 30-31, 1983.

9. Houston, Texas. Attended Lunar and Planetary Sample Team meeting at Lunar and Planetary Institute. June 10-12, 1983.

Alfred Kracher

1. St. Louis, Mo. Attended meeting of the Meteoritical Society and presented one talk. September 11-16, 1982.

2. Houston, Texas. Attended workshop on Chondrules and their Origins at Lunar and Planetary Institute. November 14-17, 1982.

3. Houston, Texas. Attended Lunar and Planetary Science Conference and presented one talk. March 13-18, 1983.

J.R. Connolly

1. Mercury, Nevada. Carried out research at Nevada Test Site. August 16-18, 1982.

2. Mercury, Nevada. Carried out research at Nevada Test Site. December 8-9, 1982.

3. Mercury, Nevada. Carried out research at Nevada Test Site. April 19-22, 1983.

4. Salt Lake City, Utah. Attended combined Cordilleran and Rocky Mountain Section Meeting of the Geological Society of America and presented one talk. May 2-4, 1983.

Addi Bischoff

1. Marburg, West-Germany. Attended meeting of the German Mineralogical Society and presented one talk. September 5-10, 1982.

2. St. Louis, Mo. Attended Meteoritical Society Meeting and presented one talk. Sept. 11-16, 1982.

3. Houston, Texas. Attended Lunar and Planetary Science Conference and presented one talk. March 13-18, 1983.

4. Chicago, Illinois. Visited Department of Geosciences, Univ. of Chicago, and presented one talk. June 10, 1983.

Tammy L. Dickinson

1. Valles Caldera, New Mexico. Attended workshop on Continental Scientific Drilling Program, Los Alamos National Laboratory. October, 1982.

2. New Orleans, Louisiana. Attended Geological Society of America Meeting. October 31 - Nov. 3, 1982.

3. Salt Lake City, Utah. Attended combined Cordilleran and Rocky Mountain Section Meeting, Geological Society of America. May 2-4, 1983.

M.J. Jercinovic

1. Salt Lake City, Utah. Attended meeting of combined Cordilleran and Rocky Mountain Sections of the Geological Society of America and presented one talk. May 2-7, 1983.

5.3. New Schalastic Honors, Fellowships, etc.

Klaus Keil

1. Listed in Who's Who in Frontier Science and Technology.

2. Recipient of the Regents Meritorious Service Medal, University of New Mexico .

Tammy L. Dickinson

1. Received Albuquerque Gem and Mineral Club Scholarship through the Department of Geology, Univ. of New Mexico. Spring, 1983.

2. Received Geology Research and Scholarship Fund Scholarship, Department of Geology, Univ. of New Mexico. Spring, 1983.

3. Received Mountain Bell Grant for graduate studies. Spring, 1983.

J.P. McKinley

1. Recipient of NORCUS grant to support Ph.D. dissertation work at Rockwell Hanford Operations, Richland, Washington, funded by DOE. Ph.D. program to be carried out at Univ. of New Mexico.

5.4 Publications

Listed are only publications that have appeared in the report period. Not listed are papers that are in press or in preparation. Since most publications of the Institute of Meteoritics are co-authored by several members of the Institute, only one list of publications is given, rather than duplicating listings on an individual-by-individual basis. Note that to draw your attention to the active participation of students in research of the Institute of Meteoritics, names of student authors and speakers have been underlined.

5.4.1. Scientific Articles Published in Major National and International, Reviewed Journals; Scientific Publications of the Institute of Meteoritics; as well as Books.

1. C.C. Allen, M.J. Jercinovic, T. See and K. Keil, Experimental shock lithification of water-bearing rock powders. Geophys. Res. Lett. 9, 1013-1016 (1982).

2. A.E. Rubin, E.R.D. Scott and K. Keil, Microchondrule-bearing clast in the Piancaldoli LL3 meteorite: A new kind of type 3 chondrite and its relevance to the history of chondrules. Geochim. Cosmochim. Acta 46, 1763-1776 (1982).

3. R.V. Fodor, G.R. Bauer and K. Keil, Ultramafic inclusions and megacrysts in olivine nephelinite, Aitutaki Island, Cook Islands. New Zealand J. Geol. Geophys. 25, 67-76 (1982).

4. C.C. Allen, J.L. Gooding and K. Keil, Hydrothermally-altered impact melt rock and breccia: Contributions to the soil of Mars. J. Geophys. Res. 87, No. B12, 10083 - 10101 (1982).

5. S.E. Barker, A.M. Kudo and K. Keil, Mineral chemistry of basalts from holes 483 and 483 B. Init. Rep. Deep Sea Drilling Project, Washington, D.C., LXV, 635-642 (1983).

6. A.M. Kudo, S.E. Barker, K. Keil and M.H. Beeson, Geochemical modelling of basalts from DSDP Leg 65, East Pacific Rise, Gulf of California. Geochim. Cosmochim. Acta 46, 2427-2434 (1982).

7. P.H. Warren, G.J. Taylor, K. Keil, G.W. Kallemeyn, P.S. Rosner and J.T. Wasson, Sixth foray for pristine nonmare rocks and an assessment of the diversity of lunar anorthosites. Proc. 13th Lunar Planet. Sci. Conf., part 2, J. Geophys Res., Suppl., 88, A615-A630 (1983).

8. A.E. Rubin, E.R.D. Scott, G.J. Taylor, K. Keil, J.S.B. Allen, T.K. Mayeda, R.N. Clayton and D.D. Bogard, Nature of the H chondrite parent body regolith: Evidence from the Dimmitt breccia. Proc. 13th Lunar Planet. Sci. Conf., part 2, J. Geophys. Res., Suppl., 88, A741-A754 (1983).

9. K. Keil, Review of "Meteorites: A petrologic-chemical synthesis", by R.T. Dodd, Cambridge Univ. Press, 1981. In Amer. Mineral. 68, 283 (1983).

10. A. Bischoff and K. Keil, Ca-Al-rich chondrules and inclusions in ordinary chondrites: Evidence for a related genesis of ordinary and carbonaceous chondrites. Lunar Planet. Sci. XIV, LPI, Houston, 47-48 (1983).

11. R.B. Greegor, F.W. Lytle, R.C. Ewing and K. Keil, Preliminary investigations of Ti-site geometry in lunar volcanic and impact glasses by X-ray absorption spectroscopy. Lunar Planet Sci. XIV, LPI, Houston, 257-258 (1983).

12. A. Kracher, E.R.D. Scott and K. Keil, Dusty olivines in the Vigarano (CV3) chondrite: Evidence for an ubiquituous reduction process. Lunar Planet Sci. XIV, LPI Houston, 407-408 (1983).

13. J.P. McKinley, G.J. Taylor and K. Keil, White portions of Apollo 16 dimict breccias are polymict. Lunar Planet Sci. XIV, LPI, Houston, 483-484 (1983).

14. S.G. McKinley, E.R.D. Scott and K. Keil, Chondrules in enstatite chondrites-Nature and source of enstatite. Lunar Planet Sci. XIV, LPI, Houston, 485-486 (1983).

15. M.R. Smith, R.A. Schmitt, P.H. Warren, G.J. Taylor and K. Keil, Far-eastern nonmare samples: New data from Luna 20 and 16. Lunar Planet. Sci. XIV, LPI, Houston, 716 (1983).

16. P.H. Warren, G.J. Taylor and K. Keil, Regolith breccia ALHA81005: Evidence of lunar origin, and nature of pristine and nonpristine clasts. Lunar Planet. Sci. XIV, LPI, Houston, 828-829 (1983).

17. P.H. Warren, G.J. Taylor, K. Keil, G.W. Kallemeyn and J.T. Wasson, Seventh foray: Whitlockite-rich lithologies, a diopside-bearing troctolitic anorthosite, ferroan anorthosite, and KREEP. Lunar Planet. Sci. XIV, LPI, Houston, 830-831 (1983).

18. P.H. Warren, G.J. Taylor and K. Keil, ALHA81005: A meteorite from the Moon-but can we rule out Mercury? Lunar Planet. Sci. XIV, Suppl., LPI, Houston, 41-42 (1983).

19. A.E. Rubin and K. Keil, Mineralogy and petrology of the Abee enstatite chondrite breccia and its dark inclusions. Earth Planet. Sci. Lett. 62, 118-131 (1983).

20. C.C. Allen and K. Keil, Composition and origin of the soil of Mars (in German). Die Sterne 58, 326-338 (1982).

21. J.L. Berkley, G.J. Taylor, K. Keil, G.E. Harlow and M. Prinz, The nature and origin of ureilites (reply to a comment by F. Begemann and U. Ott). Geochim. Cosmochim. Acta 47, 979-980 (1983).

22. A. Bischoff and K. Keil, Catalog of Al-rich chondrules, inclusions and fragments in ordinary chondrites. Univ. of New Mexico - Institute of Meteoritics, Spec. Publ. No. 22, 1-33 (1983).

23. K. Keil, Meteorites from Moon, Mars. Geotimes 28, 25-27 (1983).

24. J.R. Connolly, W.L. Mansker, R. Hicks, C.C. Allen, J. Husler, K. Keil and A.R. Lappin, Petrology and geochemistry of the Grouse Canyon Member of the Belted Range Tuff, Rock Mechanics Drift, U12g Tunnel, Nevada Test Site. Sandia Report SAND 81-1970, 1-72 (1983).

25. C.C. Allen, M.J. Jercinovic, T. See, K. Keil, S.W. Kieffer and C.H. Simonds, Experimental shock lithification of water-bearing rock powders. Geophys. Res. Lett. 10, 599 (1983).

26. A. Bischoff and K. Keil, Ca-Al-rich chondrules and inclusions in ordinary chondrites. Nature 303, 588-592 (1983).

27. E.R.D. Scott, G.J. Taylor and P. Maggiore, A new LL3 chondrite, Allan Hills A79003, and observations on matrices in ordinary chondrites. Meteoritics 17, 65-76 (1982).

28. A. Kracher and J.T. Wasson, The role of S in the evolution of the parental cores of the iron meteorites. Geochim. Cosmochim. Acta 46, 2419-2426 (1982).

29. A. Kracher, Formation of IAB and IIICD iron meteorites and the origin of their silicate inclusions. Lunar Planet. Sci. XIV, LPI, Houston, 403-404, (1983).

30. A. Kracher, Notes on the evolution of the IIIAB/pallasite parent body. Lunar Planet. Sci. XIV, LPI, Houston, 405-406 (1983).

31. E.R.D. Scott and G.J. Taylor, Petrologic similarities among chondrules in H, L, LL, CO, CM and E chondrites. Lunar Planet. Sci. XIV, LPI, Houston, 680-681 (1983).

32. U. Aeschlimann, P. Eberhardt, J. Geiss, N. Groegler, D. Jost, M.S. Ma, K. Marti, R.A. Schmitt and G.J. Taylor, Consortium 67915: Ages and composition of troctolitic anorthosite and sodic ferrogabbro clasts. Lunar Planet. Sci. XIV, LPI, Houston, 1-2, (1983).

33. G.J. Taylor, Deciphering the early history of the solar system by microanalysis of meteorites. In Microbeam Analysis 1982 (ed. K.F.J. Heinrich), 427-430 (1982), San Francisco Press, San Francisco, CA.

34. G.J. Taylor, Volcanoes in our Solar System. Dodd, Mead and Comp., New York, 1-95 (1983).

35. G.J. Taylor and A.B. Mosie, Breccia Guidebook No. 6, 67435. L.B. Johnson Space Center, JSC 18743, Curatorial Branch Publ. 64, 1-38 (1982).

36. E.R.D. Scott, Review of "Meteorites: a petrologic - chemical synthesis", by R.T. Dodd, Cambridge Univ. Press, 1981. In Amer. Scientist 70, 314 (1982).

37. A. Kracher and F. Pertlik, Zinkreicher Paratacamit, $Cu_3,Zn(OH)_6Cl_2$, aus der Herminia Mine, Sierra Gorda, Chile. Ann Naturhist. Mus. Wien 85/A, 93-97 (1983).

38. J. Connolly, Structure and metamorphism in the Precambrian Cibola Gneiss and Tijeras Greenstone, Bernalillo County, New Mexico. New Mexico Geol. Soc. Guidebook, 33. Field Conf., Albuquerque Country II, 197-202 (1982).

39. W. J. Cavin, J.R. Connolly, D.L. Edwards, M. Parchman and L.A. Woodward, Precambrian stratigraphy of Manzanita and North Manzano Mountains, N.M. New Mexico Geol. Soc. Guidebook, 33, Field Conf., Albuquerque Country II, 191-196 (1982).

40. M.S. Fulp, W.J. Cavin, J.R. Connolly and L.A. Woodward, Mineralization in Precambrian rocks in the Manzanita-North Manzano Mountains, Central New Mexico. New Mexico Geol. Soc. Guidebook, 33. Field Conf., Albuquerque Country,II, 303-304 (1982).

41. J.R. Connolly, L.A. Woodward and J.W. Hawley, Road log segment I-A: Albuquerque to Tijeras Canyon. New Mexico Geol. Soc. Guidebook, 33. Field Conf., Albuquerque Country II, 2-8 (1982).

42. J.R. Connolly, R.T. Hicks, K.M. Emanuel, J.P. Cappon and S. Sinnock, Bibliography with abstracts of geological literature pertaining to Southern Nevada with particular reference to the Nevada Test Site. Sandia National Laboratories SAND 82-2212, 1-168 (1983).

43. C.C. Allen, M.J. Jercinovic and J.S.B. Allen, Subglacial volcanism in north-central British Columbia and Iceland. J. Geol. 90, 699-715 (1982).

44. E.R.D. Scott, Iron meteorites and the nature of asteroidal cores. Nature 304, 216-217 (1983).

45. C.C. Allen, Stability and alteration of naturally-occurring low-silica glasses: Implications for the long-term stability of waste form glasses.

In Scientif. Basis for Radiactive Waste Management-V (ed. W. Lutze), Elsevier Publ. Comp., 37-44 (1982).

5.4.2. Abstracts Published in Proceedings of Meetings and in Journals.

46. K. Keil, Mineralogy and petrology of unique and rare meteorites recovered in Antarctica. In "Workshop on Antarctic Glaciology and Meteorites", LPI Tech. Rep. 82-03, 43-44 (1982).

47. A. Bischoff, D. Stoffler and K. Keil, Consolidation of chondrite regolith breccias by grain boundary and localized shock melting. Meteoritics 17, 183-184 (1982).

48. A. Kracher, K. Keil and E.R.D. Scott, Leoville (CV3) - An "accretionary breccia"? Meteoritics 17, 239 (1982).

49. S.G McKinley, K. Keil and E.R.D Scott, Allan Hills A77156, and EH4 enstatite chondrite: Some evidence against formation from red and blue luminescing planetesimals. Meteoritics 17, 251 (1982).

50. A.E. Rubin, E.R.D. Scott, G.J. Taylor and K. Keil, Silicate matrix material in type 3 ordinary chondrites: Implications for the origin of chondrules. Meteoritics 17, 275-276 (1982).

51. E.R.D. Scott, G.J. Taylor and K. Keil, Brecciated type 3 chondrites and their parent bodies. Meteoritics 17, 278 (1982).

52. G.J. Taylor, The three ages of brecciation. Meteoritics 17, 287-288 (1982).

53. G.J. Taylor, K. Keil and E.R.D. Scott, Chondrules did not form by impact on parent bodies. Meteoritics 17, 288-289 (1982).

54. P.H. Warren and G.J. Taylor, The diversity of igneous rocks on the eucrite parent body, as explored via clasts from Kapoeta. Meteoritics 17, 293-294 (1982).

55. A. Bischoff, D. Stoffler and K. Keil, Consolidation and lithification of gas-rich chondrite regolith breccias by grain boundary and localized shock melting. Fortschr. Mineral. 60 Beiheft 1, 47-48 (1982).

56. P.H. Warren, G.J. Taylor, K. Keil and E.R.D. Scott, Petrology of Allan Hills A81005, and implications of a meteorite from the Moon. EOS 64, 252 (1983).

57. E.R.D. Scott, G.J. Taylor, A.E. Rubin, K. Keil and A. Kracher, Origin of chondrules by preaccretionary melting of silicate matrix material. In "Conf. on Chondrules and their Origins", LPI Contr. 493, 54 (1982).

58. G.J. Taylor, E.R.D. Scott and K. Keil, Cosmic setting for chondrule formation. In "Conf. on Chondrules and Their Origins", LPI Contr. 493, 58 (1982).

59. M.J. Jercinovic, K. Keil, M.R. Smith and R.A. Schmitt, Alteration of basaltic hyaloclastites in north-central British Columbia. Geol. Soc. Amer., Abstr. w. Progr. 15, 415 (1983).

60. J.R. Connolly, Regional thrust decollement and volcanism in the Pancake Range, Nye County, Nevada, and implications for mineralization. Geol. Soc. Amer. Abstr. w. Programs 15, 383-384 (1983).

61. K.J. De Nault, B.R. Freier and T.L. Dickinson, Comparison of fuchsite from Barlow Springs and Clarkson Hill, Wyoming. Iowa Academy of Sciences.

5.4.3. Professional Papers Read (Speaker+)

62. K. Keil+, Volcanism in the Solar System. Meeting of the Albuquerque Astronomers, Albuquerque, N.M. Aug. 6, 1982.

63. G.J. Taylor+, Deciphering the early history of the solar system by microanalysis of meteorites. Ann. Meeting, Microbeam Analysis Soc., Washington, D.C., Aug. 7-11, 1982.

64. A. Bischoff+, D. Stoffler and K. Keil, Consolidation and lithification of gas-rich chondrite regolith breccias by grain boundary and localized shock melting. Ann. Meeting of the German Mineralogical Soc., Marburg, West-Germany, Sept. 5-10, 1982.

65. K. Keil+, Volcanism in the Solar System. Meeting of the Santa Fe Astronomers, Santa Fe, N.M., Sept. 7, 1982.

66. A. Bischoff+, D. Stoffler and K. Keil, Consolidation of chondrite regolith breccias by grain boundary and localized shock melting. Ann. Meeting of the Meteoritical Soc., St. Louis, Missouri, Sept. 12-16, 1982.

67. A. Kracher+, K. Keil and E.R.D. Scott, Leoville (CV3) - An "accretionary breccia"? Ann. Meeting of the Meteoritical Soc., St. Louis, Missouri, Sept. 12-16, 1982.

68. S.G. McKinley, K. Keil+ and E.R.D. Scott, Allan Hills A77156, an EH4 enstatite chondrite: Some evidence against formation from red and blue luminescing planetesimals. Ann. Meeting of the Meteoritical Soc., St. Louis, Missouri, Sept. 12-16, 1982.

69. A.E. Rubin+, E.R.D. Scott, G.J. Taylor and K. Keil, Silicate matrix material in type 3 ordinary chondrites: Implications for the origin of chondrules. Ann. Meeting of the Meteoritical Soc, St. Louis, Missouri, Sept. 12-16, 1982.

70. E.R.D. Scott+, G.J. Taylor and K. Keil, Brecciated type 3 chondrites and their parent bodies. Ann. Meeting of the Meteoritical Soc., St. Louis, Missouri, Sept. 12-16, 1982.

71. G.J. Taylor+, The three ages of brecciation. Ann. Meeting of the Meteoritical Soc., St. Louis, Missouri, Sept. 12-16, 1982.

72. G.J. Taylor[+], K. Keil and E.R.D. Scott, Chondrules did not form by impact on parent bodies. Ann. Meeting of the Meteoritical Soc. St. Louis, Missouri, Sept. 12-16, 1982.

73. P.H. Warren[+] and G.J. Taylor, The diversity of igneous rocks on the eucrite parent body, as explored via clasts from Kapoeta. Ann. Meeting of the Meteoritical Soc., St. Louis, Missouri, Sept. 12-16, 1982.

74. P.H. Warren[+], The bulk composition of the Moon. Department of Chemistry, University of Arkansas, Fayetteville, Arkansas, Sept. 20, 1982.

75. P.H. Warren[+], Models of bulk Moon composition: a review. Workshop on Pristine Lunar Highlands Rocks and the Early History of the Moon, New Orleans, La., Oct. 15, 1982.

76. J.R. Connolly[+], Precambrian structure and metamorphism in the Tijeras Canyon area, Bernalillo County, New Mexico. Dept. of Geology, University of New Mexico, 401 Seminar, Oct., 1982.

77. K. Keil[+], Volcanism in the Solar System. 21 Club, University of New Mexico, Albuquerque, N.M., Oct. 18, 1982.

78. E.R.D. Scott[+], G.J. Taylor, A.E. Rubin, K. Keil and A. Kracher, Origin of chondrules by preaccretionary melting of silicate matrix material. Workshop on Chondrules and their Origins, Houston, Texas, Nov. 15-17, 1982.

79. G.J. Taylor, E.R.D. Scott and K. Keil[+], Cosmic setting for chondrule formation. Workshop on Chondrules and their Origins, Houston, Texas, Nov. 15-17, 1982.

80. E.R.D. Scott[+], Metallurgy of meteorites. Amer. Soc. of Metallurgists, New Mexico Branch, Albuquerque, N.M., March 3, 1983.

81. P.H. Warren[+], Moonrocks, and their implications for the early history of the Earth. Dept. of Earth Sciences, University of Notre Dame, Notre Dame, Indiana. March 8, 1983.

82. A. Bischoff[+] and K. Keil, Ca-Al-rich chondrules and inclusions in ordinary chondrites: Evidence for a related genesis of ordinary and carbonaceous chondrites. Lunar and Planet. Sci. Conf., Houston, Texas, March 14-19, 1983.

83. R.B. Greegor[+], F.W. Lytle, R.C. Ewing and K. Keil, Preliminary investigations of Ti-site geometry in lunar volcanic and impact glasses by X-ray absorption spectroscopy. Lunar and Planet. Sci. Conf., Houston, Texas, March 14-19, 1983.

84. S.G. McKinley, E.R.D. Scott and K. Keil[+], Chondrules in enstatite chondrites - Nature and source of enstatite. Lunar and Planet. Sci. Conf., Houston, Texas, March 14-19, 1983.

85. P.H. Warren+, G.J. Taylor and K. Keil, Regolith breccia ALHA81005: Evidence of lunar origin, and nature of pristine and nonpristine clasts. Lunar and Planet Sci. Conf., Houston, Texas, March 14-19, 1983.

86. P.H. Warren+, G.J. Taylor, K. Keil, G.W. Kallemeyn and J.T. Wasson, Seventh foray: Whitlockite-rich lithologies, a diopside-bearing troctolitic anorthosite, ferroan anorthosites, and KREEP. Lunar and Planet. Sci. Conf., Houston, Texas, March 14-19, 1983.

87. E.R.D. Scott+ and G.J. Taylor, Petrologic similarities among chondrules in H, L, LL, CO, CM and E chondrites. Lunar and Planet Sci. Conf., Houston, Texas, March 14-19, 1983.

88. U. Aeschlimann, P. Eberhardt, J. Geiss, N. Groegler, D. Jost, M.S. Ma, K. Marti+, R.A. Schmitt and G.J. Taylor, Consortium 67915: Ages and composition of troctolitic anorthosites and sodic ferrogabbro clasts. Lunar and Planet. Sci. Conf., Houston, Texas, March 14-19, 1983.

89. A. Kracher+, E.R.D. Scott and K. Keil, Dusty olivines in the Vigarano (CV3) chondrite: Evidence for an ubiquituous reduction process. Lunar and Planet. Sci. Conf., Houston, Texas, March 14-19, 1983.

90. M.J. Jercinovic+, K. Keil, M.R. Smith and R.A. Schmitt, Alteration of basaltic hyaloclastites in north-central British Columbia. Cordilleran and Rocky Mountain Sect. Meet., Salt Lake City, Utah, May 2-4, 1983.

91. J.R. Connolly+, Regional thrust decollement and volcanism in the Pancake Range, Nye County, Nevada and implications for mineralization. Cordilleran and Rocky Mountain Sectional Meeting, Geol. Soc. Amer., Salt Lake City, Utah, May 2-4,1983.

92. P.H. Warren+, G.J. Taylor, K. Keil and E.R.D. Scott, Petrology of Allan Hills A81005, and implications of a meteorite from the Moon. Ann. Meeting of the Amer. Geophys. Union, Baltimore, Maryland, May 30-31, 1983.

93. A. Bischoff+, Al-rich chondrules, inclusions and fragments in ordinary chondrites. Dept. of Geosciences, Univ. of Chicago, Chicago, Illinois, June 10, 1983.

94. K. Keil+, Origin of meteorites from asteroids, comets, Moon and Mars (in German). German Summer School, Dept. of Modern and Classical Languages, Univ. of New Mexico, Taos, N.M., June 17-19, 1983.

5.5 Other Research Projects or Creative Work in Progress or Completed During Period (Research Grants and Contracts).

The following research grants and contracts were in effect during the report period:

1. Research grant from NASA Headquarters, Washington, D.C., entitled "Origin of clay-bearing soil on planetary surfaces: Hydrothermal alteration of impact melt rocks and breccias."

Oct. 1, 1981 - July 31, 1983 .....$ 56,782.00

2. Research contract with Sandia National Laboratories, Albuquerque, N.M., entitled "Literature search, Nevada Test Site"
Jan. 15, 1981 - Sept. 30, 1982.....$ 7,119.00

3. Research contract with Sandia National Laboratories, Albuquerque, N.M. entitled "Silicic volcanic tuff at Nevada Test Site: Geologic support of physical properties measurements."
Oct. 1, 1981 - Sept. 30, 1982 .....$ 30,139.00

4. Research grant from NASA L.B. Johnson Space Center, Houston Texas, entitled "Origin and evolution of the lunar crust."
Feb. 1, 1982 - Jan. 31, 1983 .....$ 97,995.00

5. Research grant from NASA Headquarters, Washington, D.C. entitled "The formation and evolution of stony meteorites."
March 1, 1982 - Feb. 28, 1983 .....$ 107,988.00

6. Research equipment grant from the National Science Foundation entitled "Partial funding of electron microprobe X-ray analyzer".
July 1, 1982 - June 31, 1984 .....$ 180,000.00

7. Research contract with Sandia National Laboratories, Albuquerque, N.M. entitled "Geological support work of Nevada Nuclear Waste Storage Investigations."
Oct. 1, 1982 - Sept. 30, 1983 .....$ 40,944.00

8. Research grant with NASA L.B. Johnson Space Center, entitled "Origin of stone meteorites and the Moon."
Feb. 1, 1983 - Feb. 15, 1984 .....$ 223,850.00

Total grants and contracts in effect during period $744,817.00

Grant applications written during period and support pending:

9. Research grant with NASA L.B. Johnson Space Center, Houston, Texas, entitled "Origin and evolution of stony meteorites and the Moon".
Feb. 1, 1984 - Jan. 31, 1985 ..... $257,276.00

10. Research Contract with Sandia National Laboratories, Albuquerque, N.M., entitled "Halite mineralogy of Solado Formation".
July 29, 1983 - Sept. 30, 1984 ..... $ 25,134.00

11. Research contract with Sandia

National Laboratories, Albuquerque N.M., entitled "Geological support work of Nevada Nuclear Waste Storage Investigation". Oct. 1, 1983 - Sept. 30, 1984 ..... $ 50,000.00

Total grants and contracts in effect and pending. $1,077,227.00

5.6. Activities in Learned and Professional Societies.

5.6.1. Offices Held

Klaus Keil

1. Member, Advisory Committee on Comparative Planetology, International Union of Geological Sciences.

2. Associate Editor, Journal of Geophysical Research, Amer. Geophysical Union.

E.R.D. Scott

1. Chairman, Leonard Medal Committee, Meteoritical Society.

J.P. McKinley

1. President, Beta Mu Chapter of Sigma Gamma Epsilon.

5.6.2. Meetings Attended

Klaus Keil

1. Meteoritical Society Meeting, St. Louis, Missouri. Presented one talk, coauthored five talks, and chaired session. Sept 12-16, 1982.

2. Workshop on the origin of chondrules, Houston, Texas. Presented one talk and coauthored another. Nov. 14-17, 1982.

3. Lunar and Planetary Science Conference, Houston, Texas. Presented one talk, chaired a session, coauthored five talks and coauthored three abstracts. March 14-19, 1983.

G.J. Taylor

1. Ann. Meeting of the Microbeam Analysis Society, Washington, D.C. Presented invited talk. Aug. 7-11, 1982.

2. Meteoritical Society Meeting, St. Louis, Missouri. Presented one invited and one contributed talk. Sept. 11-16, 1982.

3. Workshop on pristine highlands rocks and the early history of the Moon. Oct. 14-17, 1982.

4. Lunar and Planetary Science Conference, Houston, Texas. Chaired session and coauthored several talks. March 14-18, 1983.

E.R.D. Scott

1. Meteoritical Society Meeting, St. Louis, Missouri. Presented one talk and chaired session. Sept. 13-16, 1982.

2. Workshop on the origin of chondrules, Houston, Texas. Presented one invited paper and coauthored another. Nov. 15-17, 1982.

3. Lunar and Planetary Science Conference, Houston, Texas. Presented one paper and chaired a session. March 14-18, 1983.

P.H. Warren

1. Meteoritical Society Meeting, St. Louis, Missouri. Presented one talk. Sept. 13-17, 1982.

2. Workshop on pristine lunar highlands rocks and the early history of the Moon, New Orleans, Louisiana. Presented one invited talk. Oct. 15-17, 1982.

3. Geological Society of America Meeting, New Orleans, Louisiana. Oct. 18-19, 1982.

4. Lunar and Planetary Science Conference, Houston, Texas. Presented one talk. March 14-18, 1983.

5. American Geophysical Union Meeting, Baltimore, Maryland. Presented one invited talk. May 30-31, 1983.

Alfred Kracher

1. Meteoritical Society Meeting, St. Louis, Missouri. Presented one talk. Sept. 11-16, 1982.

2. Workshop on chondrules and their origins, Houston, Texas. Nov. 14-17, 1982.

3. Lunar and Planetary Science Conference, Houston, Texas. Presented one talk. March 13-18, 1983.

J.R. Connolly

1. Cordilleran and Rocky Mountain Section Meeting, Geological Society of America, Salt Lake City, Utah. Presented one talk. May 2-4, 1983.

Addi Bischoff

1. German Mineralogical Society Meeting, Marburg, West-Germany. Presented one talk. Sept. 5-10, 1982.

2. Meteoritical Society Meeting, St. Louis, Missouri. Presented one talk. Sept. 11-16, 1982.

3. Lunar and Planetary Science Conference, Houston, Texas. Presented one talk. March 13-18, 1983.

Tammy L. Dickinson

1. Geological Society of America Meeting, New Orleans, Louisiana. Oct. 31-Nov. 3, 1982.

2. Cordilleran Meeting, Geological Society, Salt Lake City, Utah. May 2-4, 1983.

M.J. Jercinovic

1. Cordilleran and Rocky Mountain Sectional Meeting, Geological Society of America, Salt Lake City, Utah. Presented one talk. May 2-4, 1983.

5.6.3. Presentations and Professional Society Meetings

Klaus Keil

1. Allan Hills A77156, an EH4 enstatite chondrite: Some evidence against formation from red and blue luminescing planetesimals. Meteoritical Soc. Meet., St. Louis, Missouri, Sept. 12-16, 1982.

2. Cosmic setting for chondrule formation. Workshop on "Chondrules and their origins, Houston, Texas, Nov. 15-17, 1982.

3. Chondrules in enstatite chondrites: Nature and source of enstatite. Lunar and Planet. Sci. Conf., Houston, Texas, March 14-19, 1983.

G.J. Taylor

1. Deciphering the early history of the solar system by microanalysis of meteorites. Microbeam Analysis Soc. Meet., Washington, D.C., Aug. 7-11, 1982.

2. The three ages of brecciation. Meteoritical Soc. Meet., St. Louis, Missouri, Sept. 12-16, 1982.

3. Chondrules did not form by impact on parent bodies. Meteoritical Soc. Meet., St. Louis, Missouri, Sept. 12-16, 1982.

E.R.D. Scott

1. Brecciated type 3 chondrites and their parent bodies. Meteoritical Soc. Meet., St. Louis, Missouri, Sept. 12-16, 1982.

2. Origin of chondrules by preaccretionary melting of silicate matrix material. Workshop on "Chondrules and their Origins", Houston, Texas, Nov. 15-17, 1982.

3. Petrologic similarities among chondrules in H, L, LL, CO, CM and E chondrites. Lunar and Planet. Sci. Conf., Houston, Texas, March 14-19, 1983.

P.H. Warren

1. The diversity of igneous rocks on the eucrite parent body, as explored via clasts from Kapoeta. Meteoritical Soc. Meet., St. Louis, Missouri, Sept. 12-16, 1982.

2. Regolith breccia ALHA81005: Evidence of lunar origin, and nature of pristine and nonpristine clasts. Lunar and Planet. Sci. Conf., Houston, Texas, March 14-19, 1983.

3. Seventh foray: Whitlockite-rich lithologies, a diopside-bearing troctolitic anorthosite, ferroan anorthosites, and KREEP. Lunar and Planet. Sci. Conf., Houston, Texas, March 14-19, 1983.

4. Petrology of Allan Hills A81005, and implications of a meteorite from the Moon. Amer. Geophys. Union Meet., Baltimore, Maryland, May 30-31, 1983.

Alfred Kracher

1. Leoville (CV3) - An "accretionary breccia"? Meteoritical Soc. Meet., St. Louis, Missouri, Sept. 12-16, 1982.

2. Dusty olivines in the Vigarano (CV3) chondrite: Evidence for an ubiquitous reduction process. Lunar and Planet. Sci. Conf., Houston, Texas, March 14-19, 1983.

J.R. Connolly

1. Regional thrust decollement and volcanism in the Pancake Range, Nye County, Nevada, and implications for mineralization. Cordilleran and Rocky Mountain Sect. Meet., Geol. Soc. Amer., Salt Lake City, Utah, May 2-4, 1983.

Addi Bischoff

1. Consolidation and lithification of gas-rich chondrite regolith breccias by grain boundary and localized shock melting. German Mineralogical Soc. Meeting, Marburg, West-Germany, Sept. 5-10, 1982.

2. Consolidation of chondrite regolith breccias by grain boundary and localized shock melting. Meteoritical Soc. Meet., St. Louis, Missouri, Sept. 12-16, 1982.

3. Ca-Al-rich chondrules and inclusions in ordinary chondrites: Evidence for a related genesis of ordinary and carbonaceous chondrites. Lunar and Planet. Sci. Conf., Houston, Texas, March 14-19, 1983.

M.J. Jercinovic

1. Alteration of basaltic hyaloclastites in north-central British Columbia. Cordilleran and Rocky Mountain Sect. Meet., Geol. Soc. Amer., Salt Lake City, Utah, May 2-4, 1983.

A.E. Rubin

1. Silicate matrix material in type 3 ordinary chondrites: Implications for the origin of chondrules. Meteoritical Soc. Meet., St. Louis, Missouri, Sept. 12-16, 1982.

5.7 Other Professional Activities

Klaus Keil

1. Consultant, Sandia National Laboratories, Albuquerque, N.M.

2. Reviewed three proposals submitted to NASA for funding.

3. Reviewed eleven scientific papers submitted for publication in Geochimica et Cosmochimica Acta, Meteoritics, Science, Nature, and Chemical Geology.

4. Several interviews with Lobo, Albuquerque Tribune and Journal.

5. Served on Program Committee for 14th Lunar and Planetary Science Conference, held in Houston, Texas.

6. Member, Editorial Board, Journal "Chemical Geology."

7. Member, Editorial Board, Colorado School of Mines Quaterly, Golden, Col.

8. Chairman, Lunar and Planetary Science Council, Universities Space Research Association, Houston, Texas.

9. Member, Antarctic Meteorite Working Group, National Science Foundation - National Aeronautics and Space Administration.

10. Member, Editorial Board, Tschermak's Mineralogisch-Petrographische Mitteilungen, Vienna, Austria.

11. Lead field trip to Harding pegmatite, New Mexico.

12. Associate Editor, Journal of Geophysical Research.

13. Organized and executed through President Perovich's office an agreement for scientific collaboration in meteorite research on Spanish meteorites between the Institute of Meteoritics, UNM, and the National Museum of

Natural Sciences, Madrid, Spain, the Geological Institute of the Superior Council of Scientific Investigations, Madrid Spain, the Geological Museum of Barcalona, Spain, and the Department of Geosciences, University of Houston, Texas.

14. Hosted New Mexicans for Space Exploration, by sponsoring an evening to honor "Space Week" in the Department of Geology and Institute of Meteoritics. This included a talk by Dr. P.W. Keaton of Los Alamos National Laboratory regarding a research station on the Moon, and a brief review of the activities in the Institute of Meteoritics, including a tour of facilities and the Museum. July 20, 1982.

15. Organized and led tour of Institute of Meteoritics and arranged for use of electron microbeam facilities by attendees of the International Science and Engineering Fair, Albuquerque, N.M., May 10 and May 12, 1983.

16. Judge for NASA at International Science and Engineering Fair, Albuquerque, N.M., May 11, 1983.

17. Hosted, together with Dr. R.C. Ewing, a tour of the Department of Geology and Institute of Meteoritics for participants of the International Conference on Radiation Damage, Albuquerque, N.M., May 30, 1983.

18. Member, NASA Solar System Exploration Committee, Subcommittee on Manned Space Exploration.

G.J. Taylor

1. Chairman, Lunar and Planetary review panel (NASA).

2. Member, Lunar and Planetary Sample Team (NASA).

3. Reviewed papers submitted for publication to Geochimica et Cosmochimica Acta (4), Earth and Planetary Science Letters (1), Meteoritics (2) and Nature (1).

4. Reviewed grant proposals to NASA (7) and NSF (1).

5. Served as judge at the International Science and Engineering Fair, Albuquerque, N.M.

6. Substituted for Prof. Wolf Elston in Planetary Science Class, UNM, Jan. 17, 19, 21, 31 and May 4, 1983.

E.R.D. Scott

1. Reviewed articles submitted for publication to Meteoritics (1), Geochimica et Cosmochimica Acta (2), Icarus (1), Proc. of the 14th Lunar and Planetary Science Conference (2) and Nature (1).

2. Reviewed one grant proposal for the National Science Foundation.

3. Served as reporter for Smithsonian Institution Alert Network.

4. Served as judge at the International Science and Engineering Fair, Albuquerque, N.M.

P.H. Warren

1. Member, NASA Lunar and Planetary Sample Team, Lunar and Planetary Institute, Houston, Texas.

2. Reviewed papers submitted for publication in Proc. of the 14th Lunar and Planetary Science Conference (1) and Journal of Geophysical Research (1).

Alfred Kracher

1. Reviewed papers submitted for publication in Geochimica et Cosmochimica Acta (1) and Proc. of the 14th Lunar and Planetary Science Conference (1).

2. Served as judge at the International Science and Engineering Fair, Albuquerque, N.M.

J.R. Connolly

1. Part-time consultant, Anaconda Minerals Company, Denver, Colorado.

2. Served as judge at the International Science and Engineering Fair, Albuquerque, N.M.

J.P. McKinley

1. Carried out electron microprobe analyses for Visiting Professor V. Majer, Dept. of Geology, Zagreb University, Zagreb, Yugoslavia.

2 Carried out electron microprobe analyses of zoning in conodonts for Caswell Silver Distinguished Professor, William Holser.

3. Carried out electron microprobe analyses of stainless steel for New Mexico Energy Institute.

4. Instructed Dr. Carol Stein, Sandia National Laboratories, in the use of luminoscope.

5.8 Non-teaching University Services

Klaus Keil

1. Administration of the Institute of Meteoritics and its collections.

2. Chairman and member of several thesis and dissertation committees in the Department of Geology.

3. Served on UNM - University of Sao Paulo, Brazil joint research and exchange program committee.

4. Participated in Parent Day, UNM.

5. Served as Director of the Caswell Silver Foundation, Department of Geology, UNM.

6. Chaired search committee for Caswell Silver Distinguished Professor, Department of Geology, UNM.

7. Served on several M.S. and Ph.D. comprehensive examinations committees.

8. Assisted in design and supervision of renovation of basement into laboratories, Dept. of Geology Building.

9. Served on Department of Geology Committee to revise requirements for geology Ph.D. program at UNM.

10. Served on UNM Honorary Degree Committee.

G.J. Taylor

1. Assisted in design of laboratory excercises for course on Meteoritics and Cosmochemistry

2. Served as a reader on A. Rubin's thesis committee

3. Gave 401 seminar talk, Nov. 4, 1982.

E.R.D. Scott

1. Curator, Meteorite Collection, Institute of Meteoritics, University of New Mexico.

P.H. Warren

1. Advised Department of Geology and Institute of Meteoritics faculty and students on word processors, micro-computers, and computer interfacing.

2. Advised Department of Geology and Institute of Meteoritics on purchase and installation of facilities (gamma-ray counting equipment and a powerful yet inexpensive computer) for neutron activation analysis.

J.P. McKinley

1. Demonstrated electron microprobe to participants in 1983 International Science and Engineering Fair, Albuquerque, N.M.

5.9. Public Service

Klaus Keil

1. Many private showings of moon rocks to interested citizens, school classes, civic groups, etc., many of which were after working hours and on weekends.

2. Many private showings of the meteorite museum to interested citizens, school classes, civic groups, etc., many of which were after working hours and on weekends.

3. Investigated without charge many rocks suspected to be meteorites and brought to the Institute by citizens.

4. Assisted Laura Trauth, a local high school student, in the study of "The chemical and physical properties of rings in prehistoric alligatorian and crocodillion fossil teeth," for which she won the highest award at the International Science and Engineering Fair.

5. Presented talk on meteorites to children at Foothill Child Development Center. Oct. 6, 1982.

6. Hosted the visit to UNM of a local high school student through teacher B. Trujillo. Nov. 1, 1982.

7. Presented talk to Breakfast Club, Four Seasons, Albuquerque, on "Volcanism in the Solar System". Nov. 12, 1982.

8. Presented talk to New Mexicans for Space Exploration, Albuquerque, N.M., on "Volcanism in the Solar System." Dec. 14, 1982.

9. Presented talk to Albuquerque Gem and Mineral Club on "Meteorites from asteroids, comets, the Moon and Mars", Albuquerque, N.M., May 23, 1983.

10. Hosted a local highschool student Richard Turietta, in the Institute, for the purpose of doing research on the scanning electron microscope for a science fair project entitled "An evaluation of particulate air pollution in Albuquerque." (Throughout 1983).

G.J. Taylor

1. Gave talk to first and second grades at Zia Elementary School, March 7, 1983.

2. Led group of International Science and Engineering Fair participants on tour of Institute of Meteoritics. May 10 and 12, 1983.

E.R.D. Scott

1. Led tour of Meteorite Museum for Space Week visitors. July 20, 1982.

2. Led tour of Meteorite Museum for participants of International Science and Engineering Fair. May 10 and 12, 1983.

3. Led 6 tours through Meteorite Museum and gave talks on meteorites, for school classes from New Mexico

4. Investigated many suspected meteorites submitted by the public.

P.H. Warren

1. Many private showings of Moon rocks to individual citizens and groups and school classes, including New Mexicans for Space Exploration.

J.R. Connolly

1. Tour of geology and meteorite museums for kindergarden class of La Puerta de los Ninos school. March 23, 1983.

THE REPORT OF THE DEPARTMENT OF HISTORY

July 1, 1982 - June 30, 1983

Janet Roebuck, Chair

I. GENERAL DEPARTMENTAL INFORMATION

A. Significant Achievements:

1. The following courses were added to the History curriculum:

   171. History of U.S. to 1877/Discussion (1) (a one-hour discussion section for students in 161-01 to be led by a Teaching Assistant.)

   172. History of U.S. to the Present/Discussion (1) (a one-hour discussion section for students in 162-01 to be led by a Teaching Assistant.)

2. The following courses were offered under 220/320 "Studies in History"

   220. Society and Culture in the Southwest
   American & Canadian Indian Policy

   320. Life and Times of Alexander the Great
   The Stalin Era
   Comparative Slavery
   History of Law
   Introduction to Applied and Public History

3. Professors Kern, Bakewell, Porter, and Kramer conducted courses in the spring on the rise and decline of colonialism in the world. This project was sponsored through the Department of Education

through a Latin American Institute grant.

320. Modern Colonialism

Overseas Empire: Colonialism in the Making of the Modern World

4. Activities Beyond the Formal Curriculum:

a. Three History journals, The Historian, Editor, Gerald D. Nash; The New Mexico Historical Review, Editor, Richard Etulain; and the Hispanic American Historical Review, Editor, John Johnson, Assoc. Editor, Peter Bakewell, Book Review Editor, Edwin Lieuwen, continue as part of the Department.

b. Professor Steven Kramer was co-director of the French Summer School in Taos in the summers of 1982 and 1983.

c. The departmental Newsletter was edited by Professor Richard Etulain and distributed to 400 universities and History Ph.D. alumni.

d. Professor F. Roy Willis, University of California, Davis gave several public lectures on "European Studies"

e. Professor Susan Ramirez, University of De Paul, Chicago gave a lecture on "Land Tenure and Economic Power in Colonial Peru".

f. The Department instituted a series of symposia attended by faculty and graduate students which

met 3-4 times a semester, in which various faculty members reported on their research activities. A discussion followed.

g. The Department participated in Parents' Day in October. Faculty and paretns met informally to listen to a lecture by Professor Charlie Steen on the "Architecture of the Palace of Versailles".

5. Honors:

a. The Dorothy Woodward Memorial Fellowship for graduate students completing dissertations in the area of southwest history was given to Cheryl Foote and Arthur Gomez.

b. The Charles Florus Coan Award for the graduating senior with the highest GPA was awarded to Rose Marie Finley.

c. Sandra Blankenburg, Alice Moore, and Barton H. Barbour were recipients of the Grunsfeld Award.

d. A Graduate Tuition Award was given to Lincoln Draper.

e. The Harry Vanderpool Memorial Award was given to Beth A. Kaimowitz.

f. Phi Alpha Theta gave the William Dabney Award to Cheryl Foote.

B. Significant Plans and Recommendations for the Near Future:

1. The History Graduate Advisory Committee proposed extensive changes in the graduate program in areas such a Committee of Studies, Foreign Language requirements and comprehensive examinations. These proposals were discussed and passed at faculty meetings held April 15 and May 6.

2. The Department passed a proposal of the History Undergraduate Review Committee to change the degree requirements for a History major to allow for areas of concentration that are not confined to national or area studies, i.e. careers in law, management, government service, theology, editing, writing and museum work. The number of courses required would not be changed, but topical studies would be added to area of concentration. Students would be encouraged to become involved in individual study and to take a senior seminar.

C. Appointment to Staff:

1. Visiting or Part-Time appointments

a. Anne Boylan, Visiting Assistant Professor, U.S. survey and family history, academic year (3/4 time), 1982-83.

b. John Johnson, Professor (part-time 1 course); Editor, Hispanic American Historical Review, academic year, 1982-83.

c. Carl Hanson, Visiting Assistant Professor, Western Civilization, (part-time, fall-spring) 1982-83.

d. Stanley Hordes, Visiting Assistant Professor, History of New Mexico, Applied and Public History, (part-time, fall-spring) 1982-83.

e. Barron Oder, Teaching Associate, U.S. survey, (part-time, fall) 1982.

f. Marc Simmons, Visiting Associate Professor, The History of New Mexico, (part-time) Spring 1983.

g. Michael Welsh, Teaching Associate, U.S. survey and Society and Culture in the Southwest, (part-time, fall-spring) 1982-83.

h. Professor William Dabney taught part-time, Fall 1982, at the UNM Law School.

2. Office Staff:

a. Mariana Ibanez, August 1, 1982

3. Promotions:

a. Professor Ferenc Szasz, to Full Professor.

4. Assistant Chairman, 1982-83:

Professor Donald Sullivan

D. Separation from Staff:

1. Professor William Roberts, resigned for position at Annapolis.

E. Sponsored Research:

1. Four professors submitted 10 proposals, (15% of current faculty).

2. Of these four submitting proposals, three obtained awards. (10%).

II. Composite of information requested on individual biographical supplements: (period January 1, 1982 to December 31, 1982.)

2. Sabbaticals, summer teaching, travel, etc.

Conniff, Michael L.	Sabbatical for one year, 1982-1983. Research travel to London and Washington, D.C., Sept.-Oct. 1982.
Dabney, William M.	Visiting faculty, University of New Mexico School of Law, fall semester, 1982
Etulain, Richard W.	Summer course of lectures, Sheldon Jackson College (Sitka, Alaska) June, 1982.
Iklé, Frank W.	Travel: Hong Kong, People's Republic of China, Australia, New Zealand, Tahiti. History Lecturer, "Kunlun", Lindblad Yangtze River Cruises, April, 1982.
Kern, Robert	Travel and research in Portugal and England during the summer.
Kramer, Steven P.	Directed French Summer School, Taos, 12 June-15 July. Spent several weeks in late July-early August in France doing interviews of old French socialists.
Lieuwen, Edwin	Travel in Italy, June-July, 1982. Research--Archivo General de la Nacion, Mexico DF, August 1982.
McClelland, Charles	Leave of absence without pay, calendar year 1982. Spent year principally in Munich, Germany doing historical research for a new book on the rise of modern learned professions in Germany. Travel to Great Britain, Austria, and Hungary.
Porter, Jonathan	Travel to the People's Republic of China, June, 1982.
Robbins, Richard	Travel for research purposes to U. of Illinois and to Columbia University in New York.

Roberts, William R.	Leave of absence, fall semester 1982.
Steen, Charlie R.	Sabbatical leave, Spring 1982.
Szasz, Ferenc M.	Taught a mini-course for the Honors Department on "History and Mystery." Spring, 1982.

3. New scholastic honors, fellowships, etc.

Etulain, Richard W.	RAC grant UNM: Western American Literature.
Ikle, Frank W.	Visiting honorary professor, University of Hong Kong.
Lieuwen, Edwin	25 year service award--UNM, November, 1982.
McClelland, Charles	Alexander von Humboldt Fellow, calendar 1982.
Nash, Gerald D.	Project '87 Research Fellowship for 1982-83, for preparation of a book on American bureaucracy; major NEH Planning Grant for Public Program, "The Constitution in a Tri-Cultural Society, New Mexico," 1982-83; Visiting Distinguished Scholar, Southeast Missouri State University, April 14-16, 1982.
Porter, Jonathan	Weatherhead Foundation Scholar, China Traveling Seminar.
Rabinowitz, Howard	Listed in Contemporary Authors (Detroit: Gale Research Co., 1982), Vol. 105, 392-93.

4. Publications

Books

Conniff, Michael L.	Editor and contributor, Latin American Populism in Comparative Perspective (Albuquerque: University of New Mexico Press, 1982).
Etulain, Richard W.	Fifty Western Writers (Greenwood, 1982, pp. 562)--coeditor. A Bibliographical Guide to the Study of Western American Literature (U. of Nebraska Press, 1982, pp. 317).

Rabinowitz, Howard N. — Editor, Southern Black Leaders of the Reconstruction Era (Urbana: University of Illinois Press, 1982), xxiv + 422 pp.

Roebuck, Janet — The Making of Modern English Society from 1850, Rutledge & Kegan Paul, London (2nd ed.).

Szasz, Ferenc M. — The Divided Mind of Protestant America, 1880-1930 (University, Ala.: The University of Alabama Press, 1982).

Articles

Boylan, Anne M. — "Growing Up Female, 1800-1860," in N. Ray Hiner and Joseph Hawes, eds., The History of Childhood in America (Greenwood Press, forthcoming).

Bakewell, Peter — "An Interview with Silvio Zavala," Hispanic American Historical Review, 62:4 (November 1982), pp. 553-68.

Conniff, Michael L. — "The Health Professions in Brazil," (Albq., Professional Seminar Consultants, 1982). "The Falklands: Dilemma for U.S. Policy," New Mexico Independent, June 1982.

Etulain, Richard W. — "Luke Short." Fifty Western Writers (Greenwood Press, 1982), pp. 434-43. "Farmers in Southwestern Fiction." Southwestern Agriculture (Texas A&M, 1982), pp. 28-46.

Ikle, Frank W. — "The Role of Women in Japanese History," Third International Symposium on Asian Studies, 1981, 367-373. Abstractor for Monumenta Nipponica and Japan Quarterly for CLIO.

Kern, Robert — "Right to Work Again," Century Magazine, Jan. 23, 1982.
"In Their Inverbrate Way," Century Magazine, April 4, 1982.
In James Cortada, Historical Dictionary of the Spanish Civil War (Westport, Ct.: Greenwood Press, 1982): "Anarchists," "Army of Aragon," "Ascaso, Francisco," (cont'd.)

	"Asua, Luis Jimenez de," "Catalona Anti-Fascist Militia Committee," "Confederación Nacional de Trabajo," "Day, Hem," "Durruti, Buenaventura," "Faure, Sebastian," "Federación Anarquista Iberica," "Makhno, Nestor," "Nelken y Mausberger, Margarita," "Santillán. Diego Abad de," "Union General de Trabajando."
Kolchin, Peter	"The Slaving Business," Reviews in American History, X (June, 1982), 173-176. "Comparing American History," Reviews in American History. X (December, 1982).
Kramer, Steven	"Les Etats-Unis sont en declin," La Quinzaine Litteraire, Sept. 1, 1982 (377) pp. 14-15. "A Look at the Record," Commonweal, Sept. 10, 1982 pp. 454-5. "Thunder along the Rio Hondo," several newspapers in N.M. "Nous n' vons pas su ecouter Jaures," Le Monde, 7 August 1982 p. 2. "New Policies Needed to Correct U.S. Economy," Albuquerque Tribune, December 21, p. A 5.
Lieuwen, Edwin	"The Problem of Military Government," in New Military Politics in Latin America, Robert Wesson, ed., Praeger, New York, 1982, pp. 1-16.
McClelland, Charles	"The Wise Man's Burden: The Role of Academicians in Imperial German Culture" (chapter), in G.D. Stark & B.K. Lackner (eds.), Essays on Culture and Society in Modern Germany (College Station: Texas A&M, 1982), 45-69. "Professionalization and Higher Education in Germany," (chapter), in K.H. Jarausch (ed.), The Transformation of Higher Learning in Germany 1860-1930 (Stuttgart and Chicago. Klett-Cotta and University of Chicago Press, 1982), ca. 30 pp.
Nash, Gerald D.	"The Managerial State: Government and Business since 1940," in Robert Weible (ed.), Essays from the Lowell Conference (Boston, 1982), pp. 158-171; "The Twentieth Century West," Western Historical Quarterly, vol. 12 (April 1982), pp. 121-125;

	"Department of Commerce," Encyclopedia Americana (1982), vol. 5, pp. 121-124.
Porter, Jonathan	"The Scientific Community in Early Modern China," Isis, 73, 269 (December 1982), 529-544. "Letter from Xinjiang: The New Frontier," Century, II, 7 (1/6/82). "Letter from Shandong," Century, II, 14, (4/21/82).
Pugach, Noel H.	"Keeping an Idea Alive: The Establishment of a Sino-American Bank, 1910-1920," Business History Review (Summer 1982), 265-293.
Rabinowitz, Howard	"Introduction: The Changing Image of Black Reconstructionists," in Southern Black Leaders of the Reconstruction Era ed. Howard N. Rabinowitz (University of Illinois Press), pp. xi-xxiv; "Holland Thompson and Black Political Participation in Montgomery, Alabama," ibid. pp. 249-80; "North Carolina's 'Forgotten Alternative,'" Reviews in American History, X (June 1982), 194-200.
Slaughter, M. Jane	Contributions to J.W. Cortada (eds.) Historical Dictionary of the Spanish Civil War (Greenwood Press, Dec. 1982), various pps.
Spidle, Jake W.	"A Nation of Sots," Century: A Southwest Journal of Observation and Opinion, April 7, 1982, 22-25. "The Legacy of Bolt Ruler," The New Mexico Horse Breeders' Magazine 3 (1982, #4): 46-49.
Szasz, Ferenc M.	"Pre-Historic Contact in the Southwest: The Theories and the Evidence," New Mexico Humanities Review 5 (Spring, 1982), 43-58. "American Populism in Michael L. Conniff, ed., Latin American Populism in Comparative Perspective (Albq.: UNM Press, 1982), 191-215. "Knowledge vs. Wisdom: The Perennial Paradox," The UCM Prophet 2 (March-April-May, 1982), 5. "Halloween--America's Newest Religious Holiday," The Unitarian-Universalist World 13 (October 15, 1982), 3.

"The American Quest for Religious Certainty, 1880-1915," in Sam B. Girgus, ed., The American Self: Myth, Ideology and Popular Culture (Albq. UNM, 1981, paperback edition, 1982), 88-104.

Reviews

Boylan, Anne M. — Review of Margorie Barnhard, Prisoners of Hope in Pennsylvania History 49 (January 1982), 74-75.

Berthold, Richard — Review in American Historical Review 87 (1982) pp. 754-55.

Kolchin, Peter — Otto H. Olsen, ed., Reconstruction and Redemption in the South (Louisiana State University Press, 1980), in Civil War History, March 1982, 79-80.
Eric Foner, Politics and Ideology in the Age of the Civil War (Oxford University Press, 1980), in Journal of Interdisciplinary History, spring 1982, 736-738.
George M. Fredrickson, White Supremacy: A Comparative Study in American and South African History (Oxford University Press, 1981), in Journal of Social History, 1982, 556-558.
Drew Gilpin Faust, ed., The Ideology of Slavery: Proslavery Thought in the Antebellum South, 1830-1860 (Louisiana State University Press, 1981), in Florida Historical Quarterly, Oct. 1982, 198-199.

Lieuwen, Edwin — "The CIA in Guatemala" and "Bitter Fruit," in Hispanic American Historical Review, Nov. 1982, pp. 706-709.
"Beyond Empire and Revolution," in Hispanic American Historical Review, Nov. 1982, pp. 716-718.

McClelland, Charles — Review of W. Ritzel, Philosophie und Paedagogik Im 20. Jahrhundert (German Studies Review, 5, pp. 418-419) and D. Fallon, The German University: A Heroic Ideal in Conflict with the Modern World (German Studies Review, 5, pp. 419-420).

Pugach, Noel H.	Curtis T. Henson, Jr., Commissioners and Commodores: The East India Squadron and American Diplomacy in China, in American Historical Review, vol. 87, (December 1982), 1465-66.
Rabinowitz, Howard	Robert L. Clarke (ed.), Afro-American History: Sources for Research, Reprint Bulletin-Book Reviews, XXVI (Winter 1981-82), 5. Walter J. Fraser, Jr. and Winfred B. Moore, Jr. (eds.), From the Old South to the New: Essays on the Traditional South, Civil War History, 28 (December 1982).
Roebuck, Janet	Review of Gillette & MacMahon, A History of Hull for The American Historical Review, February 1981, 2; Treble, Urban Poverty in Britain 1830-1914 for Journal of Interdisciplinary History, 1982).
Slaughter, M. Jane	Book review, New Mexico Historical Review 57:4 (1982), 403-4. Book notice, Hispanic American Historical Review (May 1982), 323-24.
Szasz, Ferenc M.	Four book reviews in Choice and S.D. History.

5. Other research projects or creative work in progress or completed during period

Boylan, Anne M.	Continued work on book manuscript dealing with Protestant Sunday Schools in the 19th-century United States.
Bakewell, Peter	Writing continued on Miners of the Red Mountain: Indian Labor in Potosi, 1545-1650, to be published by UNM Press.
Berthold, Richard	Book, History of Rhodes revised. satyrical essay on Menachem Begin. science fiction short story.
Conniff, Michael	American Philosophical Assn. award for research: $1200. Researched and began writing book on Falklands, temporarily abandoned. Preliminary contacts for future book on the Peace Corps. Continue book on West Indians in Panama.

Etulain, Richard W.	Book: Conversations with Wallace Stegner on Western History and Literature (U of Utah Press, 1983 forthcoming): RAC grants (2) UNM Book: Western Films: A Brief History (Sunflower U. Press, 1983 forthcoming). Essay: "Shifting Interpretations of Western American Culture," Historians and the American West (U of Nebraska Press, 1983 forthcoming).
Ikle', Frank W.	"The role of the Humanities in Post-Industrial Societies: Germany and France". Revised paperback edition of joint two volume "History of Asia," in collaboration with Professor W. Bingham and H. Conroy.
Kern, Robert	Labor in New Mexico: Strikes, Unions and Social History since 1881--an edited collection of essays to be published by UNM Press in April, 1983. Building New Mexico: The Experience of a Southwestern Carpenters Union--an edited group of studies submitted to Cornell University Press.
Kolchin, Peter	Book manuscript, "American Slavery and Russian Serfdom: A Comparative Study in Unfree Labor."
Lieuwen, Edwin	Completed work on article: "The Politics of Oil in Venezuela," in Press, Stanford. Work in progress: Biography of Alvaro Obregon, Review article on Latin American Energy History.
McClelland, Charles	Continuing research (under Humboldt Grant) on a book concerning the rise of modern professions in Germany. Completed research for a chapter on German professors as an elite, 1815-50. Completed a short study of the sociological theory and historical applications of professionalization. Initiated research on the impact of World War I on professional classes in East Central Europe.
Nash, Gerald D.	Completion of book entitled "The West in World War II." Essay, "The 20th Century West," in Thomas Alexander

	(ed.), Essays on the American West 50 pp.; "American Environmental Policies Since 1933," for the Environmental History Review. Book reviews in American Historical Review, Journal of American History, Pacific Historical Review, Business Hist. Review, Great Plains Quarterly, Journal of the West, Pacific Historian.
Porter, Jonathan	Book completed December 1982: All Under Heaven: The Chinese World.
Pugach, Noel H.	Completed sections of four chapters for a History of the Carpenters Union in New Mexico. Study of the China Arms Embargo in progress. Received grant for a series of lectures, "Understanding the Contemporary Jew," Fall 1982-Spring 1983, from the New Mexico Humanities Council, $4865.
Rabinowitz, Howard	Completed "Albuquerque: City at a Crossroads" to be published in anthology on sunbelt cities. Completed "Race, Ethnicity and Cultural Pluralism in American History" to be published in an anthology on the New Social History; research for books on the New South 1877-1920 and Albuquerque 1940-1974; wrote several book reviews.
Robbins, Richard	Russian Provincial Governors 1880-1917.
Roberts, William	Loyalty and Expertise: The Transformation of the Nineteenth-Century American General Staff and the Creation of the Modern Military Establishment (book-length work to be submitted for publication in the spring semester of 1983). Over the Ramparts (a military anthology to be published by Greenwood Press in 1984; co-ed.) "Laying the Foundation for a New Army," (essay for inclusion in Over the Ramparts; work in progress)
Skabelund, Donald	Summer work on two ongoing manuscripts, "Structure of Thought" and "Structure of Theory in Historical Perspective," mainly on history of mathematical logic. Summer preparation in history of electronics for Hist. 327, Hist. of Technology.

Slaughter, M. Jane	Monograph in progress, Women and the Italian Resistance, 1943-45; Co-editor with Richard Stites for multivolume series, Women and Revolution (contract with Arden Press,) in progress.
Spidle, Jake W.	Heavily involved in a New Mexico Medical History. Oral History research project submitted to several agencies for funding. Since June, 1979, engaged in writing a basic history of U.S. Air Force laser research at Kirtland Air Force Base.
Steen, Charlie	Commenced writing a biography of Margaret of Parma of the Netherlands. This concludes a long-term research project.
Sullivan, Donald	Article completed on late medieval prophecy and reform.
Szasz, Ferenc M.	Book manuscripts on religion in the West and Trinity Site.

6. Activities in learned and professional societies

Bakewell, Peter	Attended International Congress of Americanists (Manchester, UK) 5-10 September 1982. Attended annual meeting of American Historical Association, Washington D.C. 27-30 Dec. 1982--chairing session "Fiscal Reform and Politics in Colonial Spanish America." Attended meeting of Latin American Studies Association, Washington, D.C., March 1982. Elected chairman of Mexican Studies Committee of Conference on Latin American History, Dec. 1982. Associate editor, Hispanic American Historical Review. Member of editorial board of New Mexico Historical Review. Referee for Latin American Research Review. Attended meeting "Presencia de America Latina y Mexico en los Estados Unidos," UNAM, Mexico City, 21-23 April 1982--presenting brief paper "Historiografia reciente de Mexico en Estados Unidos."
Conniff, Michael	Attended the 44th International Congress of Americanists in Manchester, England 5-10 September and presented paper,

	"Black Labor in a White Canal: Panama, 1904-1980."
Dabney, William	Paper read at the Rocky Mountain Conference on British Studies, October 9, 1982, "Sir James Steuart's Comments on the American Revolution."
Etulain, Richard	Chaired sessions at Western American Literature; Intersections (U. of Nebraska); read paper at Western Literature; Pacific Coast Branch nominating committee; attended meetings in Santa Fe, Denver, Phoenix.
Ikle', Frank W.	Pacific Coast Branch, American Historical Association, San Francisco, California, August, paper on "The Role of Women in Japanese History." Royal Asiatic Society, Hong Kong, March, talk on "The Nature of Japanese History," Chairman, Western Conference on Asian Studies, Boulder, Colorado, panel on "Korean Unification." Invited guest, 10th Military History Symposium, U.S. Air Force Academy, Colorado Springs, October on "The Home Front and War in the 20th Century." Elected to Nominating Committee, Western Conference of Asia Studies, Boulder, Colorado.
Kern, Robert	Membership in American Historical Society, Southwest Labor Studies Association, and American Association of University Professors (President of UNM chapter).
Lieuwen, Edwin	March 3-6, 1982--Latin American Studies Association, Washington D.C.--Committee on Programs. August 16-23, 1982--Presented paper at Xth World Congress of Sociology in Mexico City entitled "The Armed Forces and the State in Latin America"--to be published. Oct. 16-18--Commentary on "Contemporary Role of the Latin American Military" at Pacific Coast Conference of Latin American Studies, San Diego, California. Dec. 27-30, 1982, American Historical Association Meetings in Washington, D.C., Research report on Venezuela, Gran Colombia

	Session; Book Review Editors Report to Hispanic American Historical Review Board.
McClelland, Charles	Attended German Historical Association meeting in Muenster, Germany, October. Attended Medical History Conference, Bielefeld, Germany, March. Attended semi-annual meetings of Working Group for Modern Social History, Bad Homburg, Germany, March and October, reading a paper on "Professionalisierung and Professionalisierungstheorie in der neueren deutschen Geschichte." Attended First Biannual Conference of American and Hungarian Historians, sponsored by Hungarian Academy of Sciences, Budapest, Hungary, August. Attended annual conference of Humboldt Fellows, Bonn, Germany, July. Attended West German Rectors' Conference (annual meeting of presidents and rectors of all German universities) as Distinguished Foreign Observer, April (Konstance, Germany). Attended Ninth Meeting of the International Economic History Association, Budapest, Hungary, August. Official UNM delegate to Anglo-American Historical Conference, London, England, July (unable to attend). Panel chairmand, Western Association for German Studies, El Paso, Texas, October (unable to attend). Note: inability to attend these sessions resulted from travel funds not being available at the last minute.
Nash, Gerald D.	Paper, "Environmental History since 1933," at Environmental History Conference, University of California, Irvine, Jan. 2-4, 1982; "Persistence of the Cowboy Myth in the 20th Century West," at Western Symposium, Carnegie Art Museum, Pittsburgh, Pa., March 23-24, 1982; "New Approaches to American Economic History," N.M. Council for Social Studies, November 12, 1982
Porter, Jonathan	Paper read at annual meeting of Western Conference, Assn. for Asian Studies, Boulder, 9/17/82: "China as

	a Counter-Model of the West: Themes of 'Retardation' and 'Non-development in Chinese Civilization."
Pugach, Noel H.	Paper Read: "Twentieth Century Disarmament Efforts in Historical Perspective," SPAR Conference, Air Force Weapons Laboratory, Kirtland Air Force Base, Jan. 20-22, 1982; Attended Annual Meeting of the Society for Historians of American Foreign Relations, Boston University, Aug. 5-7, 1982; Chairman, Bernath Article Prize Committee, Society for Historians of American Foreign Relations.
Rabinowitz, Howard	Member, Board of Editors, Journal of Southern History; invited discussant, NAACP Legal Defense Fund conference on the Voting Rights Act; attended Organization of American Historians Convention, Philadelphia, Pa., April, 1982; Southern Historical Association Convention, Memphis, Tennessee, November, 1982.
Robbins, Richard	Read paper: "The Limits of Professionalization: The Russian Governors at the Beginning of the Twentieth Century," at Southwestern Social Science Association Convention in San Antonio, March 1982. Participant in Conference on the Professions in Tsarist Russia, University of Illinois, June, 1982.
Roberts, William	Attended the annual meeting of the American Historical Association in Washington, D.C. from December 27-December 30.
Roebuck, Janet	"Progress Towards a New Age Group," Richard A. Kalish and Janet Roebuck presented at the 10th Conference of the Internationale de Gerontologie Social, Deauville, France, May 1982.
Slaughter, Jane	Participant, UCLA Workshop on Teaching Women's History, March 1982. Attended conference "Mussolini and Italian Fascism" Trinity College, Hartford, Connecticut, October 1982. Associate Editor, Social Science Journal.

Steen, Charlie R.	Gave a paper at the annual meeting of the Western Society for French History in Winnipeg. Elected to the Council of that organization. Served on the program committee.
Sullivan, Donald	Paper presented at 17th International Medieval Congress, Western Michigan University: "Apocaplypse Tamed: Cusanus and Late Medieval Prophecy."
Szasz, Ferenc M.	Attended the Western Historical Association meeting in Phoenix, Fall 1982. Interviewed by a Buffalo, New York radio station on Halloween.

7. Other professional activities

Boylan, Anne M.	Talk on "The Changing American Family" sponsored by the New Mexico Humanities Council, Las Vegas, New Mexico, March, 1982.
Berthold, Richard	Talk on Rome to Kiwanis.
Conniff, Michael	Referee for National Endowment for Humanities, Guggenheim Foundation, The Historian, Hispanic American Historical Review, and Latin American Research Review. Consultant, Professional Seminar Consultants, Albuquerque. Guest lecture in History 320 and two colonialism courses. Seven talks to service clubs on the Falklands war, one radio show and two TV appearances. Talk to Amigos of the Americas on shantytowns 24 February 1982.
Etulain, Richard	Gave guest lectures at Kirtland Air Force Base (2), Sheldon Jackson College (6), Palace of the Governors; serve on editorial boards of Great Plains Quarterly, Journal of American Culture, Journal of Regional Cultures, Journal of the West; read manuscripts for University of New Mexico Press, University of Oklahoma Press, University of Washington Press, NEH, Great Plains Quarterly (8).

Iklé, Frank W.	Lectures in German and French on topics pertaining to Switzerland, July, Taos German and French Language School. UN Speaker, Albuquerque, November, "The UN as seen from Asia."
Kern, Robert	Director, New Mexico Carpenters Project. TV talk, channel 13, May 5, 1982; article about work, Albuquerque Journal, October 23; Las Cruces Sun News, November 1; set up and directed photo exhibition of the Carpenters centennial at Coronado Center and Mesilla Mall.
Kolchin, Peter	Reader for Louisiana State University Press. Talk, January 1982, at University of Chicago, on "The Antebellum Slave Community: A Comparative Perspective."
Kramer, Steven P.	Coordinator and moderator of colloquium, 30 September-1 October "The Writer and his language, New Mexico and Quebec." Completion of television program on NMHC grant on multilingualism, Américains, americanos.
McClelland, Charles	Guest lectures on various aspects of the history of learned professions in Germany, 1850-1933, at the Universities of Bielefeld, Berlin, and Frankfurt, Germany, University of East Anglia (Norwich, England), and German Historical Institute, London, England. Guest seminar director on several occasions at University of Munich, Germany.
Nash, Gerald D.	Talk, "Recent Trends in Historical Publishing," S.E. Missouri State University, April 16, 1982; Consultant, NEH (5 proposals); Referee, Western Historical Quarterly, Journal of Southern History, Agricultural History; Prize Committee, Agricultural History Society; Executive Council, Phi Alpha Theta; Editor, The Historian; Consultant, University of California Press, UNM Press; Consultant Economics Workshop for Teachers, June 2-5, 1982, UNM.
Porter, Jonathan	Lecture to Rio Rancho Rotary Club, 5/25/82; Campus Asian Studies lecture 4/15/82: "The Three Religions in China."

Pugach, Noel H.	Gave the first four lectures in the series, "Understanding the Contemporary Jew," funded by the New Mexico Humanities Council, Oct. 20, Nov. 3, Dec. 1 and Dec. 8, 1982. Evaluated article for the New Mexico Historical Review. Lectures: "United States Policy Toward the Middle East: Reagan's First Year," B'nai Brith Women, March 22, 1982; "An Analysis of the Crisis in Lebanon," ARMDI, June 22, 1982. TV and Radio appearances: "Israel: An Historical Perspective," Channel 14, April 24, 1982; "The Major Themes of Modern Jewish History," KZIA, October 13, 1982; "The Nature of Modern Anti-Semitism," November 15, 1982.
Rabinowitz, Howard	Discussed the history of postwar Albuquerque and the role of neighborhood associations in a series of five neighborhood forums run by the Planning Research Institute and funded by the New Mexico Humanities Council, May-December 1982; participant in League of Women Voters Mini-Conference on Mass Transit in the Albuquerque Metropolitan Area; consultant for Educational Testing Service (reader American History Advanced Placement Exams, Trenton, NJ, June 1982). Evaluated manuscripts, proposals, or reprint possibilities for Alfred A. Knopf, Inc., Johns Hopkins University Press, University of North Carolina Press, The Historian, Journal of Southern History, and University of Maryland (in tenure decision).
Robbins, Richard	"Russia Today" a talk given to the Albuquerque Committee on Foreign Relations, February 1982.
Roebuck, Janet	New course, "Old Age in the Modern World" History 320, first offered in Spring 1982; Guest on KGGM TV talk show, Feb. 11, 1982, half hour segment on the aging and the elderly; acted as outside reader dissertation of Stephanie Kauffman in the English Department.
Skabelund, Donald	Four lectures in history of relativity and quantum mechanics for General Honors program.

Slaughter, M. Jane	Speaker, New Mexico Women's Political Caucus, January 14, 1982. Speaker, Bn'ai Israel Women's Group, February 18, 1982. Lecture, History Graduate Student's Association, February 19, 1982. Lecture, American Association of University Women, December 2, 1982. Guest lectures, History of War and Society, and Introduction to Sociology.
Spidle, Jake W.	New Mexico Institute on Alcohol Studies 18th Annual Conference (Silver City, N.M.), June 1982, keynote speaker: "Our Founding Fathers: a Nation of Sots". Lovelace Medical Center Care-Unit Staff Lecture series, August 1982 lecture on "The Alcohol Problem in American History."
Steen, Charlie	Continued a series of lectures on the intellectual and ecclesiastical history of Europe. Offered in an informal environment, these are designed to be informative and to make a positive contact between the university and the community.
Sullivan, Donald	Presented five part series of lectures on history of Christianity to UNM Newman Center (Feb.-May, 1982).
Szasz, Ferenc M.	Gave eight talks to outside audiences: "Were there visitors to America before Columbus?" to the Community College Summer program, June 9, 1982; "The Story of Trinity Site" for (a) a Northern Arizona Lecture series--March 4, 1982; (b) for an audience at New Mexico Military Institute on April 28, 1982; (c) for an Honors Center class at UNM October 7, 1982; "America's Civil Religion" for the Monzana Del Sol Retirement Center, October 12, 1982. "Who was here first?" for the Albuquerque Scandinavian Club, Sept. 24, 1982. Led a discussion at Farmington, November 18, 1982 on nuclear-related issues.

8. Non-teaching University service

Bakewell, Peter	Faculty Senate, 1981-82. Faculty Senate Operations Committee (1981-1982). Latin American Institute Policy Committee (1981-present). History

	Department Curriculum Committee (chair) 1981-82. Latin American Institute Library Sub-Committee (chair), 1981-present. A&S Dean's Inter-disciplinary Committee on Latin American Studies (1981-present).
Conniff, Michael	Became Director of the Ibero-American Ph.D. program in August; co-organizer of Latin American Institute Caribbean Week; campus host for Patrick Bryan, Fulbright professor, David McCullough, William P. McGreevey, and Simon Collier, all visiting scholars. Served on Graduate Affairs committee and unit review team, spring semester.
Dabney, William	Arts and Sciences Committee on Teaching Resources. Arts and Sciences Tenure Committee, 1981-82. Arts and Sciences Promotion Committee, 1981-82, chairman. Student Standards Committee, Faculty' Ethics and Advisory Committee.
Etulain, Richard	Editor, New Mexico Historical Review. Graduate committees of 12 students. Chair, Graduate Advisory Committee (Spring). Chair, Search Committee for Southwest position. UNM Press Committee. N.M. Humanities Newspaper Committee.
Ikle, Frank W.	Member, Asian Studies Committee; Chairman, Ad Hoc Senate Committee on Selection of Regents for UNM; Chairman, Ad Hoc Committee for Academic Exchanges with the People's Republic of China.
Kern, Robert	Faculty advisor for Democrats for Anaya; member of Faculty Senate; member and chairman of Undergraduate Academic Affairs Committee; member of Curriculum Committee; member of History Graduate Entrance Committee.
Kolchin, Peter	Member, History Department Graduate Advisory Committee (spring). Coordinator, History Department Colloquium. Member, University Curricula Committee.
Kramer, Steven P.	President, Faculty Senate; co-director French Summer School; co-director European Studies.

Lieuwen, Edwin	Chair, LA Policy Committee (All Universities) and President, LA Concilium (all Universities); Book Review Editor, Hispanic American Historical Review; Dissertation Advisor: 6 Ph.D. candidates; Thesis Advisor: 2 M.A. Candidates.
Nash, Gerald D.	Director, Applied and Public History Program; Chairman, Graduate Entrance Committee (History); Honorary Degree Committee; A&S Promotion Committee; Chair, History Department Audio Visual Instruction Committee; Promotion Evaluation Committee; Project Director, NEH Grant on Constitution.
Porter, Jonathan	Graduate Coordinator, History Department (Semester I, Fall). Faculty Senate. A&S Graduate Committee (Fall). Chair, Asian Studies Committee & Asian Studies Minor Program (Fall).
Pugach, Noel H.	Member, Research Allocations Committee; Member, Department of History Graduate Advisory Committee; Member, History Department Branch Campus Committee. Read papers for History Day, April 1982.
Roberts, William	Member, Faculty Club Board; member, History Department Curriculum Committee (spring 1982); coordinator, History Department Honors Program; departmental coordinator and judge, New Mexico History Day (spring 1982)
Roebuck, Janet	Presidential Search Committee; Women's Studies Advisory Committee; College of Nursing Graduate Committee; Committee of Five.
Skabelund, Donald	Dean's Task Force on Undergraduate Education (adjunct to A&S Curricula Committee),; BUS Advisory Council; Department Unit Review Committee; Department Graduate Advisory Committee; Department Curriculum Committee (chair); Department Undergraduate Advisory Committee.
Slaughter, M. Jane	Women Studies Committee, Women Studies Advisory Committee, Women Studies Subcommittee Grievance and University and Community Liaison. Academic Freedom

	and Tenure Committee, two hearing panels. Member, Athletic Council; Co-Director, European Studies Committee, 1982; Treasurer, Faculty Club Board; University Committees on Gubernatorial Candidates Forums; Senate Ad Hoc Committee on Search Committees; President, Faculty Representation Association; Latin American Institute, Member Program Committee; Department: Salary Committee, Sabbaticals Committee, Library Liaison.
Steen, Charlie R.	Member of the Unit Review Committee for History. Undergraduate Advisor and chair of the group that rewrote degree requirements for history. Represented the department in advising and in Senior Day and Parents' Day activities.
Sullivan, Donald D.	University Curricula Committee; Member, Executive Committee, Religious Studies Committee; Member, Unit Review Committee, Department of History.

9. Public service

Berthold, Richard M.	Columnist for Lobo.
Dabney, William M.	Episcopal Diocese of the Rio Grande: Commission on the Ministry; Commission on Liturgy and Music; member, search committee for a rector, St. Mark's Church.
Etulain, Richard	Church of the Nazarene: church board, Sunday School teacher, steering committee on church policy.
Iklé, Frank W.	Member: Albuquerque Committee on Foreign Relations "21" Club. President, "Friends of Switzerland in New Mexico."
Kramer, Steven P.	Vice-President, Democratic Council.
Nash, Gerald D.	Albuquerque Public Schools, advisor on bicentennial programs.
Pugach, Noel H.	President, Experiment in Jewish Learning.

Rabinowitz, Howard	Chairman, Albuquerque Landmarks and Urban Conservation Commission.
Skabelund, Donald	LDS Sunday School Class in Old Testament.
Slaughter, M. Jane	Member, New Mexico Commission on the Status of Women, 1982. Charter Member, Friends of Education, Political Action Committee.
Spidle, Jake W.	Ruling Elder, First United Presbyterian Church. Chelwood Elementary School Parent-Faculty Organization board member.
Steen, Charlie R.	Department representative for U.C.F.

Report of the NEW MEXICO HISTORICAL REVIEW

July 1, 1982 - June 30, 1983

Richard W. Etulain, Editor

STAFF APPOINTMENTS

With one exception, our office staff remained intact during this past year, and this continuity, I am convinced, is the major reason for the continued growth of the REVIEW. The editor completes his fourth year, Cheryl Foote her third year as assistant editor, and Nancy Brown--the most experienced person on our staff--continues as secretary and office manager. The one change in our staff occurred when Annabelle Oczon, our reliable work study student, graduated at the end of the fall semester of 1982. During the spring semester Laura Blalock served as our work study student. Unfortunately, because of budget cutbacks, we shall have no work study assistant this next year, causing a heavier load to fall on other staff members.

In an attempt to strengthen the variety of persons available to us as editorial readers, we have added two new members to our Editorial Consultants: Gustav L. Seligmann of North Texas State University and Janet Fireman of the Los Angeles County Museum.

OTHER DEVELOPMENTS in 1982-83

We feel gratified in meeting three major goals set at the beginning of this year. First, each issue has been on time--an

important accomplishment in establishing the reputation of a journal. Second, we have also increased the number of submissions to 45, up from 26 in 1980-81 and 39 in 1981-82. Next year we hope to enlarge our submissions to at least 50, a satisfactory number considering that we publish about 14 or 15 essays per year. Third, we have enlarged considerably the number of book reviews published in each issue, thereby allowing us to call our readers' attention to a larger number of significant regional studies.

In addition, our readers and editorial consultants tell us the REVIEW is gaining strength and is now considered one of the three or four strongest state historical magazines. I accept their opinions--of course! I am proud of what we have accomplished in the past four years, and our accomplishments, I am convinced, are good arguments for the growing reputation of the REVIEW. In fact, I would think with a bit more staff help and a few more pages in which to publish another article or more book reviews in each issue we could well be the strongest state historical journal in the West in another couple of years.

PROMOTIONAL EFFORTS

We are well aware of the necessity of promoting our journal, and we have done so as much as funding and staff time allowed this year. All of our office staff have been involved in these promotional efforts. Not only have we attended several historical meetings--sometimes at our own expense--we have also promoted the REVIEW at other scholarly conferences and informal gatherings. In these

efforts we have tried to gain new subscribers as well as sell back issues. Nancy Brown has done the bulk of this promotional work, although all of us have taken part. The following list illustrates the varied and number of promotional efforts we have undertaken.

Joint sponsorship genealogical seminar, Albuquerque; sales table
Joint sponsorship land grant conference, Albuquerque; sales table
Historical Society of New Mexico State Conference, Albuquerque
NM Library Association State Conference, Santa Fe
NM Council of Social Studies State Conference, Albuquerque
Bilingual Education Conference, Albuquerque
NM Folklore Society Conference, Albuquerque
Rio Grande Writers' Association Conference, Albuquerque
NM Family and Community History Conference, Albuquerque
Women's Studies Seminar, Las Vegas, NM, display
Historical & Underwater Archaeology Conference, Denver, display
Western History Association Conference, Phoenix, display
Public talks, Etulain; Kirtland AFB; Socorro Public Library;
Panel, State History Conference; Museum of New Mexico Series

OTHER ACTIVITIES

In addition to our promotional efforts directly related to the REVIEW, we also try to promote history and historical activities throughout the state and region. This extra work continued during 1982-83.

Committee for the Promotion of History
History News Notes in NMHR, promotion of local events
Reference and inquiries on state history handled by NMHR
Promotion of Historical Society of NM, local societies, etc.
Joint sponsorship of genealogical seminar
Joint sponsorship of land grant conference

To gain wider circulation and new subscribers we have placed notices in the following outlets. Since we lack money for advertising we must utilize these kinds of efforts and special mailings to gain the attention of new readers.

Book Shops Carrying NMHR

Galeria de los Artesanos, Las Vegas
Singing Wind Book Store, Tucson
De la Peña Books, Santa Fe
Kit Carson Museum, Taos
Bent Museum and Gallery, Taos
Books by Mail, Albuquerque
The Living Batch, Albuquerque
UNM Book Store
Salt of the Earth, Albuquerque
Newsland, Albuquerque
Quivira Bookstore, Albuquerque
Millicent Rogers Museum, Taos
El Paisano Book Store, Albuquerque

News Notices or Exchange Ads with

Historical Society of NM and most state local societies
NEW AMERICA
COMMUNIQUE
NM GENEALOGIST & Albuquerque Genealogy Club
Notices in most state newspapers via UNM Public Information
LA JUNTA: NM Journal of the Social Studies article
APS Teachers' bulletins
BOOK TALK
RIO GRANDE HISTORY

Mailings To

Women's organizations, departments, professors, etc.
All NMHR recipients regarding back issues, price changes, etc.
Those interested in land grants, Hispanic topics, etc.
Those related to genealogical interests
State and Federal agencies related to NMHR topics
All community and school libraries of state
Community centers, senior centers, Hispanic parishes, etc.
US and Southwest professors with interest related to NMHR
Free news media sources of area
Professors known to NMHR regarding their libraries' NMHRs
Arizona institutions (reprint project)
Known associates of NMHR, handout packets for local distribution
Telephone calls to many state libraries

Finally, we continue to be much involved in the journal exchange program at Zimmerman Library. We are told that our library uses the REVIEW for 152 exchanges, more than any other journal. Altogether these exchanges save the library as much as $3040.00 each year. The NMHR also provides extra copies of our issues to help in recruiting new partners. That other libraries wish to exchange with the REVIEW indicates their appreciation of our periodical.

ACTIVITIES OF THE ACADEMIC STAFF

During the past year, the editor published two books (ed.) Fifty Western Writers (Greenwood, 1982) and (ed.) A Bibliographical Guide to the Study of Western Literature (Nebraska, 1982), completed two other books that will appear in the fall of 1983, had six essays accepted for publication, completed thirteen book reviews, presented two papers at scholarly conferences, and gave more than ten guest lectures at colleges and universities throughout the West.

In addition, Cheryl Foote, the assistant editor of the REVIEW and a doctoral candidate in western history, published or had accepted seven essays, read a paper at a conference, and completed seven book reviews. No other history graduate student came close to matching her publication activity. In addition she won the Dabney Award for the outstanding essay by a graduate student. Finally, she was given a coveted Woodward Fellowship for 1983-84.

FUTURE PLANS

We are now in the midst of planning for two special issues of the REVIEW. For the January 1984 issue we are planning special emphasis on the Mexican Period (1821-46) of New Mexico history. We have just about completed work for that issue and are already beginning preparation for the January 1985 issue that will honor Miss Eleanor Adams, editor of the REVIEW from 1965 to 1975. Professor Richard Greenleaf, the distinguished director of the Latin American Studies Center at Tulane University, will serve as guest editor of this issue.

We also plan to continue our practice of publishing extended review essays on notable western history volumes. These commissioned essays have brought some of the most noted American historians to the pages of the REVIEW.

Throughout my editorship we have tried to enlarge the number of our subscribers. At the beginning of this year (January) we had 1157 subscribers, as compared to 1024 in January of 1982. For the past few months we have tried several other methods of enticing subscribers, and if our efforts pay off we should reach an all-time high of more than 1350 subscribers by the end of the year.

Finally, let me say a few words about budgets and costs. Dr. Joseph Scaletti has asked me on several occasions to justify our raising but about 1/3 of our cost of operation. I have answered every one of his requests--verbally or in writing--

including a three-page, single-spaced letter earlier this spring. Let me summarize: costs of printing, mailing, and xeroxing we have little control over; raises in staff salaries we also do not control; and added expenses in mailing are a result of our concerted efforts to enlarge our subscription lists, our added use of readers to ensure high quality published essays, and our work to encourage more writers to submit essays to the REVIEW. I don't think any of these expenses can be reduced if UNM expects to publish a notable state historical journal.

As I have told the Dean of Arts and Sciences and the Associate Provost for Research, we have tried to raise more money through added subscriptions and larger sales of back issues--and in both areas we have succeeded fairly well, although not as much as we would have liked and others have pressured us to accomplish. Still, we have registered sharp gains from $5,747.43 in 1975 to $17,275.11 in 1982. But there are limits. We are raising our subscription price again next year, as we have been doing every other year, and we raised the price of our back issues. In short, we are working through every channel that I know of open to us to gather more money. We shall continue this work; depend on that.

As one way to understand our status, I have recently surveyed several state journals in the West and their modes of financial support. Most are largely subsidized by state funding through a university or a state historical society.

A few are funded through private foundations or historical organizations. But I know of none that is self-supporting--or even comes close to "paying its own way." Ideally, they should--and we would like to--but not enough readers subscribe to the REVIEW, and we are not the house organ of a large organization. Other states, universities, and historical societies have realized that part of their mission is to support a state historical magazine. I hope UNM continues to do so, for the REVIEW is part of the university's "image" to the public. We think we have made a considerable contribution in the past, and we're working overtime now and giving many hours to our journal to ensure its present strengths and to add to its future reputation. I would argue that we are doing a nearly superior job with the budget and staff available to us.

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