



# 2003 Annual Report

## Office of Research and Creative Activities

Published by the  
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at Brigham Young University

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# Foreword

We are pleased to share with you the Annual Report of the Office of Research and Creative Activities (ORCA). This report highlights the accomplishments of the faculty in sponsored research.

Far more important than these numbers are the result of this research and creativity. The expertise of the faculty is enhanced, the education for our students, in and out of the classroom is one of the best in the country. It is a tribute to the industry of the faculty and their students that such levels are reachable. We have no doubt that the trend will continue.

It is our pleasure and honor to play a small part.

Sincerely,



Gary R. Hooper  
Associate Academic Vice President for  
Research and Graduate Studies



Gary R. Reynolds  
Director  
Office of Research and Creative Activities

# Preface

This report covers January 1, 2003 to December 31, 2003.

Included are a number of activities that are carried out by the Office of Research and Creative Activities (ORCA).

- *Reports of Sponsored Programs:* Sponsored programs at BYU are those funded by external sources through ORCA. They are largely research projects, but many include programs that are designed to develop or support instructional or service activities. Support for creative activities such as performance, artistic creations, etc., may also come through ORCA.
- *Administrative Activities in Support of Research and Creative Activities:* ORCA supports several university committees which oversee compliance with university, state, and federal regulations.
- *Recognition for Research and Creative Activities:* This category includes awards to faculty and students made by ORCA, the Graduate School, and some cooperative efforts involving departments, colleges, and central administration.



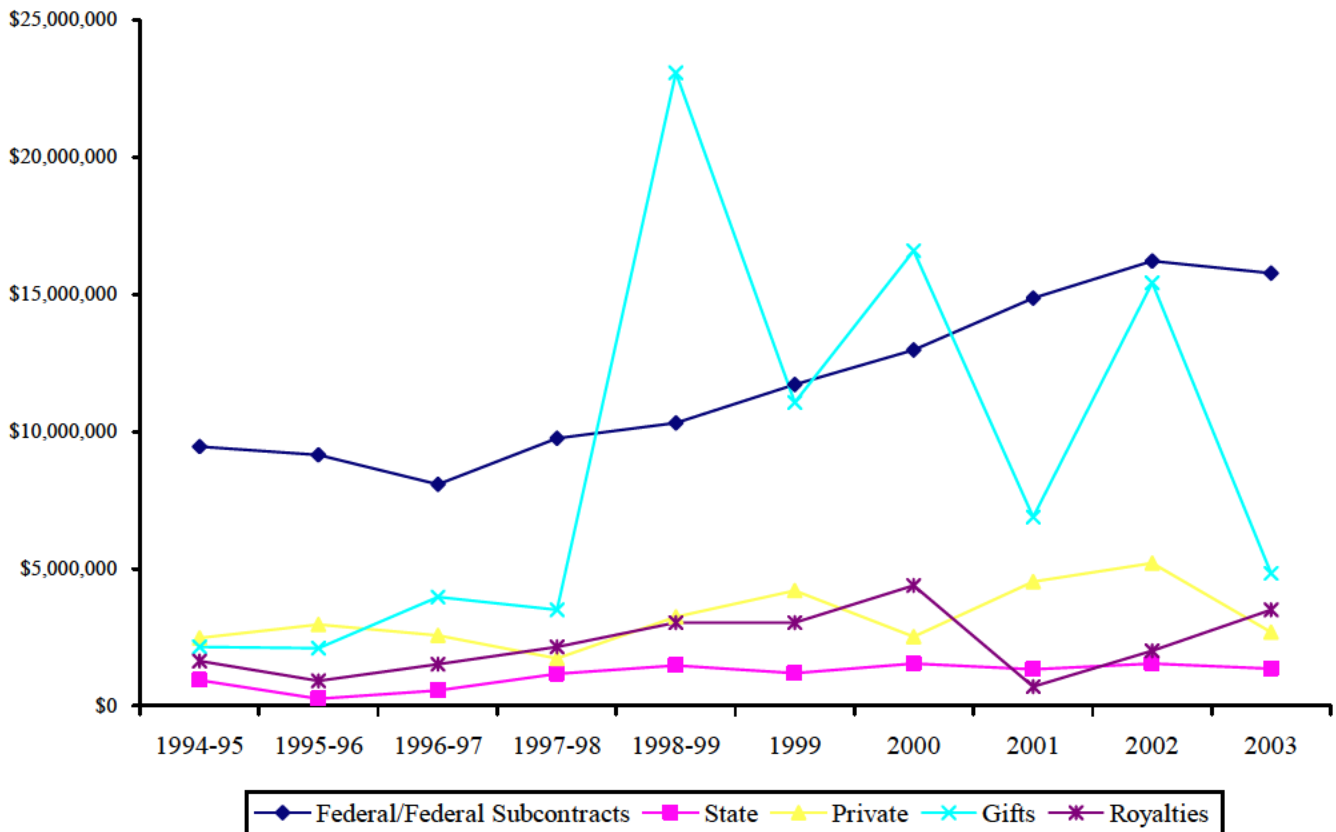
# The University

# External Research Funding (All sources including gifts, etc.)

Year	Grants/Contracts				Gifts	Royalties	Total	%Federal
	Federal	Federal Subcontract	State	Private				
1994-95	\$9,444,338	*	\$932,071	\$2,473,628	\$2,143,895	\$1,623,881	\$16,617,813	57%
1995-96	\$6,478,246	\$2,682,370	\$267,645	\$2,962,018	\$2,106,967	\$921,667	\$15,418,913	59%
1996-97	\$5,752,383	\$2,322,925	\$571,313	\$2,561,252	\$3,969,198	\$1,528,754	\$16,705,825	49%
1997-98	\$7,447,875	\$2,307,126	\$1,174,691	\$1,734,226	\$3,498,303	\$2,148,956	\$18,311,177	53%
1998-99	\$7,689,987	\$2,625,949	\$1,466,440	\$3,236,576	\$23,088,131	\$3,036,079	\$41,143,162	25%
1999	\$9,579,892	\$2,147,400	\$1,189,443	\$4,192,998	\$11,056,985	\$3,036,079	\$31,202,797	38%
2000	\$10,786,727	\$2,194,176	\$1,551,853	\$2,525,966	\$16,585,802	\$4,386,382	\$38,030,906	34%
2001	\$12,319,534	\$2,560,829	\$1,336,012	\$4,526,380	\$6,878,844	\$699,919	\$28,291,518	53%
2002	\$12,942,472	\$3,271,259	\$1,547,471	\$5,210,390	\$15,436,981**	\$2,008,385	\$40,416,958	40%
2003	\$12,412,311	\$3,359,540	\$1,352,811	\$2,694,628	\$4,841,134	\$3,495,245	\$28,155,669	56%

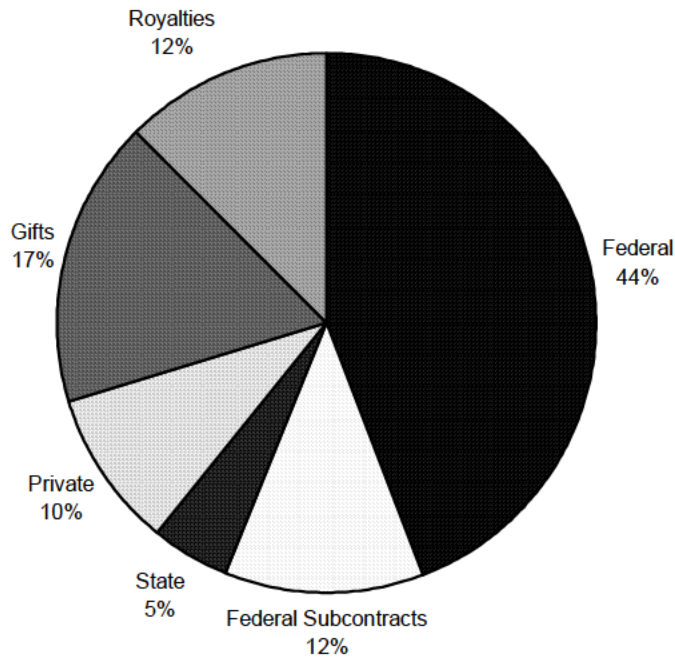
\*Specific figures for this year were not available

\*\* Gift total does not include \$313 million PACE donation to College of Engineering



# External Funds by Source—2003

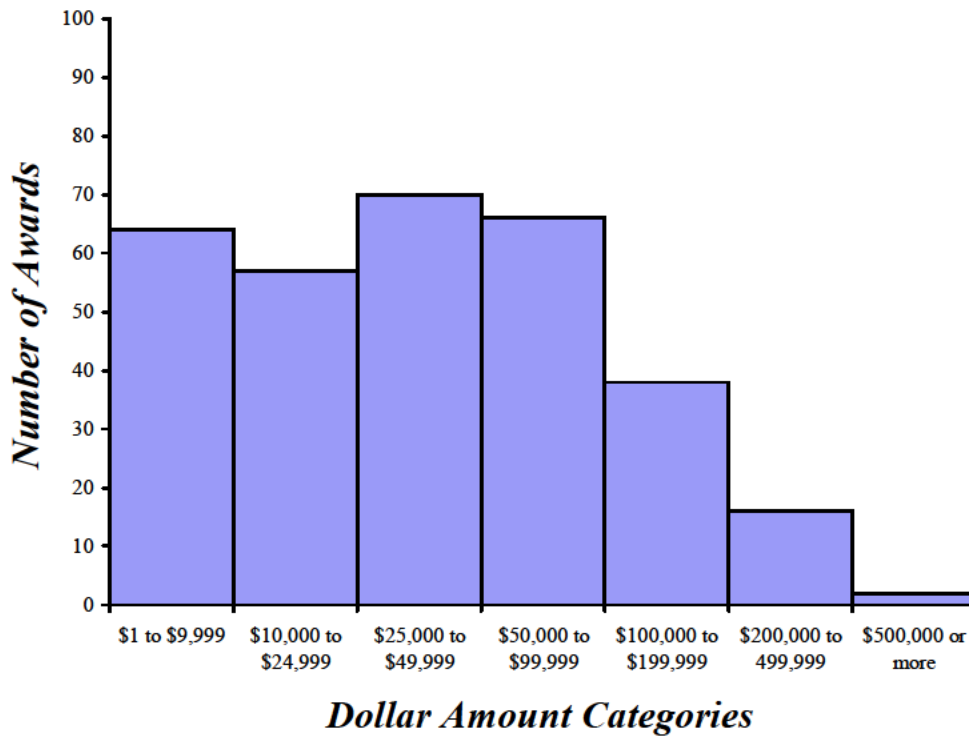
Source	Amount	% of Total
Federal	12,412,311	44%
Federal Subcontracts	3,359,540	12%
State	1,352,811	5%
Private	2,694,628	10%
Gifts	\$4,841,134	17%
Royalties	\$3,495,245	12%
<b>Total Funding</b>	<b>\$28,155,669</b>	<b>100%</b>



Federal
  Federal Subcontracts
  State
  Private
  Gifts
  Royalties

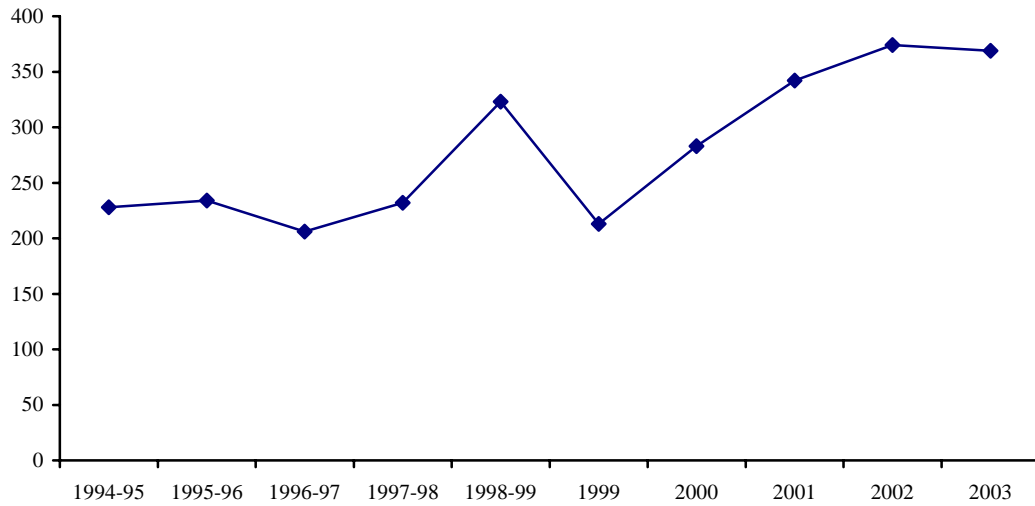
# Grant/Contract Awards by Amount—2003

Dollar Amount Categories	# of Awards	% of Total Awards by #	\$ Awarded	% of Total Awards by \$
\$1 to \$9,999	64	21%	\$326,522	2%
\$10,000 to \$24,999	57	18%	\$848,464	4%
\$25,000 to \$49,999	70	22%	\$2,452,143	12%
\$50,000 to \$99,999	66	21%	\$4,738,901	24%
\$100,000 to \$199,999	38	12%	\$5,383,419	27%
\$200,000 to \$499,999	16	5%	\$4,554,841	23%
\$500,000 or more	2	1%	\$1,505,000	8%
<b>Totals</b>	<b>313</b>	<b>100%</b>	<b>\$19,809,290</b>	<b>100%</b>

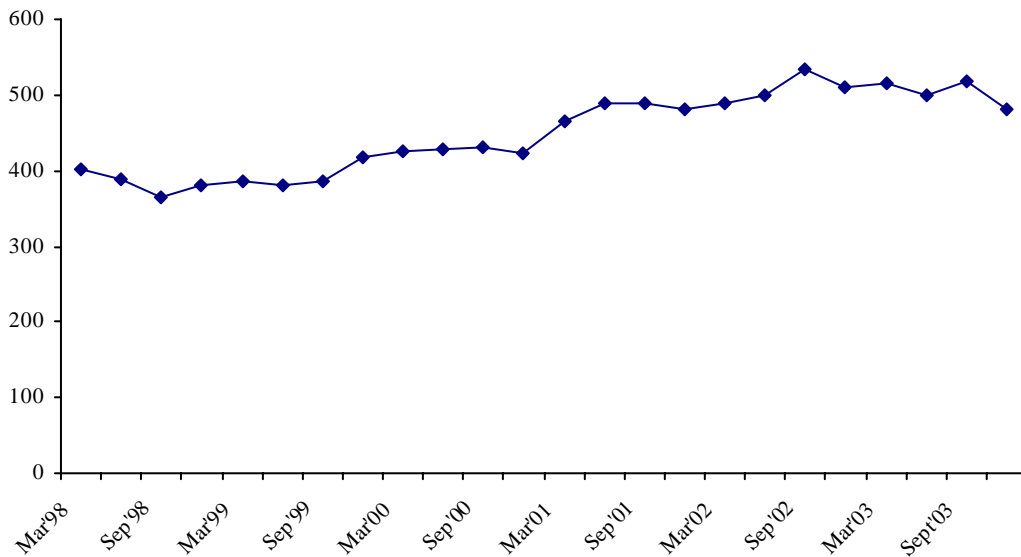




# Proposals Submitted

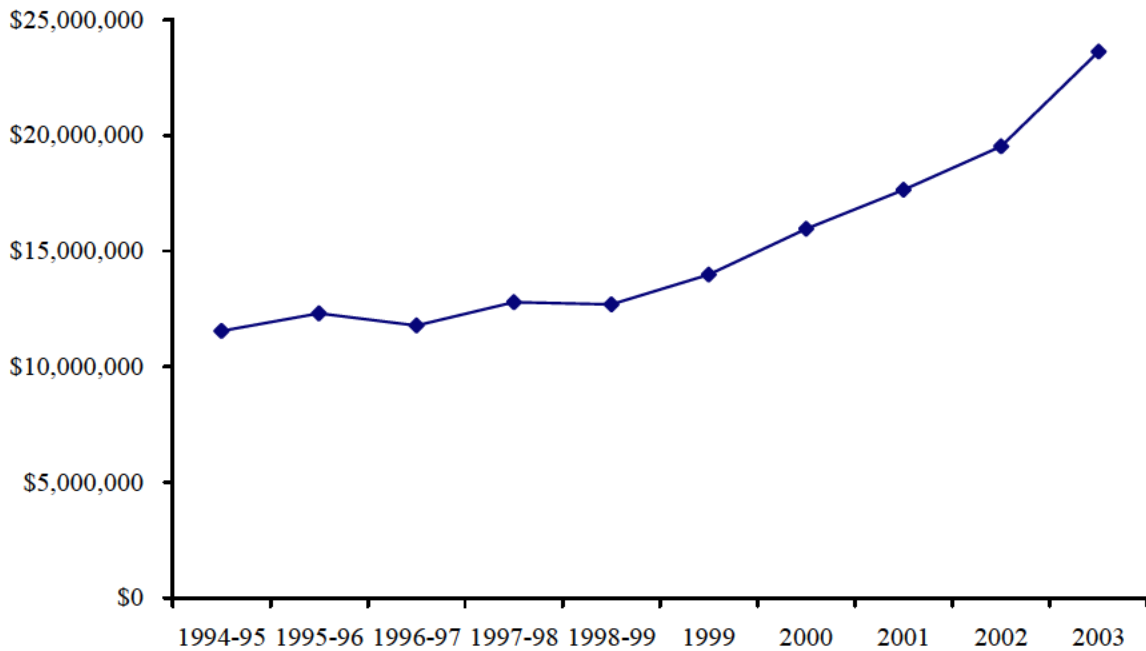


# Active Accounts



# Total Expenditures (Grants and Contracts)

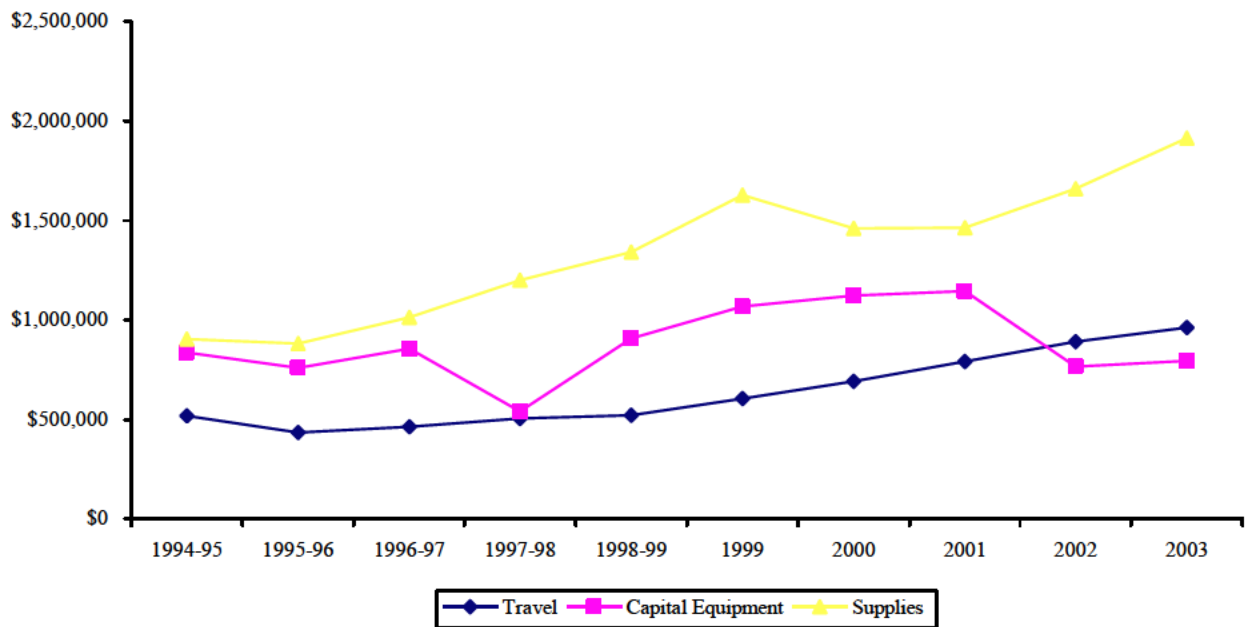
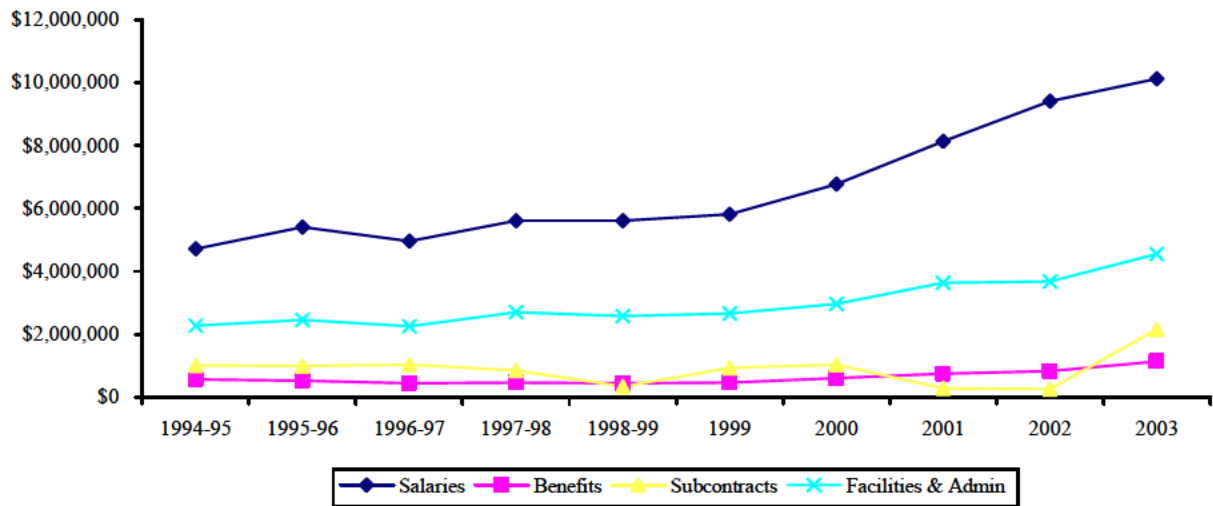
Year	Total Expenditures
1994-95	\$11,544,199
1995-96	\$12,307,058
1996-97	\$11,779,169
1997-98	\$12,795,126
1998-99	\$12,690,389
1999	\$13,988,008
2000	\$15,966,274
2001	\$17,652,928
2002	\$19,536,264
2003	\$23,623,643



# 2003 Research Contract/Grant Expenditures by Category

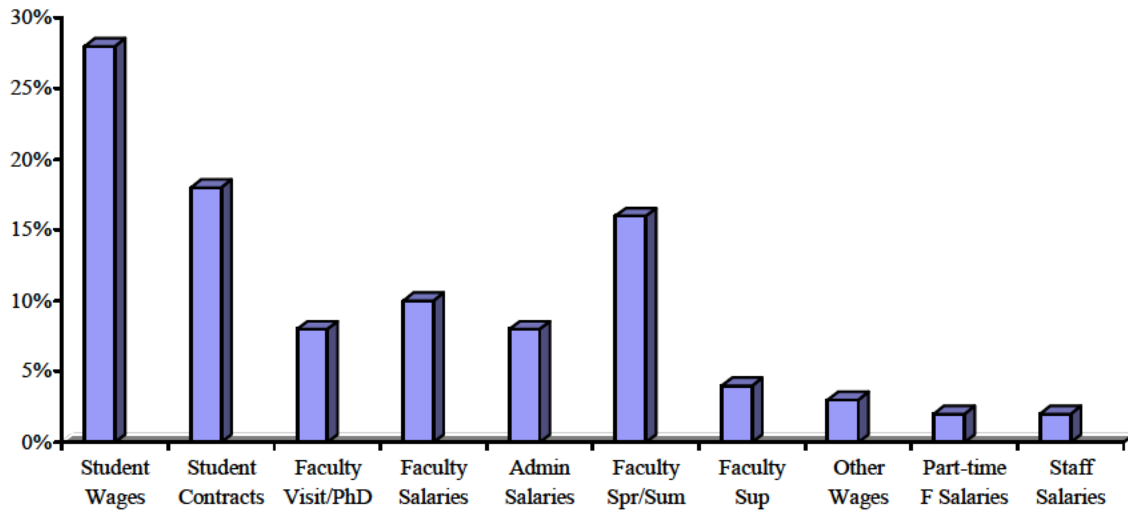
<i>Personnel Costs</i>	<i>Amount</i>
<i>Salaries &amp; Wages</i>	
Administrative Salaries	855,711
Faculty Salaries	1,008,156
Faculty—Spring/Summer	1,628,751
Faculty—Supplemental	275,430
Faculty—Visiting, Foreign, Post Docs	697,275
Part-time Faculty Salaries	185,327
Other Wages	218,206
Staff Salaries	148,432
Student Contracts	2,349,981
Student Wages	2,763,564
<b><i>Total Salaries &amp; Wages</i></b>	<b>10,130,834</b>
Fringe Benefits	1,128,977
<b><i>Total Personnel Costs</i></b>	<b>11,259,811</b>
<i>Other</i>	
Access Equipment	33,472
Advertising	1,748
Capital Equipment	794,575
Computer Services	222
Conference & Symposium Costs	24,310
Consultants	132,277
Contract Services	285,597
Employee Development/Training	77,803
Equipment Repair & Maintenance	28,965
Facilities & Administration	4,559,209
Facilities Maintenance	355
Fellowships	218,840
Hosting, Food, Entertainment	11,345
Non-Computer Non-Capital Equipment	32
Postage & Mailing	23,276
Printing & Copying	34,730
Purchase Discounts Earned	(113)
Rental Expense	69,895
Research Publications Costs	92,822
Software Purchases	74,028
Student Aid	647,450
Subcontracts	2,147,465
Supplies	1,913,780
Telecommunications	32,977
Travel	961,093
Utilities	1,244
<b><i>Total Other Expenditures</i></b>	<b>12,363,832</b>
<b><i>Total Research Expenditures</i></b>	<b>23,623,643</b>

# Research Dollars Expended (Grants and Contracts Only)

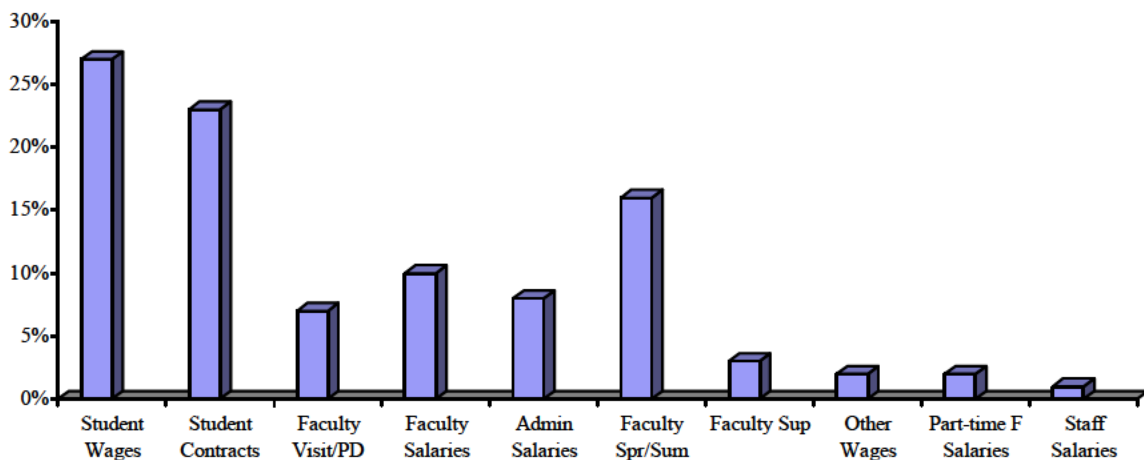


# Salary and Wage Expenditures (Grants and Contracts Only)

**2002**  
**Total: \$9,409,374**



**2003**  
**Total: \$10,130,834**

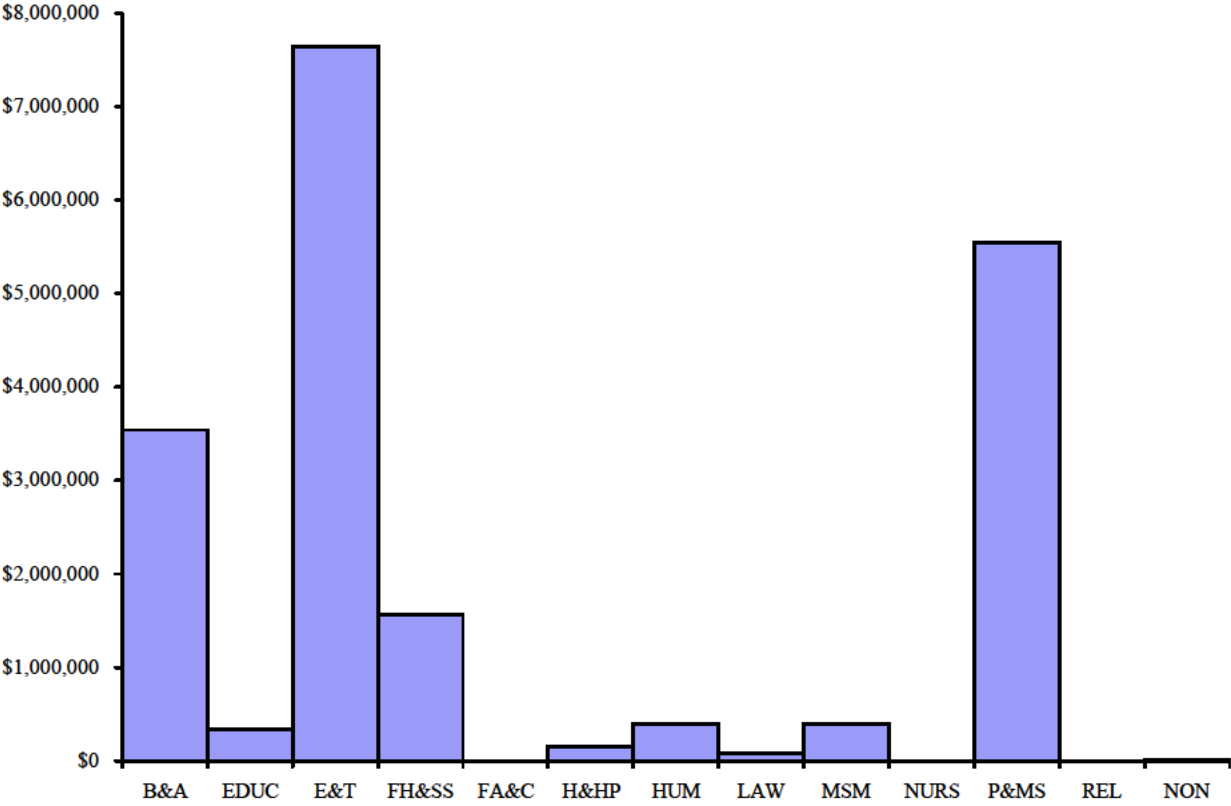




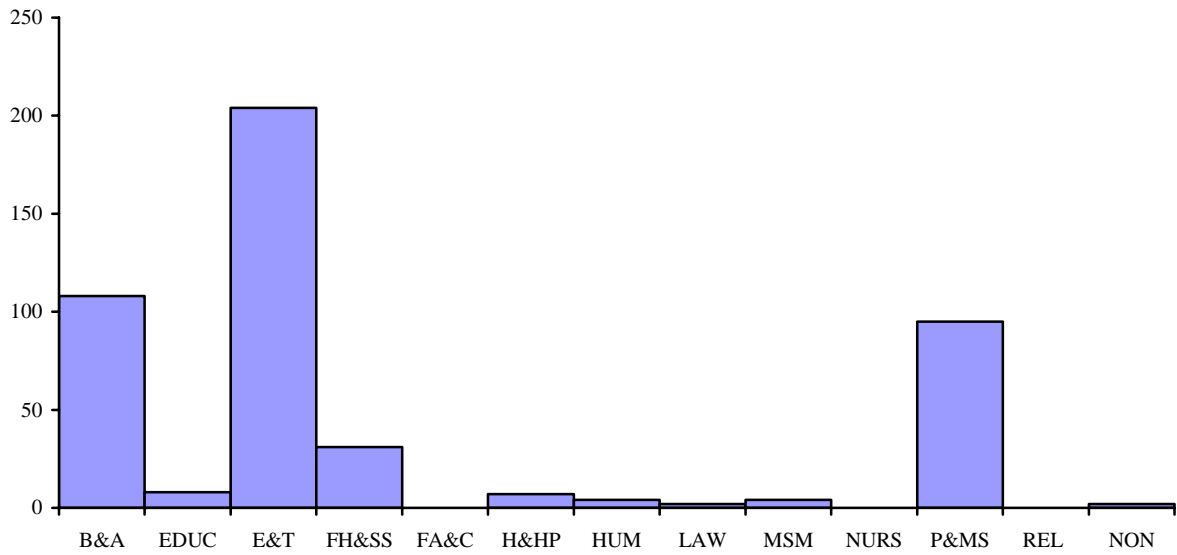
# Information by College or School

# Award Amount Totals 2003

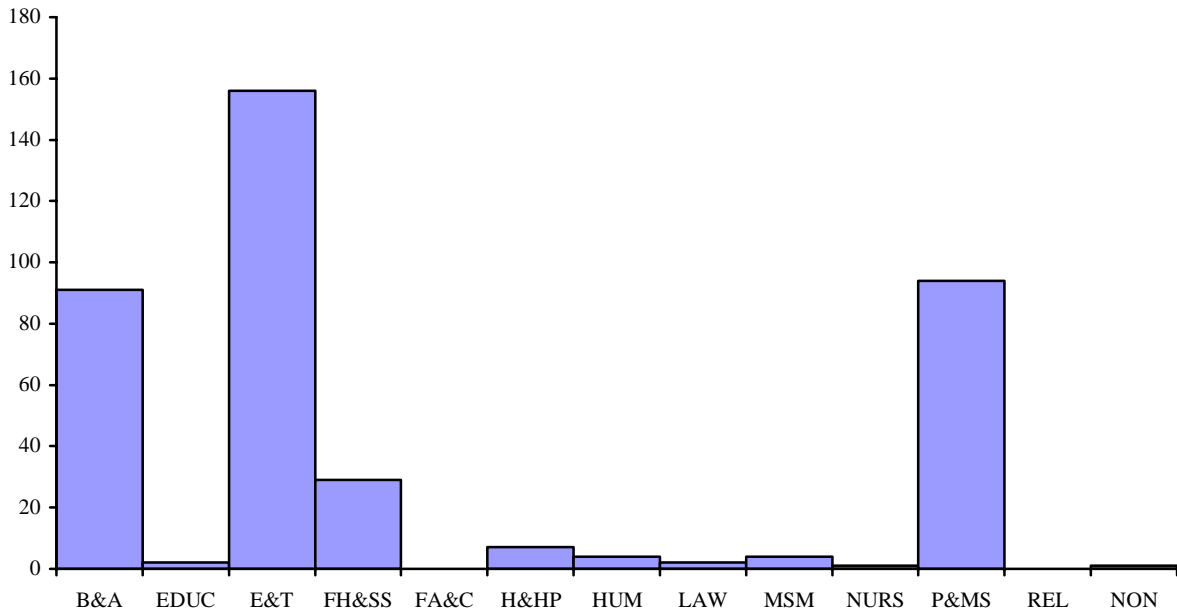
<i>College or School</i>	<i>Total</i>
Biology & Agriculture	\$3,540,512
Education	\$337,330
Engineering & Technology	\$7,641,466
Family, Home & Social Sciences	\$1,567,884
Fine Arts & Communications	\$0
Health & Human Performance	\$156,358
Humanities	\$395,633
J. Reuben Clark Law School	\$80,453
Marriot School of Management	\$396,550
Nursing	\$3,200
Physical & Mathematical Sciences	\$5,362,654
Religious Education	\$0
Non-College Units	\$337,250
<b><i>University Total</i></b>	<b>\$19,819,290</b>



# Number of Proposals 2003



# Number of Awards 2003





# Research Contract/Grant Expenditures by College and Department 2003

<i>College and Department</i>	<i>Amount</i>
<b><u>Assoc Academic VP</u></b>	
Royalties-Adm	24,312.49
Technology Transfer	5,922.50
<b>TOTAL</b>	<b>\$ 30,234.99</b>
<b><u>Biology &amp; Agriculture</u></b>	
Integrative Biology	1,977,553.76
Microbiology-Molecular Biology	702,702.17
Monte Bean Life Science Museum	9,040.49
Nutrition-Dietetic-Food Science	223,955.03
Physiology-Developmental Biology	963,733.70
Plant and Animal Sciences	74,093.11
<b>TOTAL</b>	<b>\$ 3,951,078.26</b>
<b><u>Education</u></b>	
Audiology-Speech-Lang Pathology	10,915.29
Teacher Education	441,249.34
<b>TOTAL</b>	<b>\$ 452,164.63</b>
<b><u>Engineering &amp; Technology</u></b>	
Chemical Engineering	1,552,700.00
Civil and Environmental Eng	2,970,607.62
College Engineering & Technology	45,000.00
Electrical and Computer Eng	2,805,786.62
Manufacturing Eng & Eng Tech	83,559.58
Mechanical Engineering	2,896,565.55
School of Technology	(3,221.53)
<b>TOTAL</b>	<b>\$ 10,350,997.84</b>
<b><u>Family Home &amp; Social Sciences</u></b>	
Anthropology	145,179.80
Economics	53,112.10
Kennedy International Center	495,410.47
Museum of Peoples and Cultures	425,781.47
Political Science	908,058.96
Psychology	711,944.32
Social Work	54,882.49
Sociology	68,940.62
<b>TOTAL</b>	<b>\$ 2,863,310.23</b>

<i>College and Department</i>	<i>Amount</i>
<b><u>Health &amp; Human Performance</u></b>	
Health Sciences	28,301.65
Physical Education	54,684.07
RMYL	26,726.22
<b>TOTAL</b>	<b>\$ 109,711.94</b>
<b><u>Humanities</u></b>	
Asian & Near East Languages	(42,784.41)
Center for Language Studies	168,166.53
College Humanities	(7,617.30)
English	1,452.42
French and Italian	81,380.42
German & Slavic Languages	4,450.00
Linguistics	30,144.12
Philosophy	2,186.98
Spanish and Portuguese	2,539.23
<b>TOTAL</b>	<b>\$ 239,917.99</b>
<b><u>International Affairs Vice President</u></b>	<b>\$ 69,832.64</b>
<b><u>Jacobsen Center for Service and Learning</u></b>	<b>\$ 19,871.09</b>
<b><u>J. Reuben Clark Law School</u></b>	<b>\$ 69,065.72</b>
<b><u>Marriott School of Management</u></b>	
Marriott School of Management	315,683.10
School of Accountancy-Info Sys	5,639.02
<b>TOTAL</b>	<b>\$ 321,322.12</b>
<b><u>Nursing</u></b>	<b>\$ 3,945.51</b>
<b><u>Physical &amp; Math Sciences</u></b>	
Chemistry and Biochemistry	2,668,383.40
Computer Science	1,271,989.97
Earth Science Museum	1,234.01
Geology	88,050.85
Mathematics	303,087.06
Physics & Astronomy	807,359.60
Statistics	2,085.03
<b>TOTAL</b>	<b>\$ 5,142,189.92</b>
<b>Grand Total</b>	<b>\$ 23,623,642.88</b>

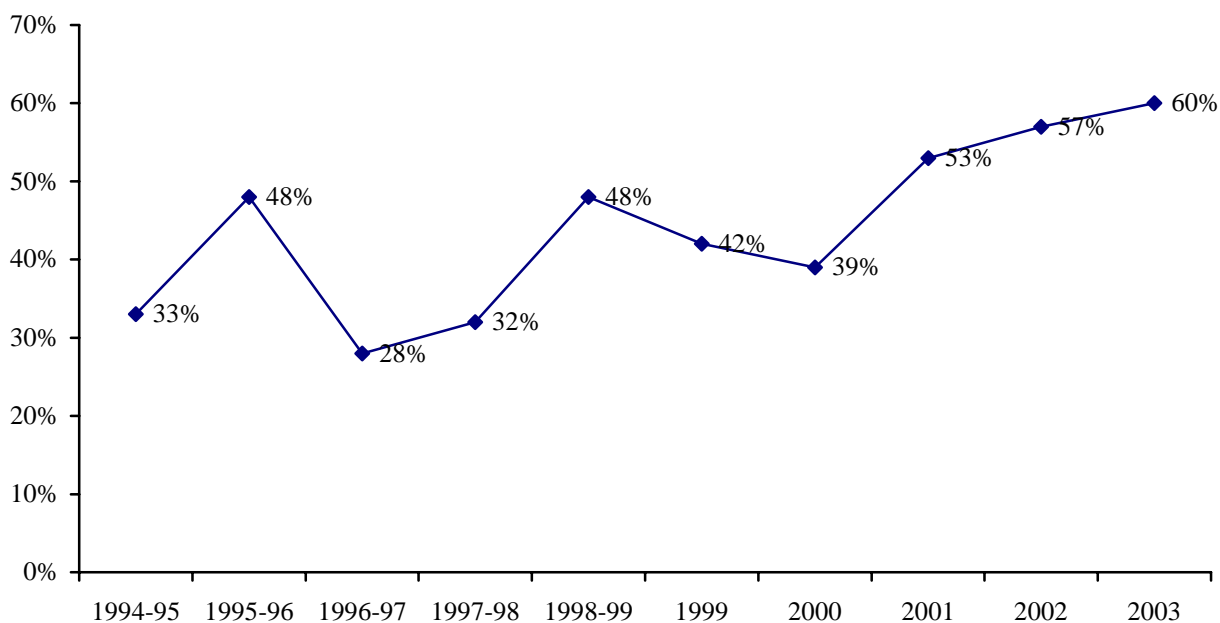


# College of Biology & Agriculture

# Summary of Sponsored Research (Grants & Contracts)

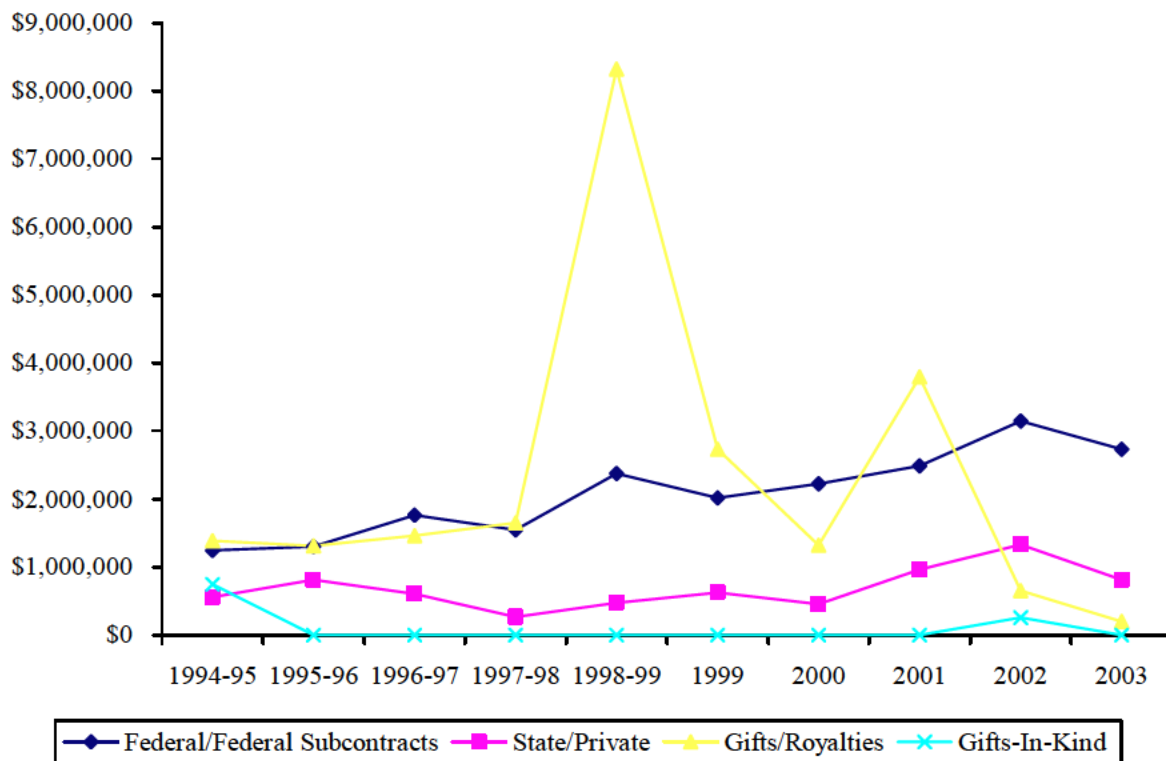
Department	# of Faculty	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Bean Museum	0	0	0	1	\$7,000
Integrative Biology	32	31	71	64	\$1,704,122
Microbiology & Molecular Biology	17	5	6	9	\$775,386
Nutrition, Dietetics & Food Science	11	4	8	10	\$245,419
Physiology & Developmental Biology	16	9	14	5	\$695,748
Plant & Animal Science	17	7	8	2	\$100,337
<b>TOTALS</b>	<b>93</b>	<b>56</b>	<b>108</b>	<b>91</b>	<b>\$3,528,012</b>

## Proposal Submission Activity



# External Research Funding (All Sources)

Year	Grants/Contracts		Gifts/Royalties	Gifts-In-Kind	Total
	Federal/Federal Subcontracts	State/Private			
1994-95	\$1,238,398	\$559,198	\$1,387,305	\$745,536	\$3,930,437
1995-96	\$1,297,925	\$810,096	\$1,312,258	\$0	\$3,420,279
1996-97	\$1,763,717	\$600,668	\$1,456,474	\$0	\$3,820,859
1997-98	\$1,547,816	\$264,232	\$1,643,295	\$0	\$3,455,343
1998-99	\$2,370,292	\$471,857	\$8,318,486	\$0	\$11,160,635
1999	\$2,010,191	\$616,711	\$2,729,011	\$0	\$5,355,913
2000	\$2,218,777	\$447,877	\$1,318,477	\$0	\$3,985,131
2001	\$2,484,780	\$958,960	\$3,796,391	\$0	\$7,240,131
2002	\$3,144,951	\$1,331,910	\$652,762	\$255,000	\$5,384,623
2003	\$2,734,614	\$805,898	\$200,259	\$0	\$3,740,771



# College of Biology and Agriculture 2003 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Title</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type</u>	<u>Amount</u>	<u>N/C</u>
<b><i>Integrative Biology</i></b>								
Anderson, Val		DOD, Dugway P.G.	LCTA Monitoring Protocol	03-12-03	12-31-03	1	\$40,766	C
Anderson, Val		DOD, Dugway P.G.	LCTA Monitoring, ITAM Project	03-12-03	12-31-03	1	\$28,268	C
Anderson, Val Jo		Forest Service	Agronomic and Cultural Care of Wildlife Plants	06-01-03	09-30-06	1	\$60,000	N
Anderson, Val Jo	w/ Roundy	MSU (BLM)	Environmentally induced dormancy in cheatgrass see and seed banking dynamics	04-25-03	11-01-04	1	\$2,475	N
Anderson, Val Jo		DOD Dugway P. G.	Dugway ITAM Project	03-01-02	12-31-03	1	\$40,416	C
Anderson, Val Jo		Dugway Proving Ground	Dugway ITAM Project	03-01-02	06-30-04	1	\$46,949	C
Anderson, Val Jo		Dugway Proving Grnd.	ITAM Project	03-01-02	12-31-04	1	\$42,930	C
Anderson, Val Jo		Dugway Proving Grnd.	Integrated Weed Management Plan	03-01-02	12-31-04	1	\$26,648	C
Anderson, Val Jo		Dugway Proving Grnd.	Integrated Weed Management Plan	03-01-02	12-31-04	1	\$30,417	C
Atwood, Duane	w/ Welsh	BLM	Illustrations of Rare Utah Plant Species	09-18-03	09-30-07	1	\$7,100	N
Atwood, Duane	w/ Welsh	BLM	Survey of Spring Flora in GSENM	09-18-03	09-30-07	1	\$7,500	N
Baumann, Richard		BLM	Insect Fauna of the East Fork of Virgin River	10-01-03	05-16-06	1	\$10,000	C
Belk, Mark		Utah DWR	Repatriation of Columbia Spotted Frog	07-01-03	06-30-06	3	\$27,580	N
Belk, Mark		Utah DWR	Seasonal Habitat of Least Chub	07-01-03	06-30-06	3	\$25,500	N
Belk, Mark		Utah DWR	Growth & Survival of Young June Sucker in Utah Lake	07-01-02	09-30-04	3	\$33,200	C
Belk, Mark	w/Peck	Utah DWR	Heritability of Morphological Variation in Utah Lake Suckers	07-01-03	06-30-05	3	\$34,650	N
Cates, Rex		Yellowstone N.P.	Analysis of Aspen Samples	07-23-03	05-01-04	1	\$5,676	C
Clement, Mark	w/ Whiting	NSF	Hexapod Phylogenomics - for the Masses	01-01-02	12-31-06	1	\$4,000	C
Crandall, Keith		NSF	Systematics & Evolution of Barnacles	03-01-03	02-29-04	1	\$97,820	N
Crandall, Keith		NSF	Systematics and Evolution of Barnacles	03-01-03	02-29-04	1	\$6,000	C
Crandall, Keith		NSF	Phylogenetic & Biogeography of Aeglidae	09-15-00	08-31-04	1	\$6,000	C
Crandall, Keith	w/ Whiting	NSF	Hexapod Phylogenomics - for the Masses	01-01-02	12-31-06	1	\$4,000	C
Crandall, Keith		Johns Hopkins (NIH)	Molecular Epidemiology of <i>N gonorrhoeae</i>	05-01-02	04-30-07	2	\$109,447	C
Crandall, Keith		Arkansas Game & Fish	Status and Genetics of <i>Procambarus ferrugineus</i>	12-01-03	09-30-04	4	\$7,000	N
Flinders, Jerran		UT Dept of Natural Res.	Forest Carnivores Occurance and Distribution	03-01-00	12-31-03	3	\$60,000	C
Flinders, Jerran		UT RM&CC	Study of Sage Grouse in Strawberry Valley	03-01-03	06-30-06	3	\$66,338	N
Flinders, Jerran		UT DWR	Forest Carnivores Occurance and Distribution	12-01-99	06-30-04	3	\$60,000	C
Flinders, Jerran		Utah DWR	Effects of Artificial Water Catchments on Wildlife	10-01-02	12-31-04	3	\$39,853	C
Flinders, Jerran		Natl. Wild Turkey Fed.	Guzzler Installation Project	10-14-03	Open	4	\$3,920	N
Johnson, Leigh	w/ Rogers	NSF	Systematic Biology & Bioinformatics Research Experiences	08-01-02	07-31-05	1	\$25,000	C
Nelson, C. Riley		NPS	Inventory of Macroinvertebrates in Timp. Cave	04-01-03	01-15-04	1	\$15,000	N
Peck, Steven		USDA	Movement of <i>Bactrocera cucurbitae</i>	09-15-01	09-23-06	1	\$50,687	C
Peck, Steven	w/ Belk	Utah DWR	Heritability of Morphological Variation in Utah Lake Suckers	07-01-03	06-30-05	3	\$34,650	N
Peck, Steven		USDA	Managing Insect Resistance to Transgenic Crops	01-01-04	08-31-07	1	\$25,000	N

# College of Biology and Agriculture 2003 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Title</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type</u>	<u>Amount</u>	<u>N/C</u>
Rader, Russell		Forest Service	Validation of Ecological Drivers in Bighorn Wetlands	08-01-03	06-01-05	1	\$23,000	N
Rogers, Duke	w/ L. Johnson	NSF	Systematic Biology & Bioinformatics Research Experiences	08-01-02	07-31-05	1	\$25,000	C
Roundy, Bruce		Forest Service	Ecological Genetics of Cheatgrass	01-01-03	831-03	1	\$7,000	C
Roundy, Bruce	w/ Anderson	MSU (BLM)	Environmentally induced dormancy in cheatgrass see and seed banking dynamics	04-25-03	11-01-04	1	\$2,475	N
Shiozawa, Dennis	w/ Evans	Utah DWR	Genetic Analysis of Cutthroat Trout Subspecies	11-01-03	06-30-04	3	\$20,000	N
Shiozawa, Dennis		CO Div. Of Wildlife	Colorado River Cutthroat Trout Genetics	09-09-03	06-30-04	4	\$24,800	N
Shiozawa, Dennis		US Fish & Wildlife	Colorado River Cutthroat Trout Genetics	09-22-03	09-30-04	1	\$2,480	N
Sites, Jack		NSF	Conservation Genetics in the Giant Amazon Turtle	09-01-99	08-31-03	1	\$6,000	C
Sites, Jack		NSF	Phylogeny of the Genus Microlophus / Edgar Benavides	06-15-03	05-31-05	1	\$11,970	N
Sites, Jack		NSF	Phylogenetic of Relationships: Squamata/ Jon Marshall	06-15-03	05-31-05	1	\$11,953	N
Sites, Jack		NSF	Resolving Squamate Phylogeny Using Genomic/Morphological Methods	01-01-04	12-31-04	1	\$134,000	N
Snell, Quinn	w/ Whiting	NSF	Hexapod Phylogenomics - for the Masses	01-01-02	12-31-06	1	\$4,000	C
St. Clair, Larry		Forest Service	Lichen Biomonitoring in Montana	06-29-00	12-31-03	1	\$7,450	C
St. Clair, Larry		Forest Service	Air Quality Biomonitoring in Sawtooth NRA, Idaho	07-16-03	12-31-03	1	\$4,000	N
St. Clair, Larry		Forest Service	Lichen-Air Quality Biomonitoring in the Spring Mtns.	10-01-03	12-31-06	1	\$5,000	N
St. Clair, Larry		Forest Service	PIXE Analysis of Dixie N. F. Lichen Samples	09-01-03	09-01-04	1	\$1,500	N
St. Clair, Larry		Colo. St. (BLM)	Effects of Fire on Biological Soil Crusts	10-01-03	12-31-04	2	\$16,714	N
Welsh, Stan	w/ Atwood	BLM	Re-establishment of Native Species in the Rattle Fire Complex	09-01-03	08-31-07	1	\$7,000	C
Welsh, Stan	w/ Atwood	BLM	Illustrations of Rare Utah Plant Species	09-18-03	09-30-07	1	\$7,100	N
Welsh, Stan	w/ Atwood	BLM	Survey of Spring Flora in GSENM	09-18-03	09-30-07	1	\$7,500	N
White, Clayton		UT DWR	Mountain Plovers in the Uintah Basin	05-01-96	09-30-03	3	\$12,500	C
Whiting, David	w/ Whiting	NSF	Hexapod Phylogenomics - for the Masses	01-01-02	12-31-06	1	\$4,000	C
Whiting, Michael		NSF	Phylogeny of the Siphonaptera of the World	03-15-00	02-28-05	1	\$80,230	C
Whiting, Michael		NSF	Phylogeny of the Siphonaptera of the World	03-15-00	02-28-05	1	\$12,000	C
Whiting, Michael		NSF	RET Supplement: Phylogeny of the Siphonaptera	03-15-00	02-28-05	1	\$15,340	N
Whiting, Michael		NSF	Hexapod Phylogenomics - for the Masses	01-01-02	12-31-06	1	\$4,000	C
Whiting, Michael		U of Georgia (NSF)	Building Taxonomic Expertise for Cucujoidea	01-01-04	12-31-05	2	\$87,967	N
Whiting, Michael		NSF	Phylogeny of the Siphonaptera of the World	03-15-00	02-28-06	1	\$58,853	C
Wood, Stephen		Forest Service	Bark Beetle Monograph	08-19-99	09-30-04	1	\$20,000	C
Woolstenhulme, Loreen		Forest Service	Ecology, Reproductive Biology and Pop. Genetics of <i>Draba burkii</i>	05-30-00	06-01-04	1	\$8,000	C
<b><i>Microbiology &amp; Molecular Biology</i></b>								
Bridgewater, Laura		NIH	Chondrocyte-specific transcriptional Regulation	08-01-02	07-31-04	1	\$177,025	C

# College of Biology and Agriculture 2003 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Title</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type</u>	<u>Amount</u>	<u>N/C</u>
Crandall, Keith		NPS	Microbiological survey of Timpanogos Cave National Monument	06-10-03	open	1	\$11,166	N
Crandall, Keith		NIH	Phylogenetics and Recombination	07-01-02	06-30-04	1	\$131,370	C
Evans, Paul	w/ Shiozawa	Utah DWR	Genetic Analysis of Cutthroat Trout Subspecies	11-01-03	06-30-04	3	\$20,000	N
McCleary, William		NIH	Genetic and Biochemical Studies of PhoB Activation	08-01-03	07-31-06	1	\$150,000	N
Murray, Byron		Lipidviro Tech	Targeting Virus' Using LVT Drug-delivery Process	10-08-03	10-07-04	4	\$75,488	N
Neilsen, Brent	w/ Coleman	NIH	Mitochondrial DNA Recombination Proteins	02-01-03	01-31-05	1	\$70,337	N
Robison, Richard		DOE	Create an Archive for CDC Select Agents	01-01-00	12-31-03	1	\$125,000	C
Robison, Richard		Environmental Defense Tech.	Sporicidal Activity of Antimicrobial Treated Fiber Materials	04-01-02	open	4	\$15,000	C
<b>Monte L. Bean Museum</b>								
Atwood, Duane	w/ Welsh	BLM	Re-establishment of Native Species in the Rattle Fire Complex	09-01-03	08-31-07	1	\$7,000	C
<b>Nutrition, Dietetics &amp; Food Science</b>								
Ogden, Lynn		Basic American Foods	Consumer Taste Preferences	11-01-02	10-31-03	4	\$10,080	C
Ogden, Lynn		Basic Am. Foods	Consumer Tastes Preferences	11-01-02	10-31-03	4	\$11,040	C
Ogden, Lynn		BAF	Consumer Taste Preferences	11-01-90	10-31-03	4	\$7,200	C
Ogden, Lynn		BAF	Consumer Taste Preferences	11-01-02	10-31-03	4	\$6,700	C
Ogden, Lynn		BAF	Consumer Preferences in Foods	11-01-02	10-30-03	4	\$5,300	C
Ogden, Lynn		LDS Welfare Services	Sensory Tests	12-30-92	Open	4	\$8,500	C
Ogden, Lynn		BAF	Consumer Taste Preferences	11-01-03	10-31-04	4	\$17,400	C
Pike, Oscar		LDS Welfare Services	Quality Food Labs	01-01-03	12-31-03	4	\$149,500	C
Steele, Frost		Moroni Feed	Lethality Determination for <i>Listeria</i>	10-16-03	Open	4	\$3,699	C
Steele, Frost		Deseret Meats	Pathogen Analysis for Meat Products	03-01-01	open	4	\$26,000	C
<b>Plant &amp; Animal Sciences</b>								
Allen, Phil		Forest Service	Conservation and Restoration of <i>Lepidium papilliferum</i>	08-30-03	08-30-04	1	\$30,000	N
Coleman, Craig	w/ Neilsen	NIH	Mitochondrial DNA Recombination Proteins	02-01-03	01-31-05	1	\$70,337	N
<b>Physiology &amp; Developmental Biology</b>								
Busath, David		Florida State U. (NIH)	Structure & Function of Gramicidin, M2 and KcsA Channels	08-01-00	02-28-04	2	\$94,692	C
Stark, Michael		NIH	Fz-7 and FREK in Early Trigeminal Placode Development	02-06-02	01-31-04	1	\$73,000	C
Sudweeks, Sterling		NIH	Neuronal Nicotinic ACh Receptors and Alzheimer's	09-30-02	08-31-04	1	\$105,336	C
Winder, William		NIH	Physiology of Malonyl-CoA in Muscle during Exercise	05-01-92	08-31-04	1	\$205,860	C
Woodbury, Dixon		NIH	Molecular Reconstitution of Neurotransmitter Release	06-01-03	05-31-04	1	\$216,860	C

Type: 1=Federal; 2=Federal Subcontract; 3=State; 4=Private

N/C: N=New; C=Combined

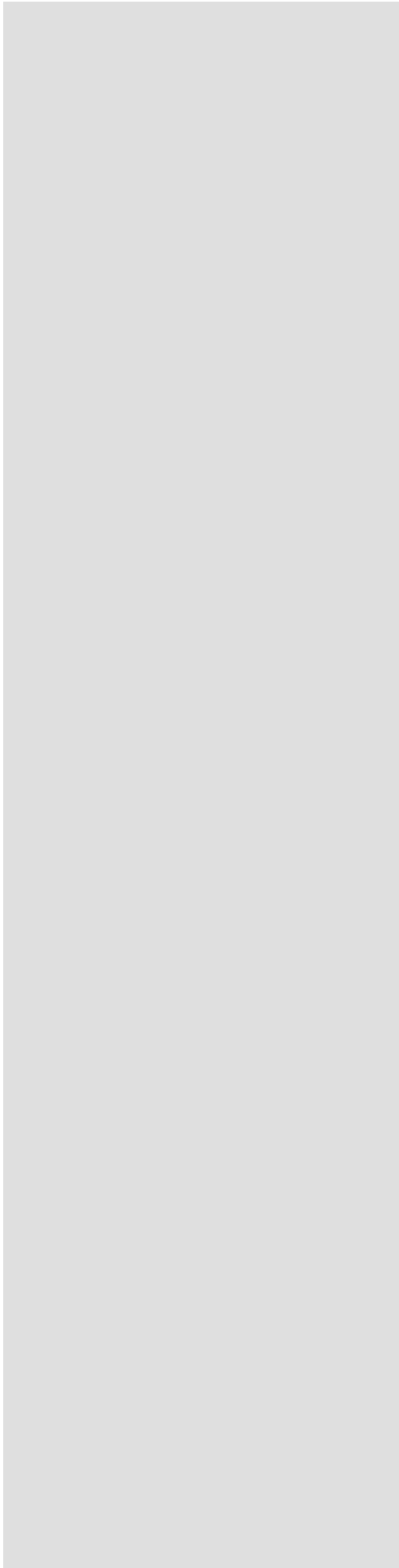


Department Totals	
Integrative Biology	\$1,716,622
Microbiology & Molecular Biology	\$775,386
Nutrition, Dietetics & Food Science	\$245,419
Physiology & Developmental Biology	\$695,748
Plant & Animal Science	\$100,337
Bean Museum	\$7,000
<b><i>College Total:</i></b>	<hr/> \$3,540,512

# Biology & Agriculture

## Source Breakdown of Grants and Contracts

Sponsor	Number Awarded	Total Amount
<b>Federal</b>		
BLM	4	\$53,200
DOD	3	\$109,450
DOE	1	\$125,000
Dugway Proving Grounds, Army	4	\$146,944
MSU	1	\$4,950
NIH	8	\$1,200,125
NPS	2	\$26,166
NSF	13	\$497,666
USDA	2	\$75,687
US Fish & Wildlife	1	\$2,480
US Forest Service	10	\$165,950
Yellowstone N.P.	1	\$5,676
<b>Total</b>	50	\$2,413,294
<b>Subcontracts</b>		
Colo. St. (BLM)	1	\$16,714
Florida State (NIH)	1	\$94,692
Johns Hopkins (NIH)	1	\$109,447
U of Georgia (NSF)	1	\$87,967
<b>Total</b>	4	\$308,820
<b>State</b>		
UT Dept. of Natural Res.	1	\$60,000
UT DWR	8	\$307,933
UT RM&CC	1	\$66,338
<b>Total</b>	10	\$434,271
<b>Private</b>		
Arkansas Game & Fish	1	\$7,000
BAF	6	\$57,720
CO Div of Wildlife	1	\$24,800
Deseret Meats	1	\$26,000
Environmental Defense Tech.	1	\$15,000
Lipidviro Tech	1	\$75,488
LDS Welfare Services	2	\$158,000
Moroni Feed	1	\$3,699
Natl. Wild Turkey Fed.	1	\$3,920
<b>Total</b>	15	\$371,627

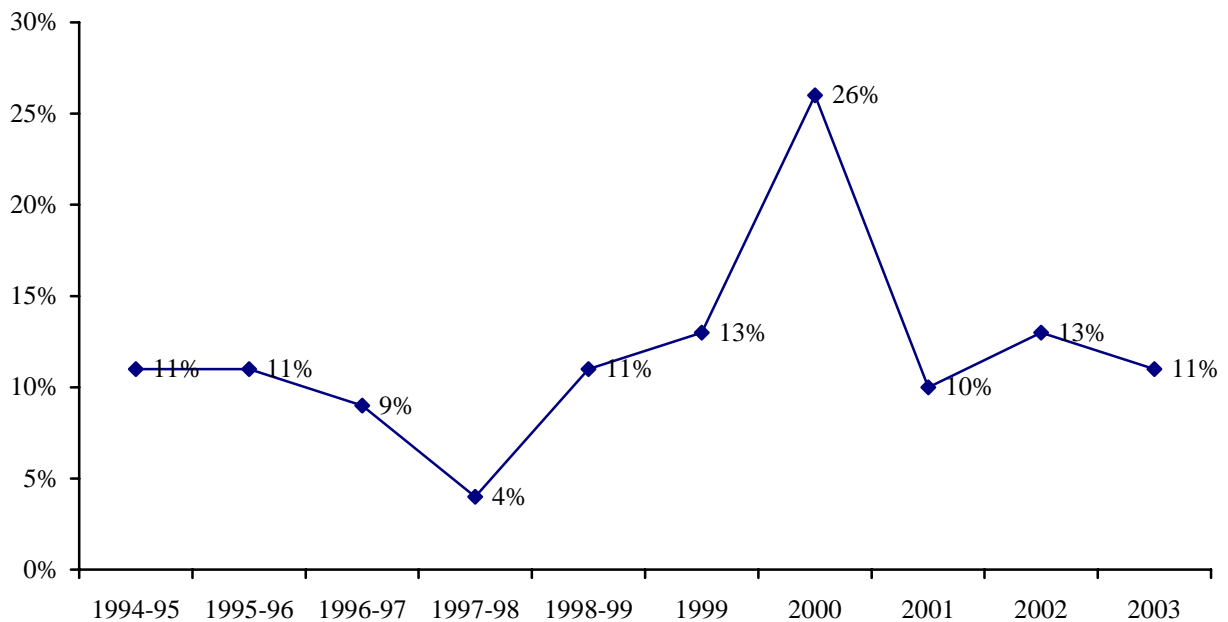


David O.  
McKay  
School  
of Education

# Summary of Sponsored Research (Grants & Contracts)

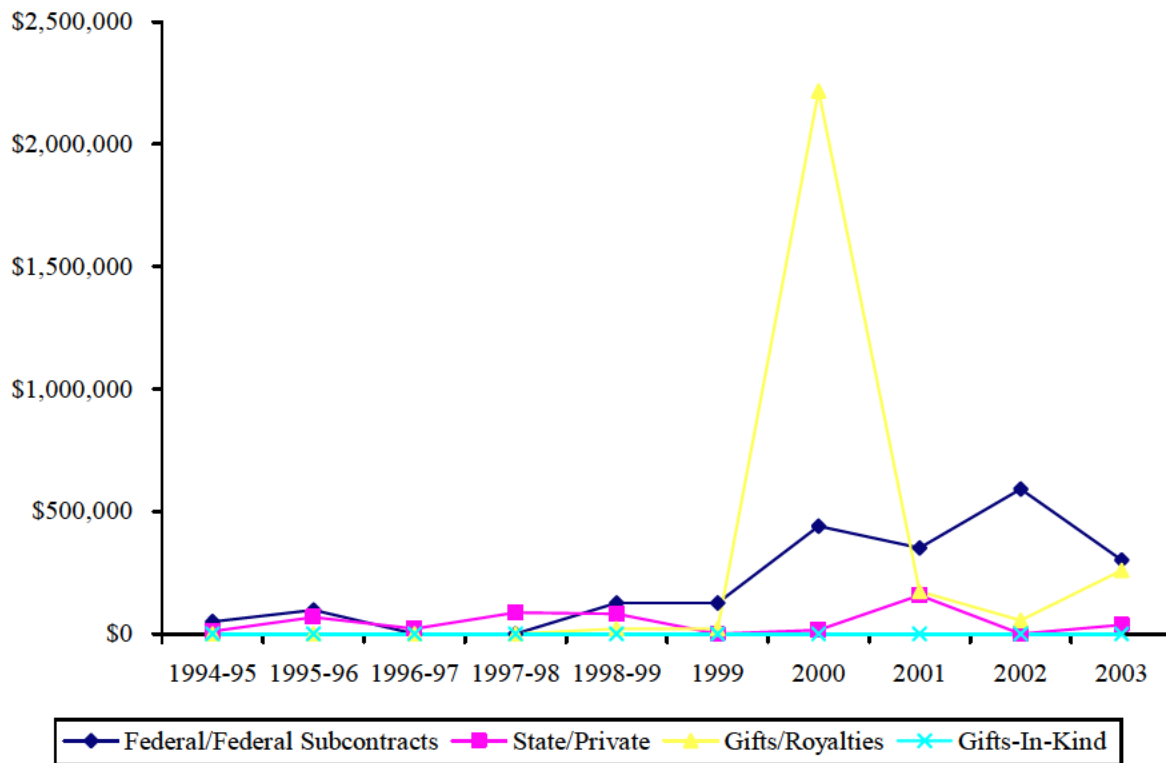
Department	# of Faculty	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Audiology & Speech Language Path	8	3	3	0	\$0
Continuing Education	0	0	0	0	\$0
Counseling Psych & Special Educ	13	2	2	0	\$0
Educ Leadership & Foundations	13	0	0	0	\$0
Instructional Psych & Tech	15	1	1	0	\$0
Teacher Education	25	2	2	2	\$337,330
<i>TOTALS</i>	74	8	8	2	\$337,330

# Proposal Submission Activity



# External Research Funding (All Sources)

Year	Grants/Contracts		Gifts/Royalties	Gifts-In-Kind	Total
	Federal/Federal Subcontracts	State/Private			
1994-95	\$49,728	\$10,397	\$0	\$0	\$60,125
1995-96	\$96,306	\$67,858	\$0	\$0	\$164,164
1996-97	\$0	\$20,000	\$0	\$0	\$20,000
1997-98	\$0	\$85,810	\$0	\$0	\$85,810
1998-99	\$126,400	\$81,400	\$20,000	\$0	\$227,800
1999	\$126,400	\$0	\$20,000	\$0	\$146,400
2000	\$439,960	\$14,400	\$2,217,302	\$0	\$2,671,662
2001	\$349,123	\$157,560	\$173,750	\$0	\$680,433
2002	\$590,209	\$0	\$53,618	\$0	\$643,827
2003	\$300,000	\$37,330	\$260,025	\$0	\$597,355



# David O. McKay School of Education 2003 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Title</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type</u>	<u>Amount</u>	<u>N/ C</u>
<i>Teacher Education</i>								
Baird, Hugh	Sudweeks	UT State Board of Regents	Assessment Training for School Personnel	04-01-03	09-30-03	3	\$37,330	C
Teemant, Annela		US Dept of Education	English Language Acquisition	09-01-03	08-31-04	1	\$300,000	C

Type: 1=Federal; 2=Federal Subcontract; 3=State; 4=Private

N/C: N=New; C=Continuing

Department Totals

Audiology & Speech Language Pathology	\$0
Continuing Education	\$0
Counseling Psychology & Special Education	\$0
Educational Leadership & Foundations	\$0
Instructional Psychology & Technology	\$0
Teacher Education	\$337,330

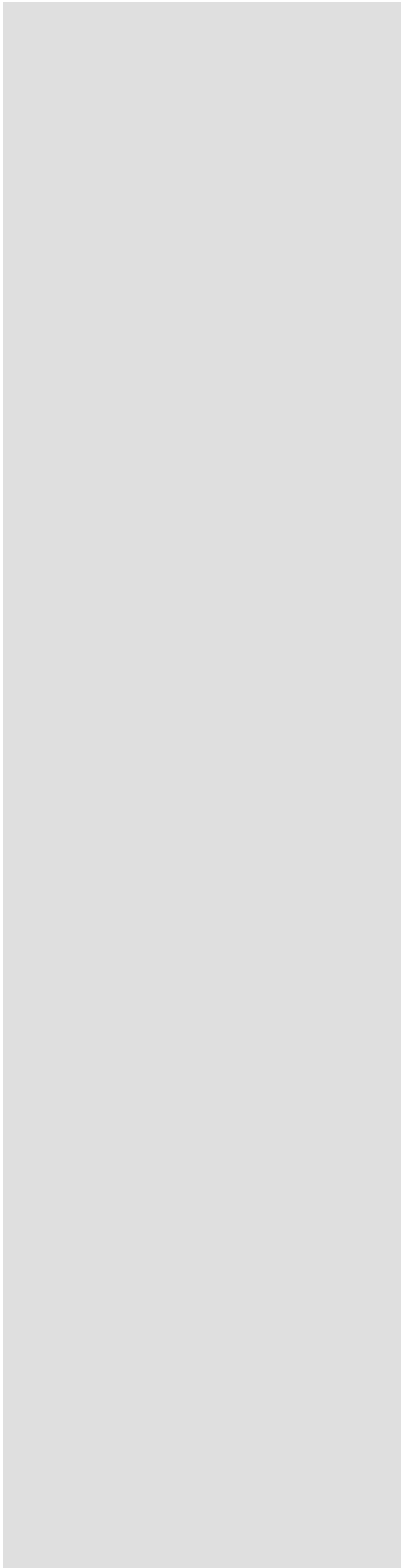
***College Total:***

\$337,330

# Education

## Source Breakdown of Grants and Contracts

<u>Sponsor</u>	<u>Number Awarded</u>	<u>Total Amount</u>
<b>Federal</b>		
US Dept of Education	1	\$300,000
<i>Total</i>		\$300,000
<b>Subcontracts</b>		
None		
<i>Total</i>		
<b>State</b>		
UT State Board of Regents	1	\$37,330
<i>Total</i>		\$37,330
<b>Private</b>		
None		
<i>Total</i>		



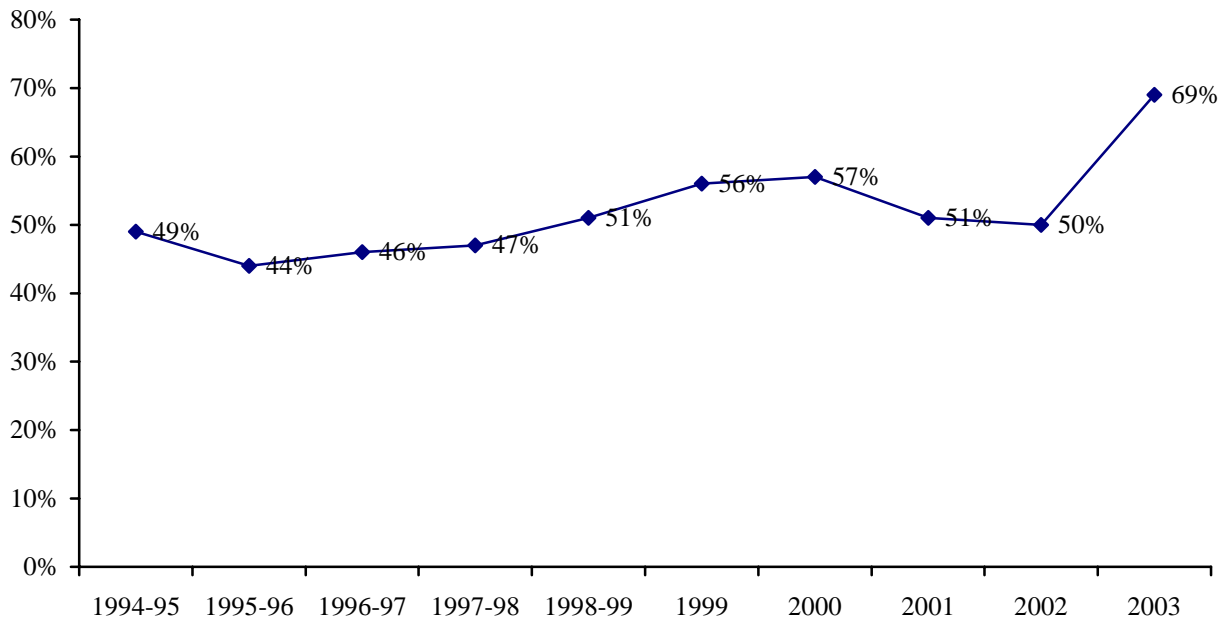
# College of Engineering & Technology



# Summary of Sponsored Research (Grants & Contracts)

Department	# of Faculty	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Chemical Engineering	13	8	12	23	\$1,655,950
Civil & Environmental Engineering	20	14	47	63	\$1,951,061
Electrical & Computer Engineering	26	26	79	25	\$1,345,687
Mechanical Engineering	22	23	61	41	\$2,604,768
School of Technology	29	5	5	4	\$84,000
<b>TOTALS</b>	110	76	204	156	\$7,641,466

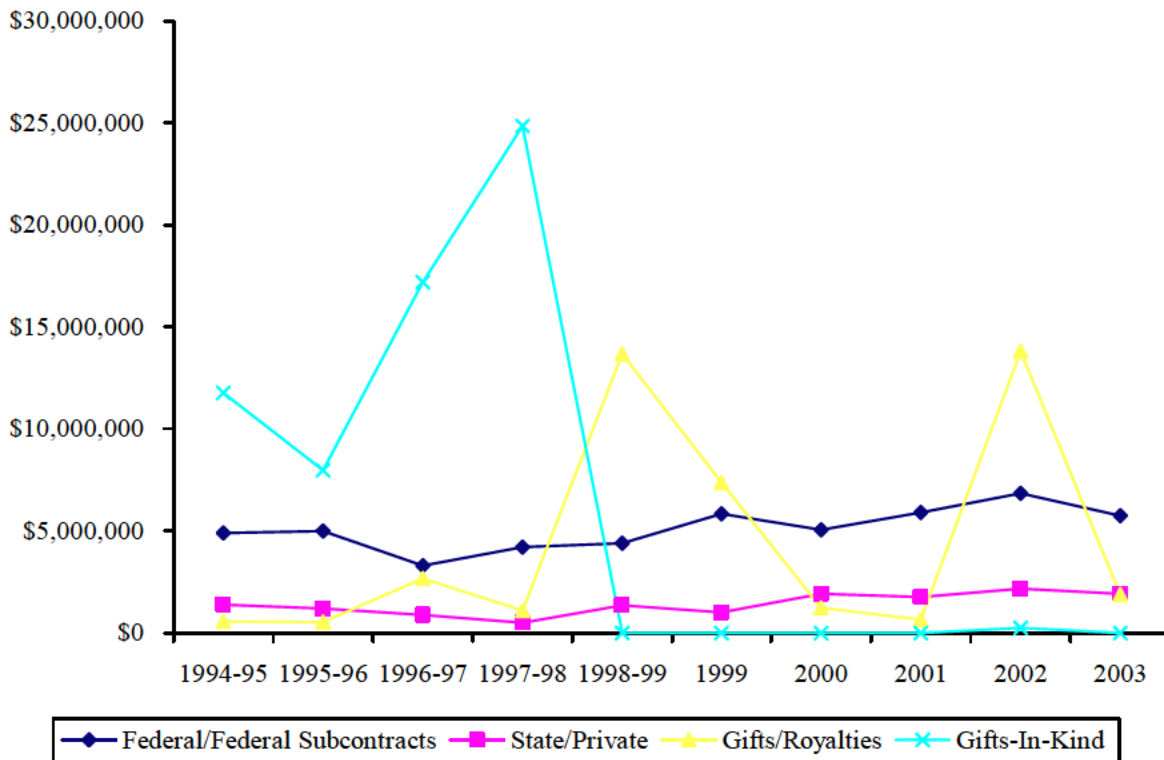
## Proposal Submission Activity



# External Research Funding (All Sources)

Year	Grants/Contracts		Gifts/Royalties	Gifts-In-Kind	Total
	Federal/Federal Subcontracts	State/Private			
1994-95	\$4,905,794	\$1,389,324	\$564,416	\$11,753,188	\$18,612,722
1995-96	\$5,001,683	\$1,177,214	\$532,636	\$7,973,888	\$14,685,421
1996-97	\$3,298,777	\$882,296	\$2,669,786	\$17,197,733	\$24,048,592
1997-98	\$4,212,196	\$509,340	\$1,087,926	\$24,867,922	\$30,677,384
1998-99	\$4,400,195	\$1,334,014	\$13,687,951	\$0	\$19,422,160
1999	\$5,837,930	\$1,018,434	\$7,362,951	\$0	\$14,218,628
2000	\$5,058,375	\$1,910,470	\$1,218,057	\$0	\$8,186,902
2001	\$5,885,021	\$1,755,752	\$649,494	\$0	\$8,290,267
2002	\$6,826,798	\$2,149,658	\$13,808,841*	\$244,295	\$23,029,592
2003	\$5,731,605	\$1,909,861	\$1,876,600	\$0	\$9,518,066

\*Gift total does not include \$313 million PACE donation to College of Engineering and Technology



# College of Engineering & Technology 2003 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Title</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type</u>	<u>Amount</u>	<u>N/C</u>
<b><i>Chemical Engineering</i></b>								
Bartholomew, Calvin		U of Wisc. (DOE)	Advanced Design of Cobalt Fischer-Tropsch Catalysts	09-30-03	09-29-04	2	\$107,540	N
Baxter, Larry		Sandia Natl. Labs	Black Liquor Combustion	01-01-01	03-31-04	1	\$30,000	C
Baxter, Larry		DOE Idaho	Improved Recovery Boiler Performance	04-15-02	06-14-04	1	\$570,000	C
Baxter, Larry		Sandia Natl. Labs	Black Liquor Combustion	01-01-01	03-31-04	1	\$47,015	C
Baxter, Larry		U of Utah (DOE)	Low-temperature Black Liquor Gasification	09-30-02	09-30-04	2	\$25,000	C
Baxter, Larry		REI	SCR Deactivation by Alkali and Alkaline Compounds	07-31-01	09-30-04	2	\$28,000	C
Beckstead, Merrill		U of Utah (LLNL, DOE)	C-SAFE	12-16-02	09-30-03	2	\$5,000	N
Beckstead, Merrill		Univ. of UT (DOE)	C-SAFE	12-16-02	09-30-03	2	\$37,500	C
Beckstead, Merrill		ERC (AFOSR)	Modeling Effects of Electrical Energy on Solid Propellant Combustion	05-30-02	12-31-03	2	\$50,000	C
Fletcher, Thomas		Sandia	Improved Combustion Physics for Wildfire Prediction Model	10-01-03	09-30-04	1	\$25,500	N
Fletcher, Thomas		Sandia Natl. Lab	Polymeric Foam Decomposition	06-01-03	08-31-05	2	\$30,299	C
Harb, John		NASA	Nanomaterials & Structures for Nanno & Micropower Applications	01-15-02	01-14-05	1	\$40,000	C
Harb, John	w/ Rowley	NSF	A Computational Chemistry, Molecular Dynamics & Experimental Study	07-01-02	12-31-03	1	\$4,291	C
Hecker, William		Bechtel ID (DOE)	Oil Shale Devolatilization and Calcination	02-17-03	09-30-03	2	\$49,617	N
Oscarson, John	w/ Rowley	AICHE	DIPPR : Evaluated Process Database	08-01-97	12-31-03	4	\$95,000	C
Oscarson, John	w/ Izatt	ARO	Modeling and Thermodynamic Study of Selected Aqueo.	06-01-01	05-31-04	1	\$32,500	C
Pitt, William		Philips Oral Healthcare	Influence of Gas Bubbles upon Removal of Bilfilm	09-01-01	12-31-03	4	\$78,588	C
Rowley, Richard		AICHE	DIPPR : Evaluated Process Database	08-01-97	12-31-03	4	\$95,000	C
Rowley, Richard		ACS/PRF	Molecular Simulation of Equilibrium	01-01-03	08-31-05	4	\$40,000	N
Rowley, Richard		NSF	A Computational Chemistry, Molecular Dynamics & Experimental Study	07-01-02	12-31-03	1	\$4,291	C
Warnick, Karl	w/ Lee	NIH	Electromobility Focusing for Separation of Proteins	02-01-03	01-31-04	1	\$135,510	N
Wilding, Vincent	w/ Rowley	AICHE	DIPPR : Evaluated Process Database	08-01-97	12-31-03	4	\$95,000	C
Wilding, Vincent	w/ Fletcher	Sandia Natl. Lab	Polymeric Foam Decomposition	06-01-03	08-31-05	2	\$30,299	C
<b><i>Civil &amp; Environmental Engineering</i></b>								
Benzley, Steven		Sandia	Hexahedral Finite Element Mesh Generation	11-13-89	09-30-03	1	\$11,955	C
Benzley, Steven		Sandia Natl. Lab	Mesh Refinement Projects	10-09-03	10-30-04	2	\$150,000	N
Downs, Wayne		INEEL	General Research & Student Support	05-31-01	open	2	\$4,500	C
Downs, Wayne		INEEL	General Student Research	05-31-01	open	1	\$4,875	C
Downs, Wayne		INEEL	General student Support	05-31-01	Open	2	\$4,608	C
Guthrie, Spencer		UDOT	Bridge Deck Strategy	04-04-03	06-30-04	3	\$45,362	N
Guthrie, Spencer		UDOT	Preventative Deck Joint & Surface Treatment Strategies	10-01-03	02-28-05	3	\$69,815	N
Jensen, David		UDOT	Loading and Rate Effects on Axial Pile Capacity	10-01-02	06-30-04	3	\$60,000	N
Jensen, David		Utah State COE	Advanced Structural Composites	07-01-03	06-30-04	3	\$54,000	C
Jensen, David	w/ Lucas	Wasatch Valley Tech.	Behavior of Trap-lock Connectors on Carbon Tubing	07-01-03	07-01-05	2	\$78,207	N

# College of Engineering & Technology 2003 Awards

Jones, Norm		Army WES	Hydrosystems Modeling	09-01-02	10-31-03	1	\$28,081	C
Jones, Norman		Army WES	Hydrosystems Modeling	09-01-02	10-31-03	1	\$25,000	C
Jones, Norman		Army WES	Hydrosystems Modeling	09-01-02	10-31-03	1	\$6,500	C
Jones, Norman		Army WES	Hydrosystems Modeling #2	09-01-02	10-31-03	1	\$55,667	C
Jones, Norman		Army WES	Hydrosystems Modeling #2	09-01-02	10-31-03	1	\$10,667	C
Jones, Norman		Army WES	Hydrosystems Modeling #3	09-01-02	10-31-03	1	\$19,600	C
Jones, Norman		Army WES	Hydrosystems Modeling #3	09-01-02	10-31-03	1	\$53,067	C
Jones, Norman		Army WES	Hydrosystems Modeling #4	09-01-02	10-31-03	1	\$36,763	C
Jones, Norman		Army WES	Hydrosystems Modeling #5	09-01-02	10-31-03	1	\$10,500	C
Jones, Norman		Army WES	Hydrosystems Modeling #6	09-01-02	10-31-03	1	\$12,878	C
Jones, Norman		Army WES	Hydrosystems Modeling #7	09-01-02	10-31-03	1	\$35,577	C
Jones, Norman		Army WES	Hydrosystems Modeling #8	09-01-02	10-31-03	1	\$7,833	C
Jones, Norman		Army WES	Hydrosystems Modeling #9	09-01-02	10-31-03	1	\$8,333	C
Lucas, Warren	w/ Jensen	Utah State COE	Advanced Structural Composites	07-01-03	06-30-04	3	\$54,000	C
Lucas, Warren		CKR Eng. (JA Jones)	experimental Evaluation of Seismic Anchors in Precast Concrete	07-01-03	10-31-03	4	\$12,000	N
Lucas, Warren		Wasatch Valley Tech.	Behavior of Trap-lock Connectors on Carbon Tubing	07-01-03	07-01-05	2	\$78,207	N
Miller, Woodruff	w/ Zundel	UDOT	Bridge Scour Countermeasures Phase I	05-19-03	05-31-03	3	\$16,580	N
Nelson, James	w/ Jones	Army WES	Hydrosystems Modeling	09-01-02	10-31-03	1	\$25,000	C
Nelson, James	w/ Jones	Army WES	Hydrosystems Modeling	09-01-02	10-31-03	1	\$6,500	C
Nelson, James	w/ Jones	Army WES	Hydrosystems Modeling #2	09-01-02	10-31-03	1	\$55,667	C
Nelson, James	w/ Jones	Army WES	Hydrosystems Modeling #2	09-01-02	10-31-03	1	\$10,667	C
Nelson, James	w/ Jones	Army WES	Hydrosystems Modeling #3	09-01-02	10-31-03	1	\$19,600	C
Nelson, James	w/ Jones	Army WES	Hydrosystems Modeling #3	09-01-02	10-31-03	1	\$53,067	C
Nelson, James	w/ Jones	Army WES	Hydrosystems Modeling #4	09-01-02	10-31-03	1	\$36,763	C
Nelson, James	w/ Jones	Army WES	Hydrosystems Modeling	09-01-02	10-31-03	1	\$28,081	C
Nelson, James		Orange County, CA	Computer Tools to Automate Orange Co. Hydrologic Design	07-01-03	06-30-04	4	\$40,350	N
Nelson, James		BOR	Reservoir and River Geometry	07-23-02	09-30-03	1	\$5,000	C
Nelson, James		BOR	Reservoir and River Geometry	08-12-03	04-30-04	1	\$24,000	N
Nelson, James	w/ Jones	Army WES	Hydrosystems Modeling #5	09-01-02	10-31-03	1	\$10,500	C
Nelson, James	w/ Jones	Army WES	Hydrosystems Modeling #6	09-01-02	10-31-03	1	\$12,878	C
Nelson, James	w/ Jones	Army WES	Hydrosystems Modeling #7	09-01-02	10-31-03	1	\$35,577	C
Nelson, James	w/ Jones	Army WES	Hydrosystems Modeling #8	09-01-02	10-31-03	1	\$7,833	C
Nelson, James	w/ Jones	Army WES	Hydrosystems Modeling #9	09-01-02	10-31-03	1	\$8,333	C
Nelson, James		Enviro Modeling Sys	LA County Hydrology	10-07-03	01-15-04	4	\$11,550	N
Rollins, Kyle		UDOT	Loading and Rate Effects on Axial Pile Capacity	10-01-02	06-30-04	3	\$90,000	N
Saito, Mitsuru		UDOT	Evaluation of UDOT's Traffic and Safety Initiatives	02-15-03	02-15-05	3	\$83,000	N
Saito, Mitsuru		UDOT	Work Zone speed Control Study	06-01-02	06-30-03	3	\$2,880	C
Saito, Mitsuru		UDOT	Development of User Cost Estimation Procedures	12-01-03	04-30-05	3	\$35,000	N
Youd, Leslie		NSF	NEES: Development of a Biaxial Multiple ShakeTable	10-01-02	09-30-04	1	\$67,200	C

# College of Engineering & Technology 2003 Awards

Zundel, Alan	w/ Jones	Army WES	Hydrosystems Modeling	09-01-02	10-31-03	1	\$25,000	C
Zundel, Alan	w/ Jones	Army WES	Hydrosystems Modeling	09-01-02	10-31-03	1	\$6,500	C
Zundel, Alan	w/ Jones	Army WES	Hydrosystems Modeling #2	09-01-02	10-31-03	1	\$55,667	C
Zundel, Alan	w/ Jones	Army WES	Hydrosystems Modeling #2	09-01-02	10-31-03	1	\$10,667	C
Zundel, Alan	w/ Jones	Army WES	Hydrosystems Modeling #3	09-01-02	10-31-03	1	\$19,600	C
Zundel, Alan	w/ Jones	Army WES	Hydrosystems Modeling #3	09-01-02	10-31-03	1	\$53,067	C
Zundel, Alan	w/ Jones	Army WES	Hydrosystems Modeling #4	09-01-02	10-31-03	1	\$36,763	C
Zundel, Alan		UDOT	Bridge Scour Countermeasures Phase I	05-19-03	05-31-03	3	\$16,580	N
Zundel, Alan	w/ Jones	Army WES	Hydrosystems Modeling	09-01-02	10-31-03	1	\$28,081	C
Zundel, Alan	w/ Jones	Army WES	Hydrosystems Modeling #5	09-01-02	10-31-03	1	\$10,500	C
Zundel, Alan	w/ Jones	Army WES	Hydrosystems Modeling #6	09-01-02	10-31-03	1	\$12,878	C
Zundel, Alan	w/ Jones	Army WES	Hydrosystems Modeling #7	09-01-02	10-31-03	1	\$35,577	C
Zundel, Alan	w/ Jones	Army WES	Hydrosystems Modeling #8	09-01-02	10-31-03	1	\$7,833	C
Zundel, Alan	w/ Jones	Army WES	Hydrosystems Modeling #9	09-01-02	10-31-03	1	\$8,333	C
<b><i>Electrical &amp; Computer Engineering</i></b>								
Beard, Randal		AFOSR	Autopilot System for BATCAM	05-27-03	open	1	\$19,125	N
Beard, Randal		Air Force	Navigation & Control for Autonomous Micro Vehicles	08-13-03	08-31-04	1	\$34,875	N
Hutchings, Brad		Sandia National Labs	Fast Fourier Transform, Best approach for Implementation on FPGA's	01-27-03	01-31-04	1	\$89,994	N
Hutchings, Brad		Sandia Natl. Labs	FBGA Development Board Analysis	01-27-03	12-31-04	1	\$89,994	C
Jeffs, Brian		Army	Experimental Analysis of Impairments to RFI Mitigation	03-21-03	03-20-04	1	\$97,530	N
Jensen, Michael	w/ Rice	Edwards AFB	Space-time Coding for Aeronautical Telemetry	05-01-02	04-30-04	1	\$23,924	C
Jensen, Michael		Edwards AFB	Differential Space Time Coding for Aeronautical Telemetry	05-01-03	04-30-04	1	\$49,990	N
Jensen, Michael	w/Warnick	JPL	Improvement of the JASON-1 Altimeter	08-27-98	12-31-03	2	\$75,358	C
Jensen, Michael	w/ Swindlehurst	NSF	Multi-user, Multi-antenna Networks	07-15-03	06-30-04	1	\$39,390	N
Lee, DJ		NIH	Shape Analysis Methods for Content Based X-Ray Images	09-15-03	09-15-04	1	\$70,000	N
Long, David		JPL (NASA)	Hydors Resolution Enhancement Feasibility	07-03-03	01-31-04	2	\$9,999	N
Long, David		Oregon State (NASA)	Near-surface Seawind Modeling	09-15-95	12-31-04	2	\$199,000	C
Long, David		NOAA	Operational Utilization of High Resolution Ocean Surface Wind Vectors	07-01-03	06-30-04	1	\$78,476	N
McLain, Timothy	w/ Beard	AFOSR	Autopilot System for BATCAM	05-27-03	open	1	\$19,125	N
McLain, Timothy	w/ Beard	Air Force	Navigation & Control for Autonomous Micro Vehicles	08-13-03	08-31-04	1	\$34,875	N
Oliphant, Travis		Cornell (NASA)	Astostatistical Tools in Python	05-01-02	04-30-04	1	\$11,248	C
Petrie, Craig		Intel Corp.	High Resolution Delta Sigma Analog to Digital Converter	05-30-02	open	4	\$53,300	C
Rice, Michael		Edwards AFB	Space-time Coding for Aeronautical Telemetry	05-01-02	04-30-04	1	\$23,924	C
Rice, Michael	w/ Jensen	Edwards AFB	Differential Space Time Coding for Aeronautical Telemetry	05-01-03	04-30-04	1	\$49,990	N
Rice, Michael	w/ Swindlehurst	NSF	Multi-user, Multi-antenna Networks	07-15-03	06-30-04	1	\$39,390	N
Swindlehurst, Lee		NSF	Multi-user, Multi-antenna Networks	07-15-03	06-30-04	1	\$39,390	N
Warnick, Karl		JPL	Improvement of the JASON-1 Altimeter	08-27-98	12-31-03	2	\$75,358	C

# College of Engineering & Technology 2003 Awards

Wirthlin, Michael		Los Alamos Natl. Lab	Improving the Reliability of FPGA Design	09-01-02	12-31-03	1	\$71,000	C
Wirthlin, Michael		USC (NASA)	Computer Aided Design Infrastructure for FPGA Design	06-01-03	08-31-03	2	\$30,260	N
Wirthlin, Michael		USC (NASA)	Computer Aided Design Infrastructure	06-01-03	05-14-06	2	\$20,174	C
<b><i>Mechanical Engineering</i></b>								
Adams, Brent		ARO	Microstructure Sensitive Design	06-01-01	12-31-03	1	\$100,000	C
Adams, Brent	w/ Nelson	ONR	High Energy Weldments Via the Friction Stir Process	05-01-03	04-30-04	1	\$233,750	N
Adams, Brent		Carnegie Mellon (NSF)	MSREC Project	09-01-00	04-28-04	2	\$72,818	C
Adams, Brent		ARO	Microstructure Sensitive Designs	06-01-01	05-31-04	1	\$32,000	C
Beard, Randal	w/ McLain	NASA	Automated Landing of an Unmanned Air Vehicle	04-01-03	03-31-06	1	\$3,500	C
Beard, Randal	w/ McLain	NASA	Automated Landing of an Unmanned Air Vehicle	04-01-03	03-31-06	1	\$10,932	C
Beard, Randy	w/ McLain	NASA	Automated Landing of an Unmanned Air Vehicle	04-01-03	03-31-06	1	\$25,828	N
Beard, Randy	w/ McLain	AFOSR	Coordinated Control of Unmanned Air Vehicles	01-01-01	12-31-03	1	\$6,855	C
Blotter, Jonathan	w/ Lieshman	LDS Church	Reinment of Conference Center Acoustics	07-01-02	04-30-03	4	\$9,626	C
Bons, Jeffrey		AFOSR	Integrated Flow Control Devices for Low Pressure Turbines	01-03-03	12-31-03	1	\$47,933	N
Bons, Jeffrey		AFOSR	Visualization of Flow Control Devices	05-01-03	04-30-04	1	\$117,178	N
Bons, Jeffrey		Clemson (DOE)	Turbine Surface Degradation	06-01-02	05-31-04	2	\$189,270	C
Bons, Jeffrey		AFOSR	Integrated Flow Control Devices	01-01-04	12-31-04	1	\$55,884	N
Howell, Larry	w/ Magleby	Taylormade-Adidas	Development and Testing of Innovative Golf Club Heads	07-15-03	09-30-04	4	\$62,025	C
Howell, Larry		Sandia Natl. Labs	Compliant Strong Link	12-15-03	08-31-04	1	\$60,000	N
Jensen, C Greg		Pratt & Whitney	Parametric Tool Design	02-14-03	open	4	\$40,000	N
Jensen, C Greg	w/ Red	Utah State COE	Direct Machining and Controls	07-01-03	06-30-04	3	\$61,000	C
Jensen, C Gregory		Pratt & Whitney	Integration of Turbine Hot Gas Path Part Design & Analysis	09-01-03	04-30-04	4	\$50,000	N
Jensen, C Gregory		Pratt & Whitney	Airfoil Multidisciplinary Optimization Task 11	09-01-02	12-31-06	4	\$10,900	C
Jensen, Greg		Pratt & Whitney	Parametric Tool Design, Tasks 6, 7 & 8	09-01-02	12-31-06	4	\$311,650	C
Jensen, Greg		Unigraphics	Virtual Reality Immersion via the IRA Room	05-13-03	open	4	\$20,000	N
Jensen, Greg		Pratt & Whitney	Task 12: Automated Bolt Flange Analysis	09-12-03	Open	4	\$10,900	N
Jensen, Greg		Tenneco Automotive	Preliminary and Detailed Muffler Design Tool	10-02-03	12-31-03	4	\$13,000	N
Jensen, Greg		Pratt & Whitney	Parametric Design Tools	02-14-03	open	4	\$30,000	C
Magleby, Spencer		Taylormade-Adidas	Development and Testing of Innovative Golf Club Heads	07-15-03	09-30-04	4	\$62,025	C
McLain, Tim		AFOSR	Coordinated Control of Unmanned Air Vehicles	01-01-01	12-31-03	1	\$6,855	C
McLain, Timothy		NASA	Automated Landing of an Unmanned Air Vehicle	04-01-03	03-31-06	1	\$25,828	N
McLain, Timothy		NASA	Automated Landing of an Unmanned Air Vehicle	04-01-03	03-31-06	1	\$10,932	C
McLain, Timothy		NASA	Automated Landing of an Unmanned Air Vehicle	04-01-03	03-31-06	1	\$3,500	C

# College of Engineering & Technology 2003 Awards

Nelson, Tracy		ONR	High Energy Weldments Via the Friction Stir Process	05-01-03	04-30-04	1	\$233,750	N
Nelson, Tracy		Utah State COE	Advanced Joining of Materials	07-01-03	06-30-04	3	\$45,000	C
Nelson, Tracy		NSF	superior Joining and Energy Efficient Manufacturing	10-01-03	09-30-04	1	\$5,000	N
Red, Edward		Utah State COE	Direct Machining and Controls	07-01-03	06-30-04	3	\$61,000	C
Sorensen, Carl	w/ Nelson	Utah State COE	Advanced Joining of Materials	07-01-03	06-30-04	3	\$45,000	C
Sorenson, Carl	w/ Nelson	ONR	High Energy Weldments Via the Friction Stir Process	05-01-03	04-30-04	1	\$233,750	N
Sorenson, Carl	w/ Nelson	NSF	superior Joining and Energy Efficient Manufacturing	10-01-03	09-30-04	1	\$5,000	N
Todd, Robert		Polaris Industries Inc.	Improve Wear Characteristics of Variable Transmission Sheaves	10-01-02	08-31-03	4	\$10,365	N
Tree, Dale	w/ Baxter	U of Utah (DOE)	Low-temperature Black Liquor Gasification	09-30-02	09-30-04	2	\$25,000	C
Webb, Brent	w/ Nelson	ONR	High Energy Weldments Via the Friction Stir Process	05-01-03	04-30-04	1	\$233,750	N
Webb, Brent		NSF	Travel Grant to the 4th Symposium on Radiative Transport	01-01-04	12-31-04	1	\$12,600	N
Whiting, Michael	w/ Todd	Polaris Industries Inc.	Improve Wear Characteristics of Variable Transmission Sheaves	10-01-02	08-31-03	4	\$10,365	N
<b>School of Technology</b>								
Chabries, Doug		U of U (NASA)	Space Grant Fellowship Program	02-01-03	01-31-04	2	\$30,000	C
Chabries, Douglas		U of U (NASA)	NASA Space Grant Fellowship Program	02-01-01	01-31-05	2	\$30,000	C
Lunt, Barry		Micron	VLSI Testing & Artificial Neural Networks	02-26-01	open	4	\$9,000	C
Miles, Michael		Rockwell (DARPA)	Develop a Finite Element Model to Predict Bending Limits	04-22-03	07-15-03	2	\$15,000	N

Type: 1=Federal; 2=Federal Subcontract; 3=State; 4=Private

N/C: N=New; C=Continuing

Department Totals	
Chemical Engineering	\$1,655,950
Civil & Environmental Engineering	\$1,951,061
Electrical & Computer Engineering	\$1,345,687
Mechanical Engineering	\$2,604,768
School of Technology	\$84,000
<b>College Total:</b>	<b>\$7,641,466</b>

# Engineering & Technology

## Source Breakdown of Grants and Contracts

<u>Sponsor</u>	<u>Number Awarded</u>	<u>Total Amount</u>
<b>Federal</b>		
AFOSR	7	\$272,955
Air Force	2	\$69,750
Army	1	\$97,530
Army WES	39	\$931,393
ARO	3	\$164,500
BOR	2	\$29,000
Cornell (NASA)	1	\$11,248
DOE Idaho	1	\$570,000
Edwards AFB	4	\$147,826
INEEL	1	\$4,875
Los Alamos Natl. Lab	1	\$71,000
NASA	7	\$120,519
NIH	2	\$205,510
NOAA	1	\$78,476
NSF	9	\$216,552
ONR	4	\$935,000
<i>Total</i>		\$4,280,592
<b>Subcontracts</b>		
Bechtel ID (DOE)	1	\$49,617
Carnegie Mellon (NSF)	1	\$72,818
Clemson (DOE)	1	\$189,270
Cornell (NASA)	1	\$11,248
ERC (AFOSR)	1	\$50,000
INEEL	2	\$9,108
JPL	2	\$150,716
JPL (NASA)	1	\$9,999
Oregon State (NASA)	1	\$199,000
REI	1	\$28,000
Rockwell (DARPA)	1	\$15,000
Sandia Natl. Lab	10	\$565,056
U of U (NASA)	2	\$60,000
U of Utah (DOE)	3	\$87,500
U of Utah (LLNL, DOE)	1	\$5,000
U of Wisc.	1	\$107,540
USC (NASA)	2	\$50,434
Wasatch Valley Tech.	2	\$156,414
<i>Total</i>		1,451,013



# Engineering & Technology

## Source Breakdown of Grants and Contracts

<u>Sponsor</u>	<u>Number Awarded</u>	<u>Total Amount</u>
<b>State</b>		
UDOT	9	\$419,217
Utah State COE	6	\$320,000
<i>Total</i>	15	\$739,217
<b>Private</b>		
ACS/PRF	1	\$40,000
AIChE	3	\$285,000
CKR Eng. (JA Jones)	1	\$12,000
Enviro Modeling Sys	1	\$11,550
Intel Corp.	1	\$53,300
LDS Church	1	\$9,626
Micron	1	\$9,000
Orange County, CA	1	\$40,350
Philips Oral Healthcare	1	\$78,588
Polaris Industries Inc.	2	\$20,730
Pratt & Whitney	6	\$453,450
Taylormade-Adidas	2	\$124,050
Tenneco Automotive	1	\$13,000
Unigraphics	1	\$20,000
<i>Total</i>	23	\$1,170,644

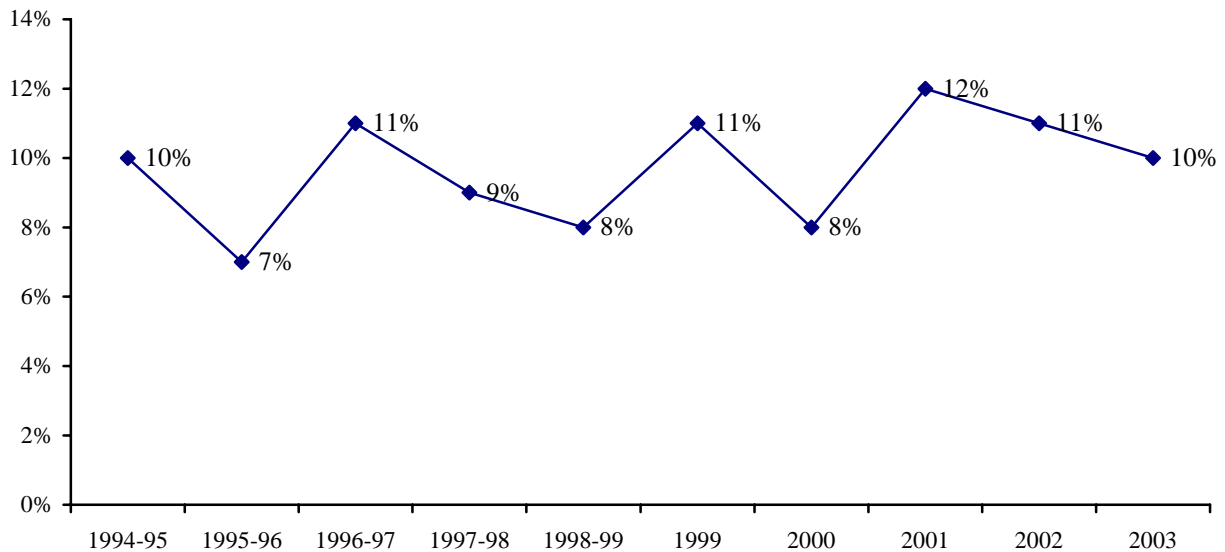


# College of Family, Home & Social Sciences

# Summary of Sponsored Research (Grants & Contracts)

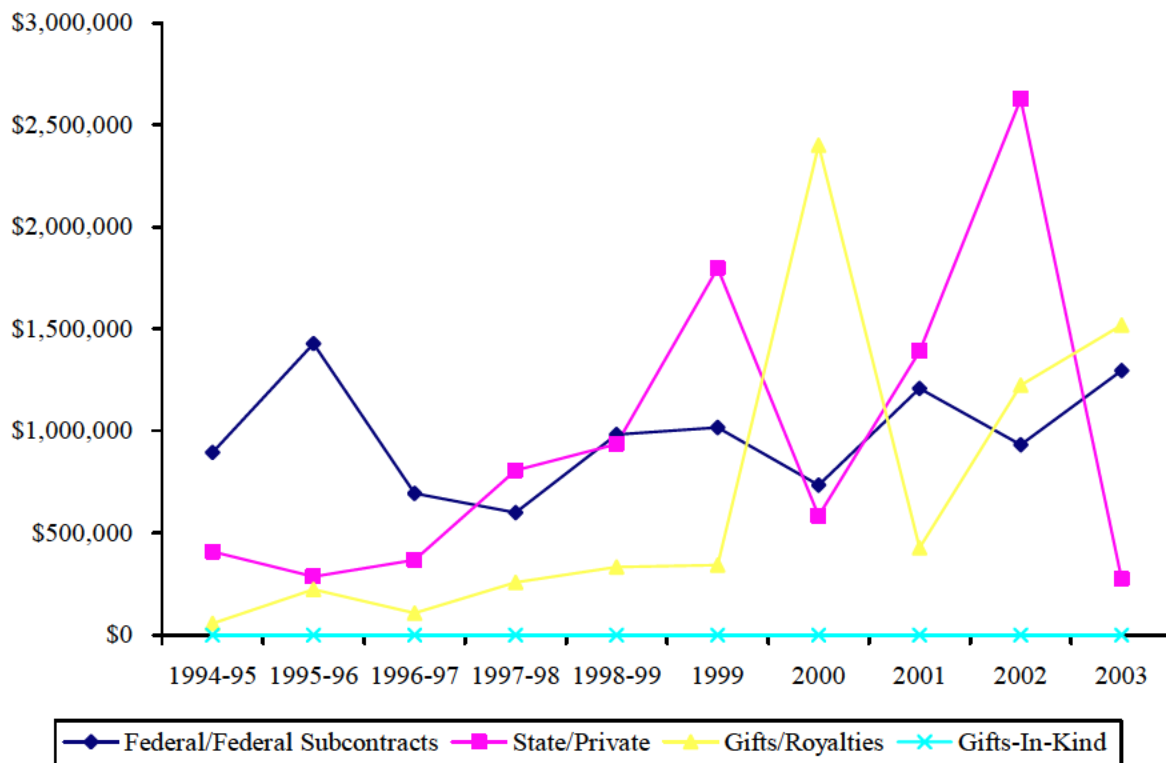
Department	# of Faculty	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Anthropology	10	2	3	1	\$35,175
Economics	21	3	4	2	\$130,645
Geography	11	0	0	0	\$0
History	34	0	0	0	\$0
Home and Family Living	7	0	0	0	\$0
Joseph Fielding Smith Institute	7	0	0	0	\$0
Marriage & Family Therapy	9	0	0	0	\$0
Marriage, Family & Human Dev.	20	1	1	0	\$0
Museum of Peoples & Cultures	0	3	5	1	\$4,518
Office of Public Archaeology	0	1	3	13	\$226,363
Political Science	26	1	1	3	\$664,000
Psychology	28	2	5	6	\$455,823
School of Family Life	0	1	1	0	\$0
Social Work	8	1	1	2	\$26,360
Sociology	18	1	2	1	\$25,000
Women's Research Institute	0	3	5	0	\$0
<b>TOTALS</b>	199	19	31	29	\$1,567,884

## Proposal Submission Activity



# External Research Funding (All Sources)

Year	Grants/Contracts		Gifts/Royalties	Gifts-In-Kind	Total
	Federal/Federal Subcontracts	State/Private			
1994-95	\$895,446	\$406,593	\$57,772	\$0	\$1,359,811
1995-96	\$1,429,036	\$285,116	\$222,337	\$0	\$1,936,489
1996-97	\$694,627	\$367,881	\$105,455	\$0	\$1,167,963
1997-98	\$599,999	\$806,018	\$257,953	\$0	\$1,663,970
1998-99	\$982,698	\$935,497	\$331,166	\$0	\$2,249,361
1999	\$1,016,236	\$1,797,394	\$340,803	\$0	\$3,154,433
2000	\$733,017	\$582,613	\$2,400,367	\$0	\$3,715,997
2001	\$1,206,835	\$1,390,664	\$472,945	\$0	\$3,070,444
2002	\$932,566	\$2,627,620	\$1,224,696	\$0	\$4,784,882
2003	\$1,296,291	\$271,593	\$1,520,336	\$0	\$3,088,220



# Family, Home & Social Sciences 2003 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Title</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type</u>	<u>Amount</u>	<u>N/C</u>
<b><i>Anthropology</i></b>								
Janetski, Joel		Hill AFB	Mosquito Willie	06-03-03	06-01-04	1	\$35,175	N
<b><i>Economics</i></b>								
Mark Showalter		Council of Economic Advisors	Assignment for one year.	08-01-03	07-31-04	2	\$122,645	N
Lefgren, Lars		NIH-Ntl Inst of Aging	Evaluating the Impact of NIH Researchq	09-10-03	01-30-04	1	\$8,000	N
<b><i>Museum of Peoples &amp; Cultures</i></b>								
Allen, Marti		UT Humanities Council	A Seminar on the Pectol-Lee Collections	11-01-03	05-31-04	3	\$4,518	N
<b><i>Office of Public Archaeology</i></b>								
Allen, Marti		IMLS	Support of MAP1	01-01-03	12-31-05	2	\$1,775	N
Allen, Marti		UT Off Mus Svcs	Catalogue and Exhibition Talbot Collection	08-01-03	06-30-04	3	\$6,000	N
Talbot, Richard		State Trust Lands	Cottonwood-Vermillion Sale Parcel	01-17-03	open	3	\$10,500	N
Talbot, Richard		State: Oil, Gas, Mining	Abandoned Mines Reclamation	01-17-03	open	3	\$28,047	N
Talbot, Richard		Pacificorp	Moab-Monticello Powerline Inventory	03-10-03	06-30-03	4	\$38,880	N
Talbot, Richard		Creamer & Noble Engr	Archaeological Inventory	03-20-03	06-30-03	4	\$3,000	N
Talbot, Richard		Washington County	Research Design forr Wash Co. Sites	03-21-03	04-30-03	3	\$2,500	C
Talbot, Richard		PacifiCorp	Moab to Monticelo Powerline Inventory-Continuation	02-11-03	06-30-03	4	\$35,000	C
Talbot, Richard		Utah Div. Of Oil, Gas & Mining	Fish Lake Abandoned Mine Survey	06-25-03	12-31-03	3	\$10,897	C
Talbot, Richard		Creamer & Noble	Snow Canyon Parkway	07-01-03	12-31-03	4	\$10,000	C
Talbot, Richard		Jones & DeMille Engineering	Hole in the Rock	04-28-03	12-31-03	4	\$4,764	N
Talbot, Richard		State of Utah	School Trust	07-15-03	03-15-04	3	\$35,000	C
Talbot, Richard		Utah School & Institutional Trust Lands Adm.	Cave Valley	11-01-03	06-30-04	3	\$40,000	C
<b><i>Political Science</i></b>								
Jacoby, Wade		Dept of Education	Foreign Language Area Fellowships	08-15-03	08-14-04	1	\$241,000	N
Jacoby, Wade		Dept of Education	NRC	08-15-03	08-14-04	1	\$168,000	N
Bowen, Donna Lee		CAORC	Support Academic Programs in No. Africa	08-24-01	08-31-03	1	\$255,000	N
<b><i>Psychology</i></b>								
Bigler, Erin		Univ of Utah (NIH)	Neuroimaging of Autism	06-01-03	05-31-04	2	\$55,501	C
Bigler, Erin		Various Sources	Neuroimaging	04-31-91	open	4	\$10,000	C
Holt-Lunstad, Julianne		A. M. Marchionne Fndtn	Association Between Marital Status and Health	11-13-03	Open	4	\$27,878	N
Hopkins, Ramona		Rutgers/NIMH	Dissociating basal forebrain vs medial Temporal Amnesia	01-01-03	12-31-03	1	\$61,835	N
Ridge, Robert		Fabian & Clendenin	Legal Research	07-21-03	open	4	\$4,609	C
Steffensen, Scott		NIH (3rd Year)	Neuropharmacological Substrates	08-01-03	07-31-04	1	\$296,000	C

# Family, Home & Social Sciences 2003 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Title</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type</u>	<u>Amount</u>	<u>N/C</u>
<b>Sociology</b>								
Ward, Carol		Dull Knife College(NSF)	Tribal Colleges Program on Effects of Food Assistance	11-15-02	08-16-03	2	\$17,160	N
Ward, Carol		Dull Knife College (NSF)	Tribal Colleges & Universities Programs	10-01-03	08-31-04	2	\$9,200	C
<b>Social Work</b>								
Cox, Shirley		Nevada (DHHS)	Quentin Burdick Interdisciplinary Project	08-08-02	06-30-03	2	\$25,000	N

Type: 1=Federal; 2=Federal Subcontract; 3=State; 4=Private

N/C: N=New; C=Continuing

## Department Totals

Anthropology	\$35,175
Economics	\$130,645
Family Life & Home Economics Ed.	\$0
Geography	\$0
History	\$0
Joseph Fielding Smith Institute	\$0
Marriage & Family Therapy	\$0
Marriage, Family & Human Dev.	\$0
Museum of Peoples & Cultures	\$4,518
Office of Public Archaeology	\$226,363
Political Science	\$664,000
Psychology	\$455,823
Social Work	\$25,000
Sociology	\$26,360
<b>College Total:</b>	<b>\$1,567,884</b>

# Family, Home & Social Sciences

## Source Breakdown of Grants and Contracts

Sponsor	Number Awarded	Total Amount
<b>Federal</b>		
CAORC	1	\$255,000
Dept of Education	2	\$409,000
Hill AFB	1	\$35,175
NIH (3rd Year)	1	\$296,000
NIH-Ntl Inst of Aging	1	\$8,000
Rutgers/NIMH	1	\$61,835
<i>Total</i>	7	\$1,065,010
<b>Subcontracts</b>		
Council of Economic Advisors	1	\$122,645
Dull Knife College (NSF)	2	\$26,360
IMLS	1	\$1,775
Nevada (DHHS)	1	\$25,000
U of Utah (NIH)	1	\$55,501
<i>Total</i>	6	\$231,281
<b>State</b>		
State of Utah	1	\$35,000
State Trust Lands	1	\$10,500
Utah Div. Of Oil, Gas & Mining	2	\$38,944
UT Humanities Council	1	\$4,518
UT Off Mus Svcs	1	\$6,000
Utah School & Institutional Trust Lands Adm.	1	\$40,000
<i>Total</i>	7	\$137,462
<b>Private</b>		
A. M. Marchionne Fndtn	1	\$27,878
Creamer & Noble	1	\$13,000
Fabian & Clendenin	1	\$4,609
Jones & DeMille Engineering	1	\$4,764
PacifiCorp	2	\$73,880
Various Sources	1	\$10,000
<i>Total</i>	7	\$134,131



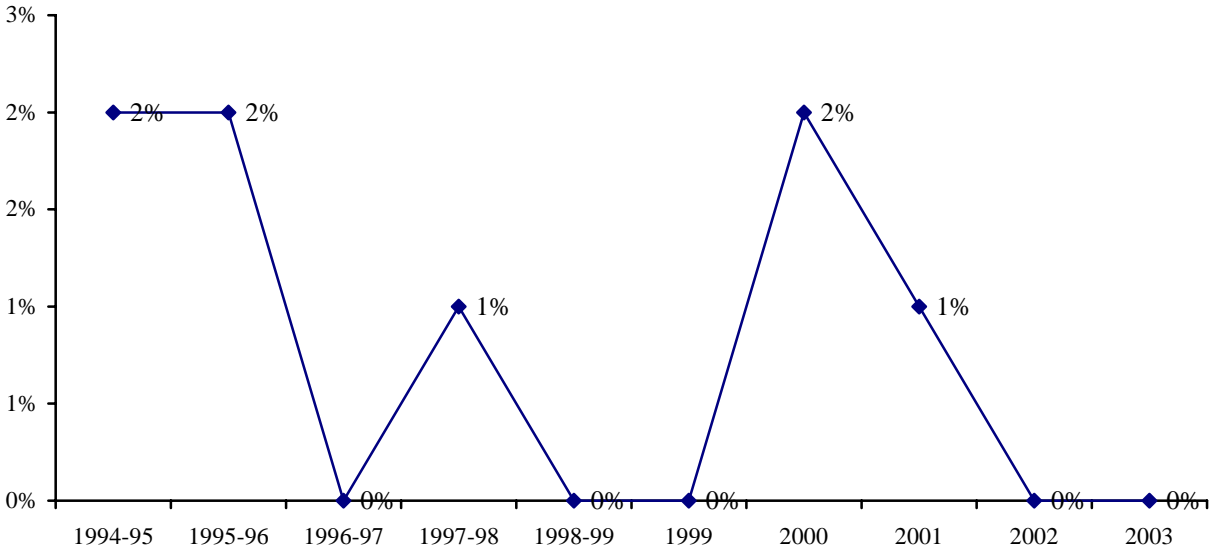
# College of Fine Arts & Communications



# Summary of Sponsored Research (Grants & Contracts)

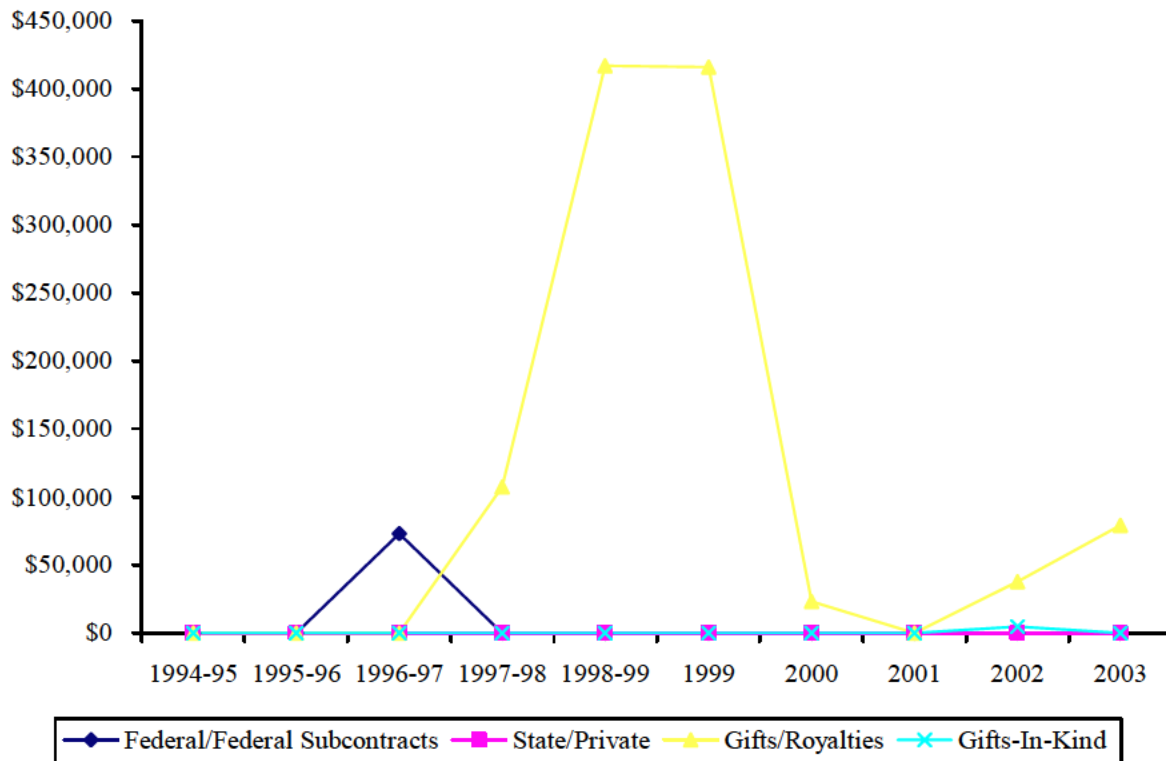
Department	# of Faculty	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Communication	17	0	0	0	\$0
Museum of Arts	0	0	0	0	\$0
Music	49	0	0	0	\$0
Theatre & Media Arts	22	0	0	0	\$0
Visual Arts	35	0	0	0	\$0
<b>TOTALS</b>	123	0	0	0	\$0

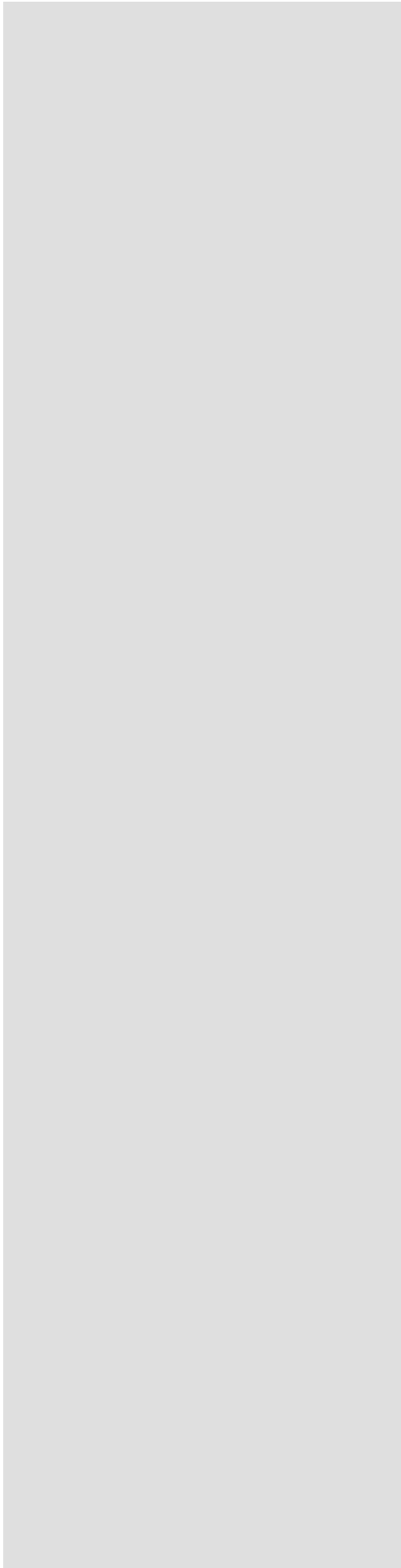
# Proposal Submission Activity



# External Research Funding (All Sources)

Year	Grants/Contracts		Gifts/Royalties	Gifts-In-Kind	Total
	Federal/Federal Subcontracts	State/Private			
1994-95	\$0	\$0	\$0	\$0	\$0
1995-96	\$0	\$0	\$0	\$0	\$0
1996-97	\$73,000	\$0	\$0	\$0	\$73,000
1997-98	\$0	\$0	\$107,111	\$0	\$107,111
1998-99	\$0	\$0	\$417,146	\$0	\$417,146
1999	\$0	\$0	\$416,146	\$0	\$416,146
2000	\$0	\$0	\$22,900	\$0	\$22,900
2001	\$0	\$0	\$0	\$0	\$0
2002	\$0	\$0	\$37,716	\$4,700	\$42,416
2003	\$0	\$0	\$78,926	\$0	\$78,926



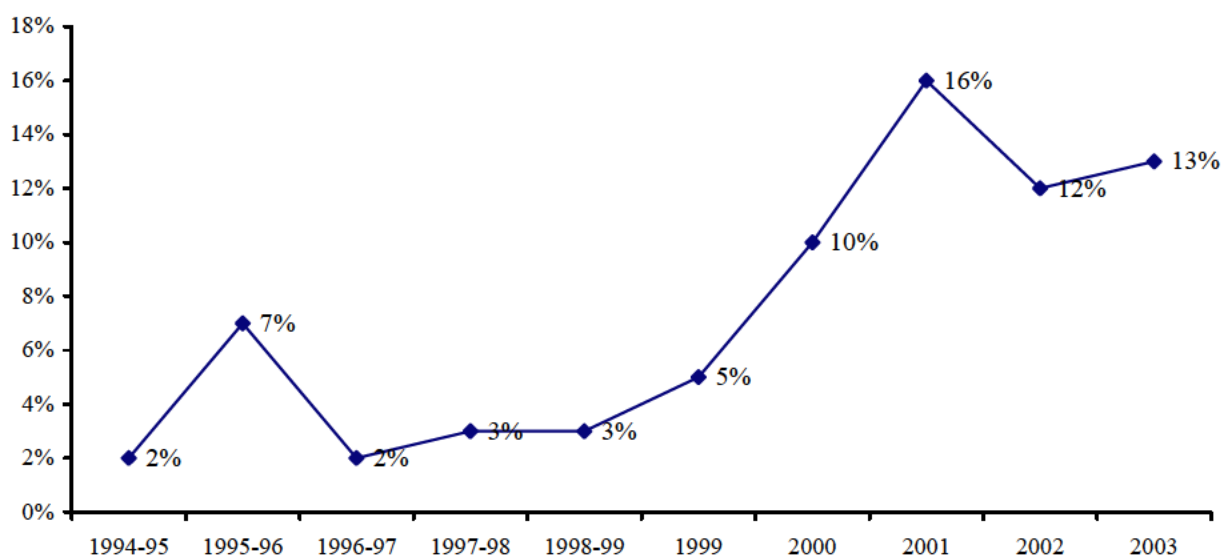


# College of Health & Human Performance

# Summary of Sponsored Research (Grants & Contracts)

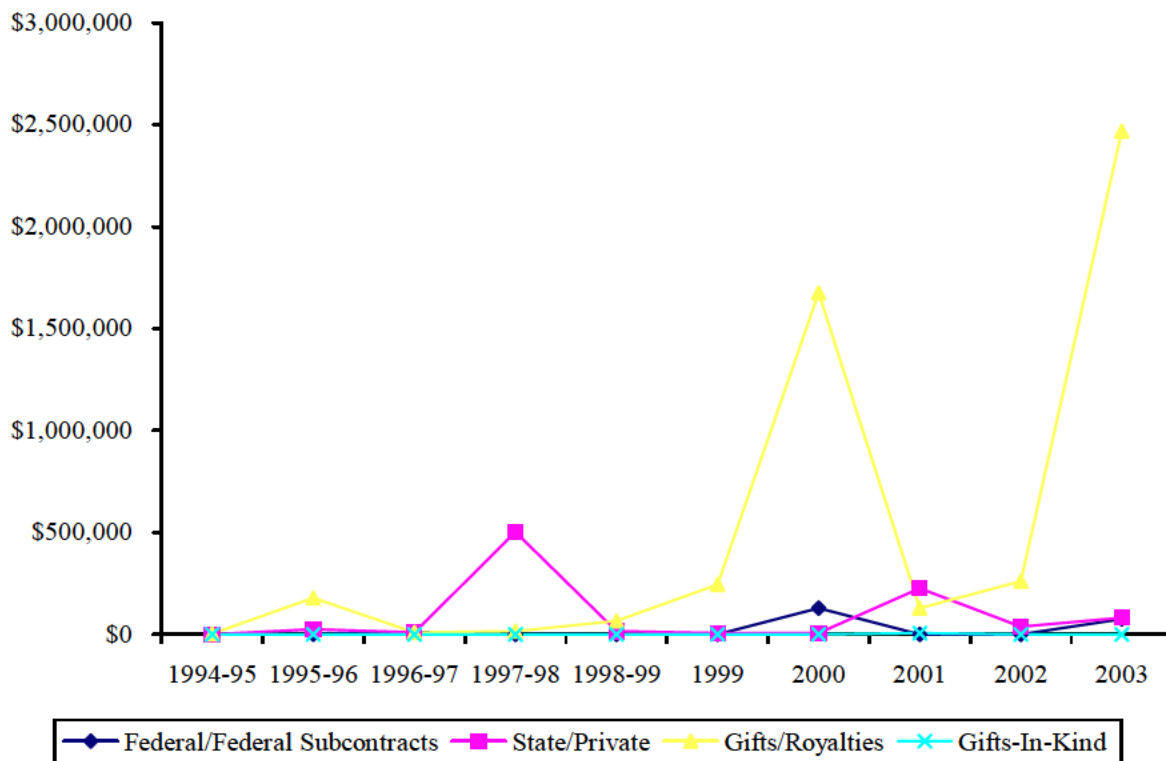
Department	# of Faculty	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Dance	16	0	0	0	\$0
Health Sciences	15	0	1	1	\$74,113
Physical Education	25	8	6	6	\$82,245
Rec Management & Youth Ldrship	8	0	0	0	\$0
<b>TOTALS</b>	<b>64</b>	<b>8</b>	<b>7</b>	<b>7</b>	<b>\$156,358</b>

## Proposal Submission Activity



# External Research Funding (All Sources)

Year	Grants/Contracts		Gifts/Royalties	Gifts-In-Kind	Total
	Federal/Federal Subcontracts	State/Private			
1994-95	\$0	\$0	\$2,300	\$0	\$2,300
1995-96	\$0	\$25,530	\$179,362	\$0	\$204,892
1996-97	\$12,925	\$10,000	\$9,900	\$0	\$32,825
1997-98	\$0	\$500,800	\$15,375	\$0	\$516,175
1998-99	\$0	\$15,000	\$66,000	\$0	\$81,000
1999	\$0	\$5,000	\$244,000	\$0	\$249,000
2000	\$130,223	\$6,750	\$1,674,743	\$0	\$1,811,716
2001	\$0	\$226,014	\$127,800	\$6,000	\$359,814
2002	\$0	\$38,500	\$260,295	\$0	\$298,795
2003	\$74,113	\$82,245	\$2,469,825	\$0	\$2,626,183



# Health & Human Performance 2003 Awards

## *Health Sciences*

Hawks, Steve/Cox, Shirley	Univ Nevada-Reno	Recruiting Health Profession Students	07-01-03	06-30-04	2	\$74,113	N
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## *Physical Education*

Draper, David	Proctor & Gamble	A Comparison of the ThermoCare Heatwraps with Various Products	06-13-02	open	4	\$35,000	C
Draper, David	Ari Med Pharm.	Comparison of two ultrasound couplants	11-12-03	11-11-04	4	\$4,500	N
Hunter, Iain	Private Sources	P.E. Research Support	10-04-03	Open	4	\$500	N
Parcell, Alan	EAS inc.	Oral Carbohydrate Feeding	02-01-03	12-31-03	4	\$24,186	C
Vehrs, Pat	Research Consortium	Validity of a Bio-electrical Impedance Body Composition Measurement Device Used in Public Schools.	04-17-03	04-01-04	4	\$13,059	N
Vehrs, Pat	Alpha CIT	Effects of Leadership in Training	06-11-03	open	4	\$5,000	N

Type: 1=Federal; 2=Federal Subcontract; 3=State; 4=Private

N/C: N=New; C=Continuing

### Department Totals

Dance	\$0
Health Sciences	\$74,113
Physical Education	\$82,245
Rec Management & Youth Ldrship	\$0
<b>College Total:</b>	<u>\$156,358</u>

# Health & Human Performance

## Source Breakdown of Grants and Contracts

<b>Sponsor</b>	<b>Number Awarded</b>	<b>Total Amount</b>
<b>Federal</b>		
None		
<i>Total</i>	<hr/>	
<b>Subcontracts</b>		
Univ Nevada-Reno	1	\$74,113
<i>Total</i>	1	\$74,113
<b>State</b>		
None		
<i>Total</i>	<hr/>	
<b>Private</b>		
Proctor & Gamble	1	\$35,000
Ari Med Pharm.	1	\$4,500
Private Sources	1	\$500
EAS inc.	1	\$24,186
Research Consortium	1	\$13,059
Alpha CIT	1	\$5,000
<i>Total</i>	6	\$82,245



# College of Humanities

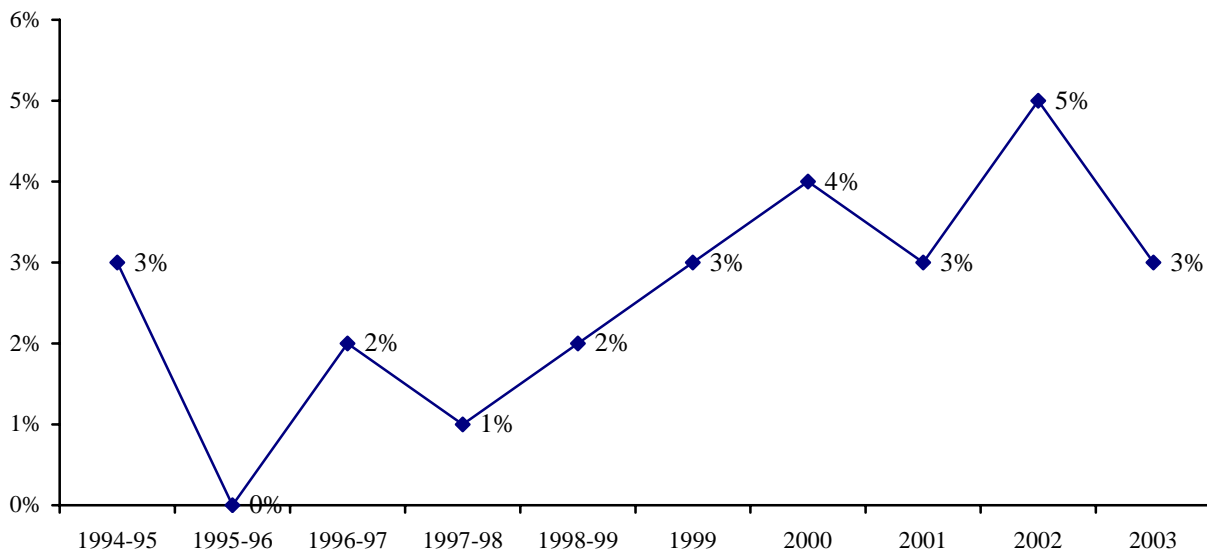


# Summary of Sponsored Research (Grants & Contracts)

Department	# of Faculty	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Asian & Near Eastern Languages	18	2	2	2	\$242,983
Center for Language Studies	0*	1*	0	0	\$0
English	56	0	0	0	\$0
French & Italian	13	0	0	0	\$0
German & Slavic Languages	16	1	0	0	\$0
Hum, Classics & Comparative Lit	25	0	0	0	\$0
Humanities Research Center	0	0	0	0	\$0
Linguistics	18	1	1	1	\$45,461
Philosophy	11	0	0	0	\$0
Spanish & Portuguese	26	1	1	1	\$107,189
<b>TOTALS</b>	183	6	4	4	\$395,633

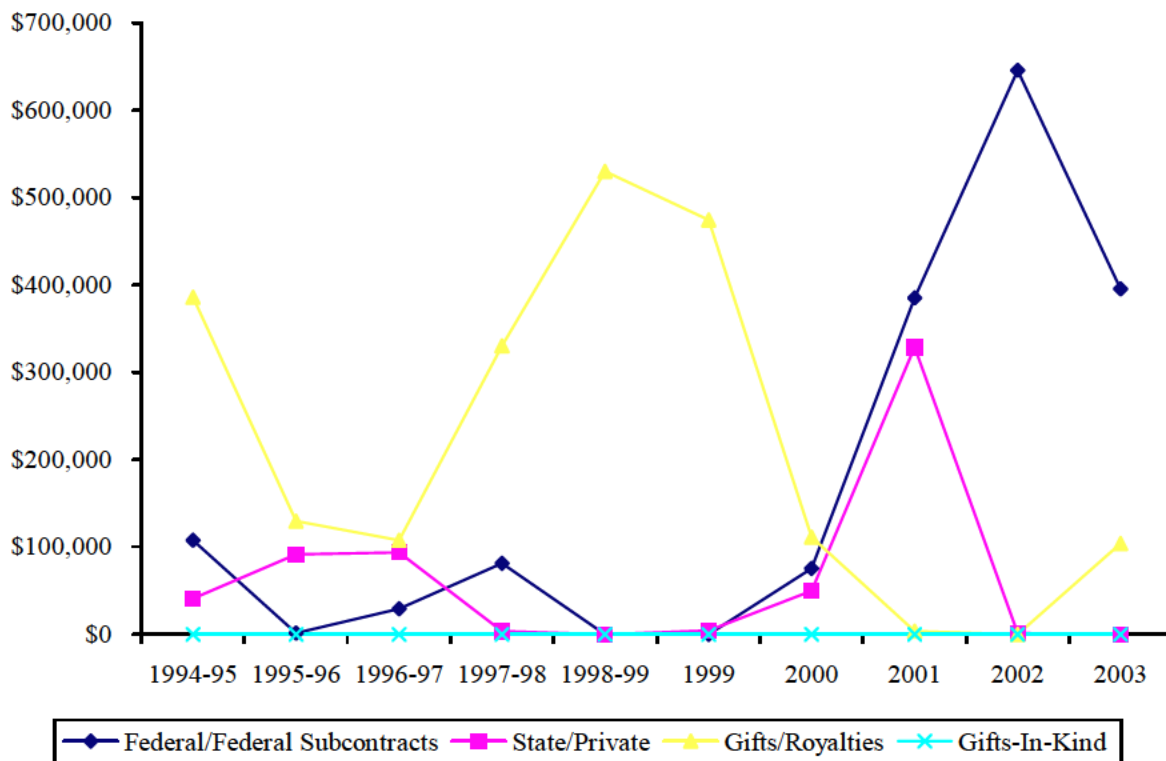
\*Faculty at the Center are from the Linguistics Department

## Proposal Submission Activity



# External Research Funding (All Sources)

Year	Grants/Contracts		Gifts/Royalties	Gifts-In-Kind	Total
	Federal/Federal Subcontracts	State/Private			
1994-95	\$107,760	\$40,742	\$385,838	\$0	\$534,340
1995-96	\$1,788	\$91,228	\$129,483	\$0	\$222,499
1996-97	\$29,578	\$93,620	\$107,801	\$0	\$230,999
1997-98	\$81,027	\$3,613	\$330,361	\$0	\$415,001
1998-99	\$0	\$0	\$530,182	\$0	\$530,182
1999	\$0	\$4,438	\$474,383	\$0	\$478,821
2000	\$75,574	\$50,000	\$111,400	\$0	\$236,974
2001	\$385,376	\$328,672	\$4,000	\$0	\$718,048
2002	\$645,960	\$1,440	\$0	\$0	\$647,400
2003	\$395,633	\$0	\$103,784	\$0	\$499,417



# Humanities 2003 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Title</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type</u>	<u>Amount</u>	<u>N/C</u>
<i>Asian &amp; Near Eastern Languages</i>								
Luthy, M./Bougerie, D.		Univ of Maryland	Mandarin Flagship	09-01-03	08-31-04	2	\$185,983	C
Kirk Belnap		Dept of Education	Fulbright	04-01-03	10-01-04	1	\$57,000	N
<i>Linguistics</i>								
Davies, Mark		No Ariz Univ	Two Million Word Corpus	06-01-03	07-31-04	2	\$45,461	N
<i>Spanish &amp; Portuguese</i>								
Rosenberg, John		NEH	Poesis en El Prado	10-01-03	09-30-04	1	\$107,189	N

Type: 1=Federal; 2=Federal Subcontract; 3=State; 4=Private

N/C: N=New; C=Continuing

Department Totals	
Asian & Near Eastern Languages	\$242,983
Center for Language Studies	\$0
English	\$0
French & Italian	\$0
German & Slavic Languages	\$0
Hum, Classics & Comparative Lit	\$0
Humanities Research Center	\$0
Linguistics	\$45,461
Philosophy	\$0
Spanish & Portuguese	\$107,189
<b>College Total:</b>	<b>\$395,633</b>

# Humanities

## Source Breakdown of Grants and Contracts

<u>Sponsor</u>	<u>Number Awarded</u>	<u>Total Amount</u>
<b>Federal</b>		
Dept of Education	1	\$57,000
NEH	1	\$107,189
<i>Total</i>	2	\$164,189
<b>Subcontracts</b>		
No Ariz Univ	1	\$45,461
Univ of Maryland	1	\$185,983
<i>Total</i>	2	\$231,444
<b>State</b>		
None		
<i>Total</i>		
<b>Private</b>		
None		
<i>Total</i>		

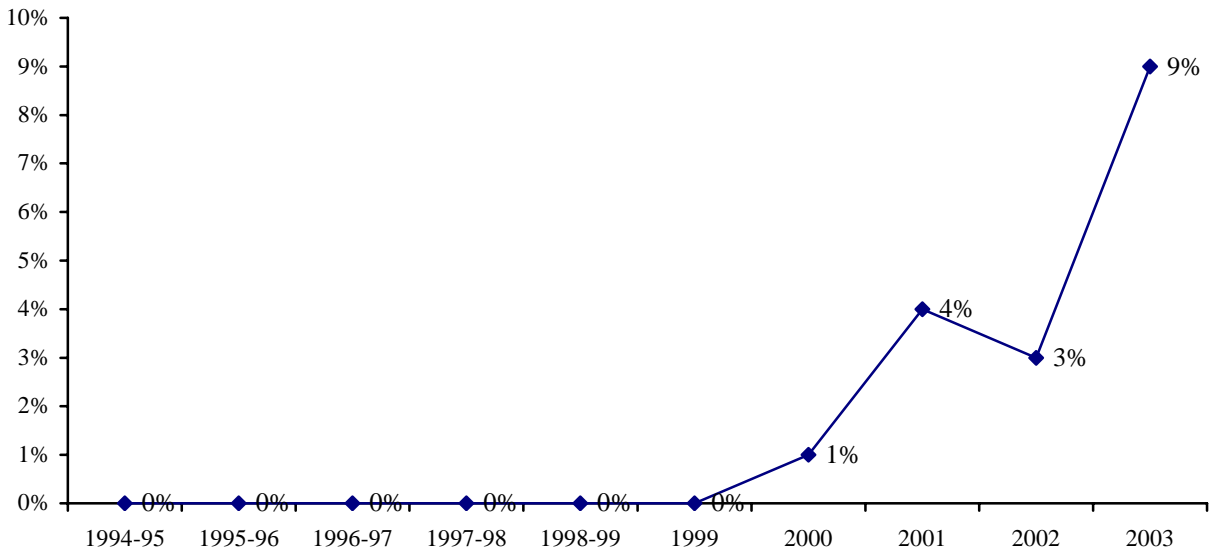


# J. Reuben Clark Law School

# Summary of Sponsored Research (Grants & Contracts)

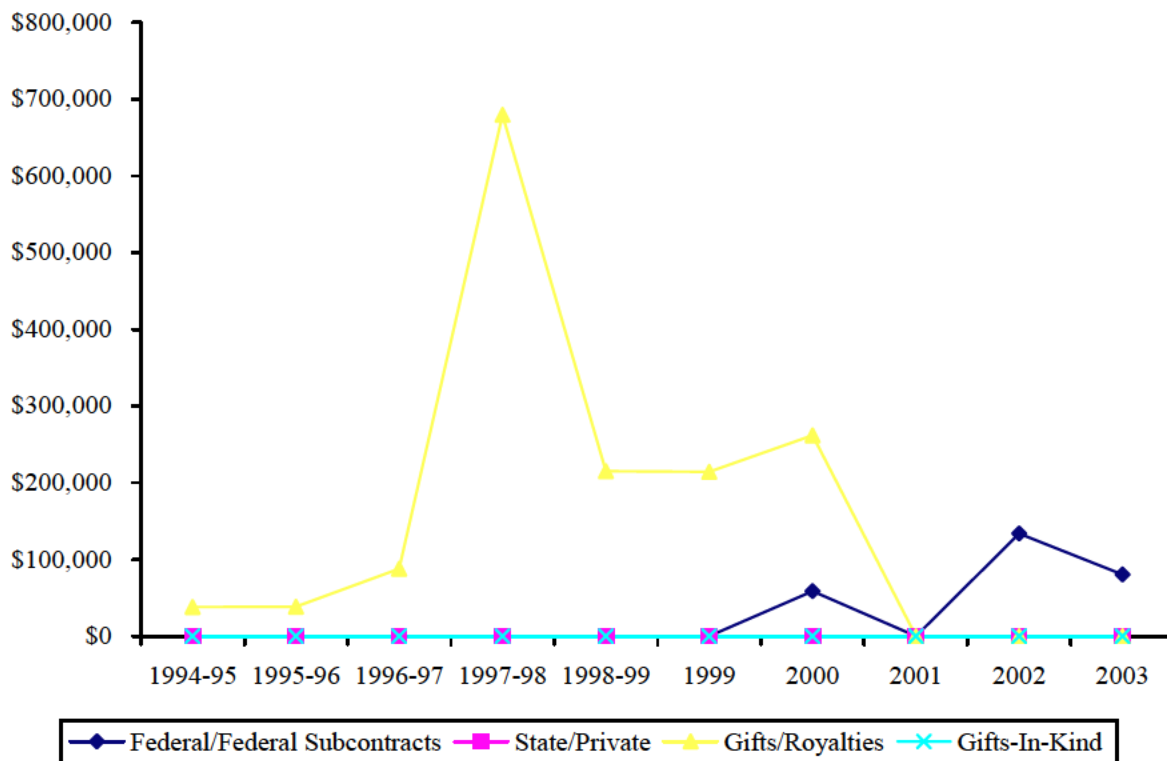
Department	# of Faculty	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Law School	31	3	2	2	\$80,453
<i>TOTALS</i>	31	3	2	2	\$80,453

# Proposal Submission Activity



# External Research Funding (All Sources)

Year	Grants/Contracts		Gifts/Royalties	Gifts-In-Kind	Total
	Federal/Federal Subcontracts	State/Private			
1994-95	\$0	\$0	\$37,793	\$0	\$37,793
1995-96	\$0	\$0	\$38,465	\$0	\$38,465
1996-97	\$0	\$0	\$88,076	\$0	\$88,076
1997-98	\$0	\$0	\$679,707	\$0	\$679,707
1998-99	\$0	\$0	\$214,962	\$0	\$214,062
1999	\$0	\$0	\$214,244	\$0	\$214,244
2000	\$58,650	\$0	\$261,856	\$0	\$320,506
2001	\$0	\$0	\$0	\$0	\$0
2002	\$133,653	\$0	\$0	\$0	\$0
2003	\$80,453	\$0	\$0	\$0	\$80,453



# J. Reuben Clark Law School 2003 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Title</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type</u>	<u>Amount</u>	<u>N/C</u>
<i>Law School</i>								
Durham, W. Cole		Library of Congress	International Academy for Freedom of Religion and Belief	06-23-03	06-23-04	1	\$40,227	N
Sewell, Elizabeth	w/ Durham	Library of Congress	International Academy for Freedom of Religion and Belief	06-23-03	06-23-04	1	\$40,226	N

Type: 1=Federal; 2=Federal Subcontract; 3=State; 4=Private

N/C: N=New; C=Continuing

Department Totals  
Law School

**College Total:**

\$80,453

\_\_\_\_\_ \$80,453



# J. Reuben Clark Law School

## Source Breakdown of Grants and Contracts

<u>Sponsor</u>	<u>Number Awarded</u>	<u>Total Amount</u>
<b>Federal</b>		
Library of Congress	1	\$80,453
<i>Total</i>	1	\$80,453
 <b>Subcontracts</b>		
None		
<i>Total</i>		
 <b>State</b>		
None		
<i>Total</i>		
 <b>Private</b>		
None		
<i>Total</i>		

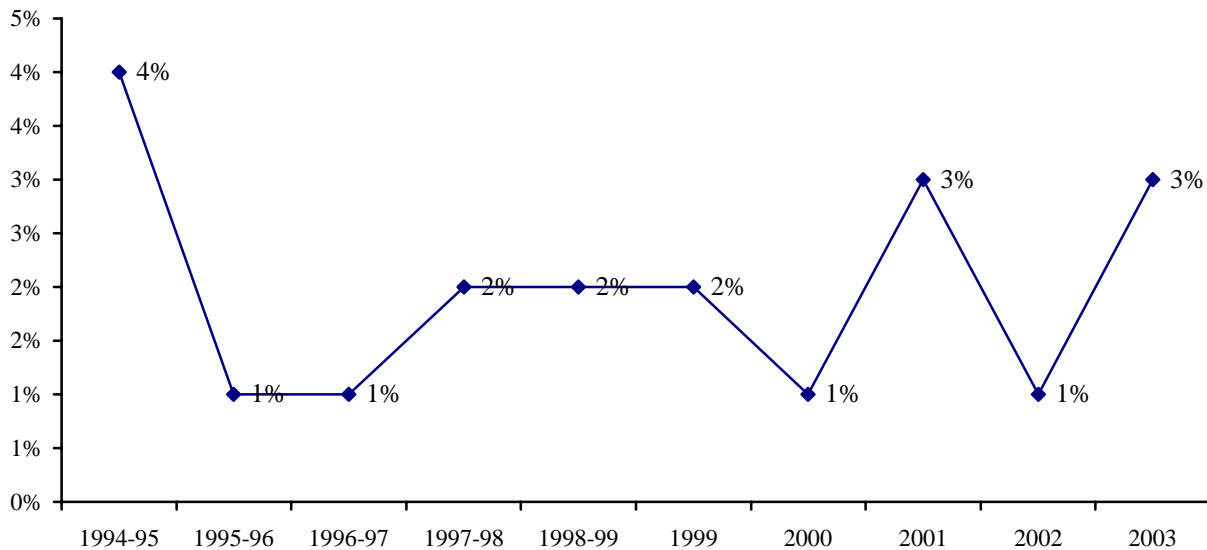


# Marriott School of Management

# Summary of Sponsored Research (Grants & Contracts)

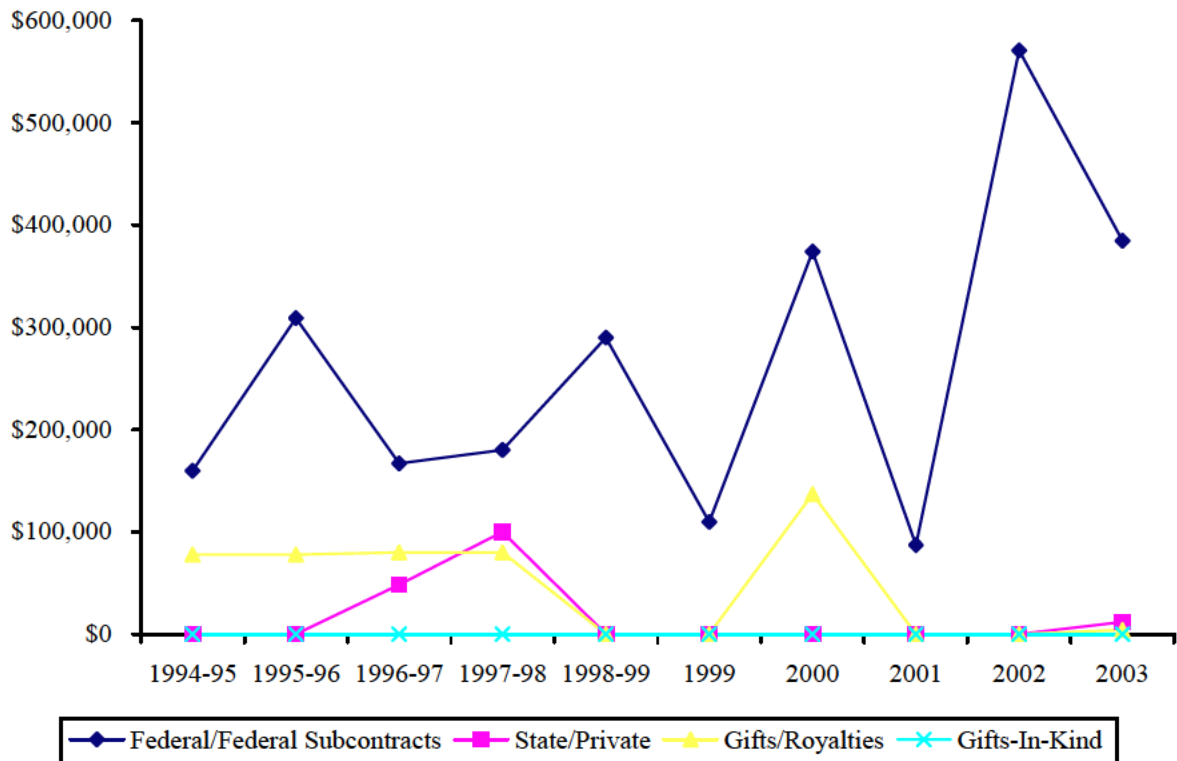
Department	# of Faculty	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Business Management	39	1	2	2	\$384,700
Organizational Leadership & Strategy	25	1	0	0	0
Romney Inst of Public Management	12	0	0	0	0
School of Accountancy & Info Sys	39	1	2	2	\$11,850
<b>TOTALS</b>	115	3	4	4	\$396,550

## Proposal Submission Activity



# External Research Funding (All Sources)

Year	Grants/Contracts		Gifts/Royalties	Gifts-In-Kind	Total
	Federal/Federal Subcontracts	State/Private			
1994-95	\$159,800	\$0	\$77,825	\$0	\$237,625
1995-96	\$308,761	\$0	\$78,000	\$0	\$386,761
1996-97	\$167,000	\$48,510	\$80,000	\$0	\$295,150
1997-98	\$180,000	\$100,108	\$80,000	\$0	\$360,108
1998-99	\$289,890	\$0	\$0	\$0	\$289,890
1999	\$109,890	\$0	\$0	\$0	\$109,890
2000	\$374,000	\$0	\$137,000	\$0	\$511,000
2001	\$87,124	\$0	\$0	\$0	\$87,124
2002	\$570,628	\$0	\$0	\$0	\$570,628
2003	\$384,700	\$11,850	\$3,927	\$0	\$400,477



# Marriott School of Management 2003 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Title</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type</u>	<u>Amount</u>	<u>N/C</u>
<i>Business Management</i>								
Derr, Brooklin		DOEd	BYU Ciber Grant Proposal	10-01-02	09-30-06	1	\$192,350	C
Seawright, Kriste	w/ Derr	DOEd	BYU Ciber Grant Proposal	10-01-02	09-30-06	1	\$192,350	C
<i>School of Accountancy &amp; Information Systems</i>								
Dean, Douglas		Hong Kong Univ of Science & Tech	GSS Electronic Government	07-01-03	open	4	\$7,319	N
Dean, Douglas		Hong Kong University of Science & Technology		07-03-03	open	3	\$4,531	C

Type: 1=Federal; 2=Federal Subcontract; 3=State; 4=Private

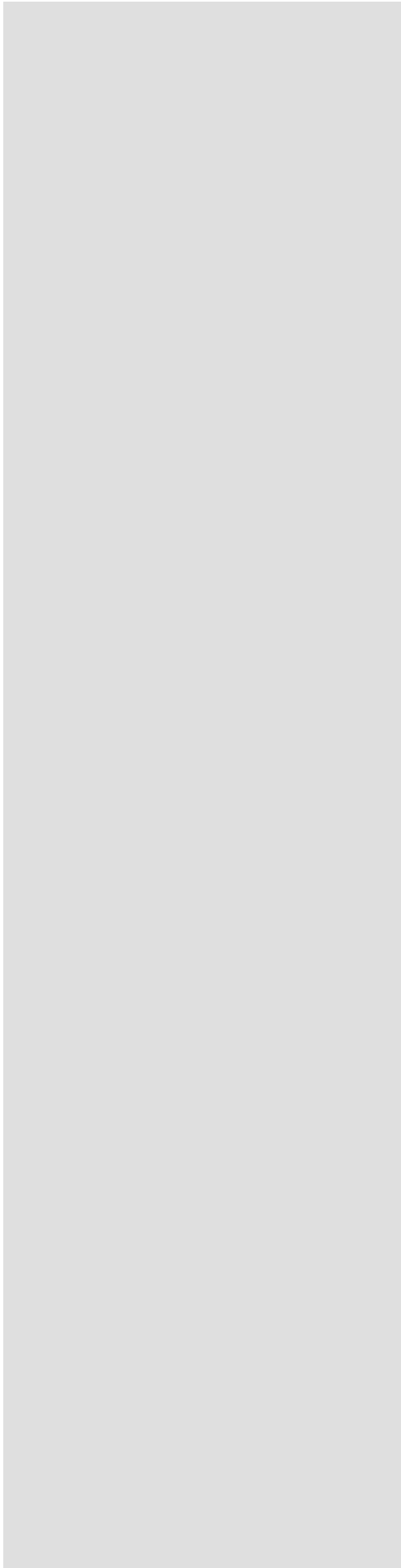
N/C: N=New; C=Continuing`

Department Totals	
Business Management	\$384,700
Organizational Leadership & Strategy	\$0
Romney Inst of Public Management	\$0
School of Accountancy & Info Sys	\$11,850
<i>College Total:</i>	<u>\$396,550</u>

# Marriott School of Management

## Source Breakdown of Grants and Contracts

<u>Sponsor</u>	<u>Number Awarded</u>	<u>Total Amount</u>
<b>Federal</b>		
Dept. of ED	2	\$384,700
<i>Total</i>	2	\$384,700
 <b>Subcontracts</b>		
None		
<i>Total</i>		
 <b>State</b>		
None		
<i>Total</i>		
 <b>Private</b>		
Hong Kong University of Science & Tech	2	\$11,850
<i>Total</i>	2	\$11,850

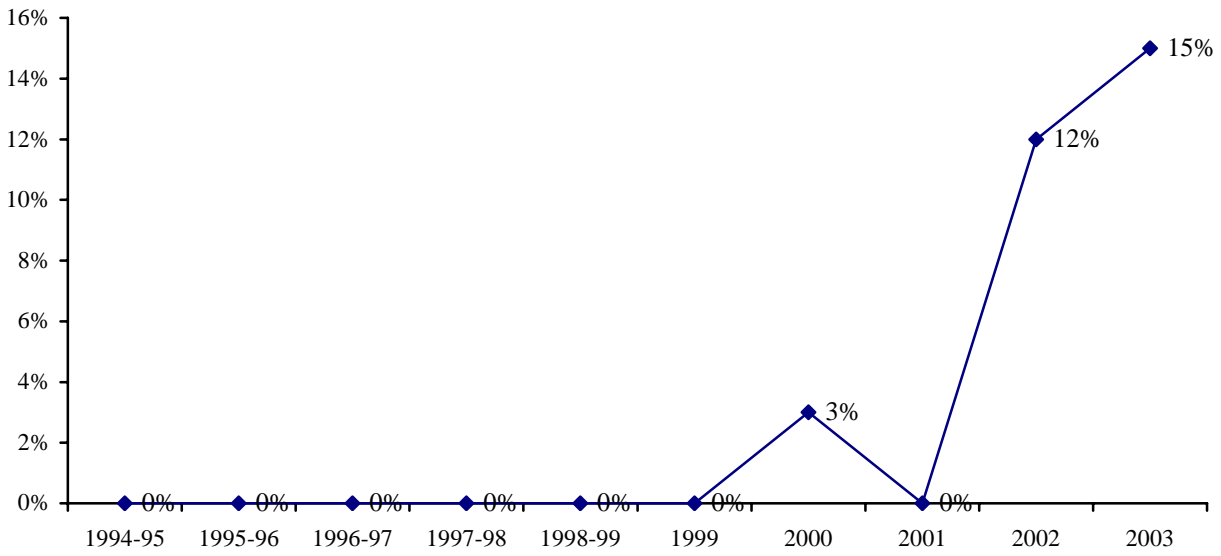


# College of Nursing

# Summary of Sponsored Research (Grants & Contracts)

Department	# of Faculty	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Nursing	34	5	11	1	\$3,200
<i>TOTALS</i>	34	5	11	1	\$3,200

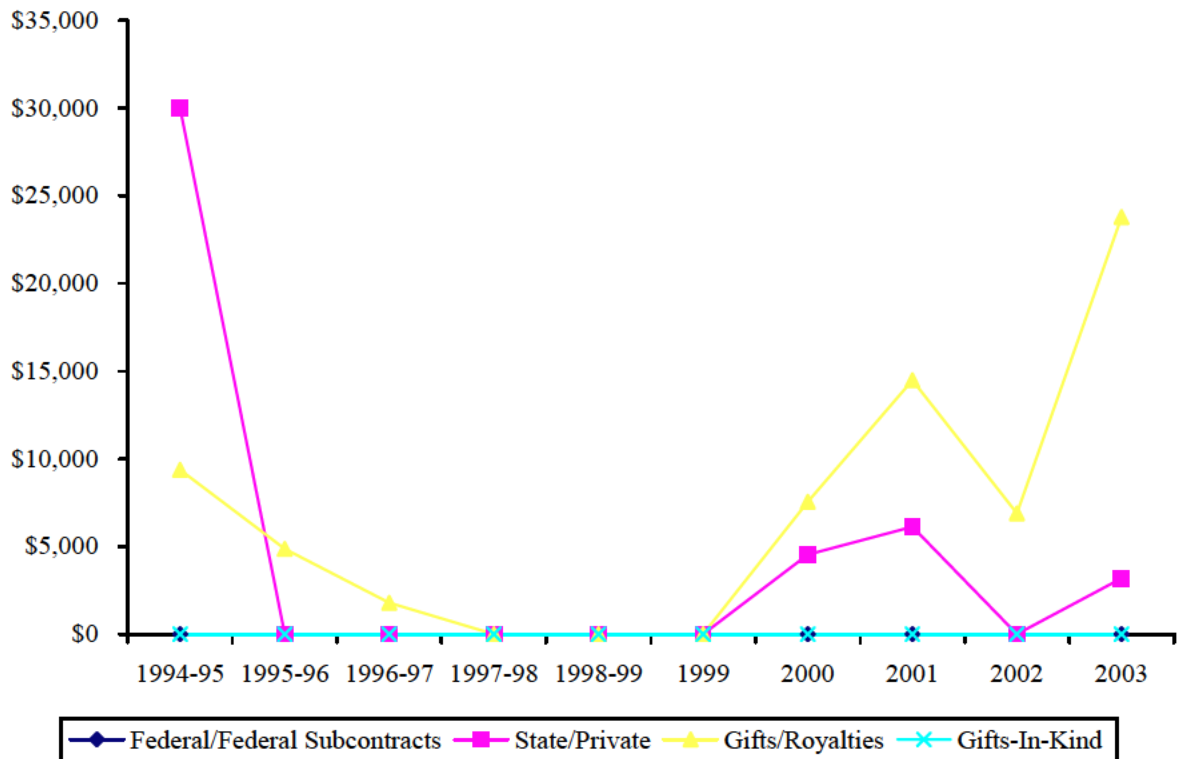
# Proposal Submission Activity





# External Research Funding (All Sources)

Year	Grants/Contracts		Gifts/Royalties	Gifts-In-Kind	Total
	Federal/Federal Subcontracts	State/Private			
1994-95	\$0	\$30,000	\$9,377	\$0	\$39,377
1995-96	\$0	\$0	\$4,862	\$0	\$38,465
1996-97	\$0	\$0	\$1,793	\$0	\$1,793
1997-98	\$0	\$0	\$0	\$0	\$0
1998-99	\$0	\$0	\$0	\$0	\$0
1999	\$0	\$0	\$0	\$0	\$0
2000	\$0	\$4,550	\$7,550	\$0	\$12,100
2001	\$0	\$6,129	\$14,480	\$0	\$20,609
2002	\$0	\$0	\$6,900	\$0	\$0
2003	\$0	\$3,200	\$23,789	\$0	\$26,989

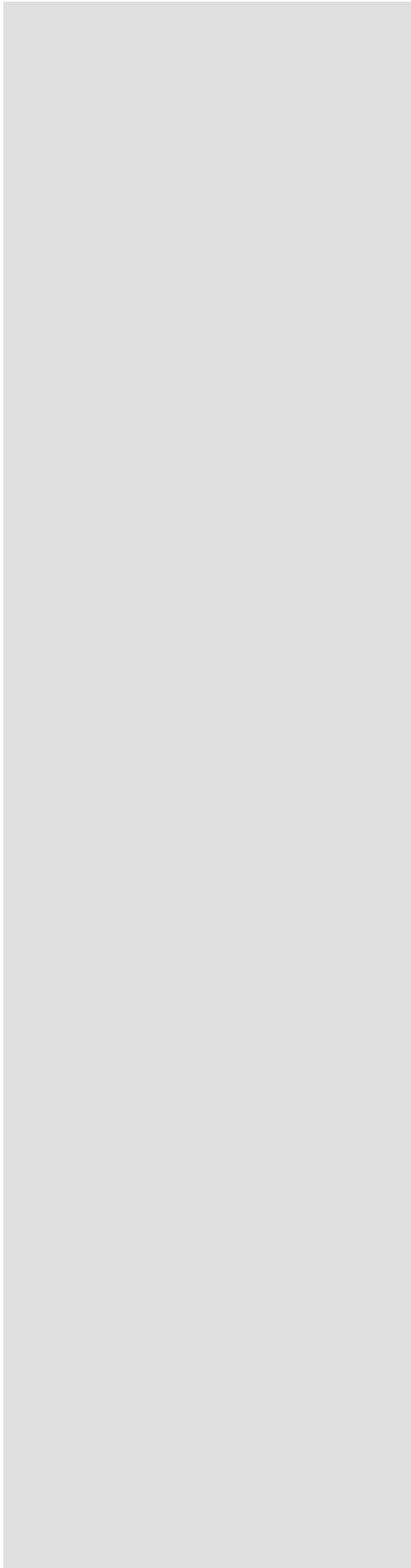


# College of Nursing 2003 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Title</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type</u>	<u>Amount</u>	<u>N/C</u>
<i>Nursing</i> Whitenight, Katheryn		Natl. League for Nursing	Human Patient Simulator Project	11-01-02	open	4	\$3,200	N

Department Totals	
Nursing	\$3,200
<b>College Total:</b>	<u>\$3,200</u>

<u>Sponsor</u>	<u>Number Awarded</u>	<u>Total Amount</u>
<b>Federal</b>		
None		
<i>Total</i>	<hr/>	
<b>Subcontracts</b>		
None		
<i>Total</i>	<hr/>	
<b>State</b>		
None		
<i>Total</i>	<hr/>	
<b>Private</b>		
Natl. League for Nursing	1	\$3,200
<i>Total</i>	1	<u>\$3,200</u>

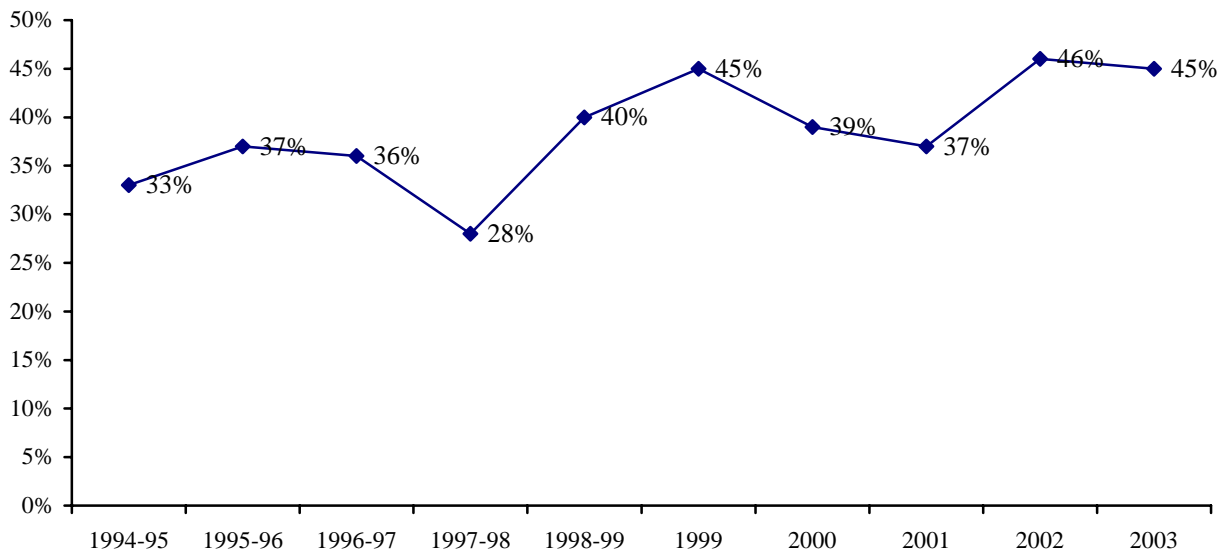


College  
of Physical  
&  
Mathematical  
Science

# Summary of Sponsored Research (Grants & Contracts)

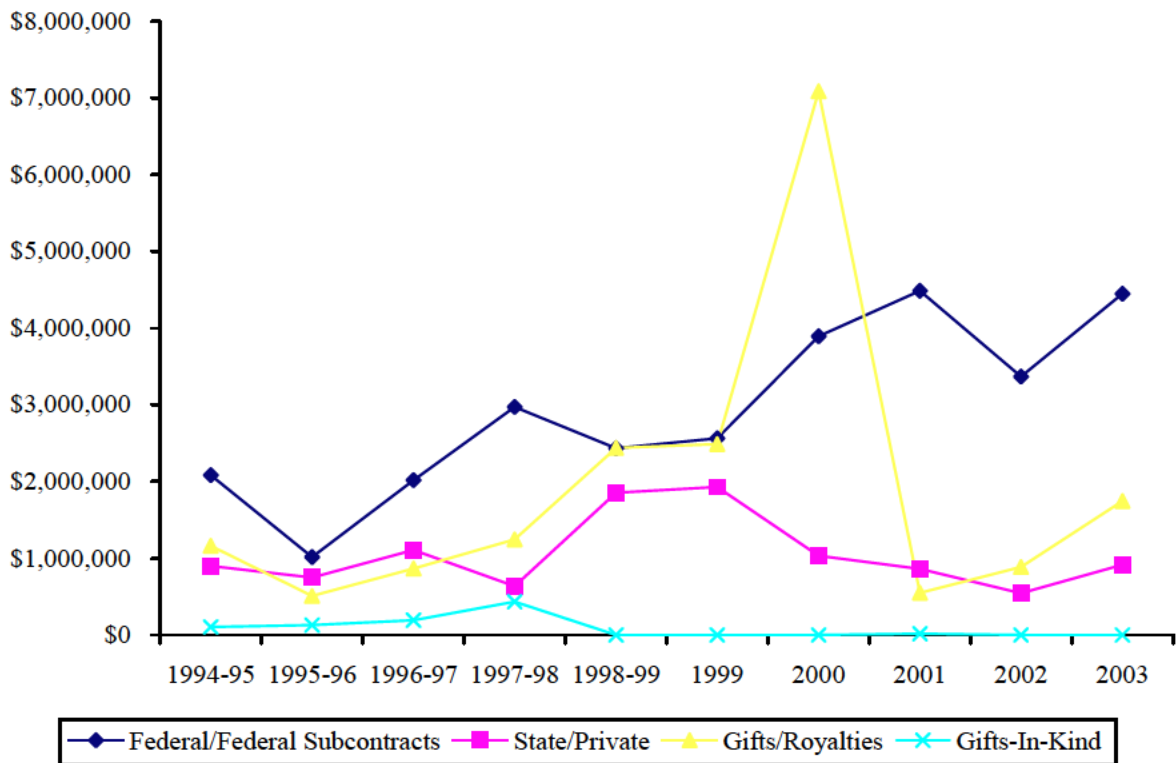
Department	# of Faculty	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Chemistry & Biochemistry	38	31	43	44	\$2,806,929
Computer Science	22	10	7	6	\$799,196
Geology	15	8	8	8	\$348,659
Mathematics	34	3	9	9	\$319,154
Mathematics Education	9	5	0	0	0
Physics & Astronomy	33	16	27	27	\$1,063,716
Statistics	15	2	1	1	\$25,000
<b>TOTALS</b>	166	75	95	95	\$5,362,654

# Proposal Submission Activity



# External Research Funding (All Sources)

Year	Grants/Contracts		Gifts/Royalties	Gifts-In-Kind	Total
	Federal/Federal Subcontracts	State/Private			
1994-95	\$2,085,112	\$899,945	\$1,164,362	\$104,920	\$4,254,339
1995-96	\$1,018,903	\$751,121	\$509,525	\$127,370	\$2,406,919
1996-97	\$2,017,813	\$1,109,950	\$867,684	\$193,500	\$4,188,947
1997-98	\$2,973,964	\$638,996	\$1,245,267	\$433,559	\$5,291,786
1998-99	\$2,436,351	\$1,853,248	\$2,438,223	\$0	\$6,727,822
1999	\$2,561,770	\$1,928,464	\$2,488,283	\$0	\$6,928,517
2000	\$3,892,327	\$1,032,159	\$7,085,643	\$0	\$12,010,129
2001	\$4,485,814	\$865,015	\$549,373	\$15,000	\$5,915,202
2002	\$3,368,967	\$547,133	\$886,015	\$0	\$4,802,115
2003	\$4,447,192	\$915,462	\$1,747,809	\$0	\$7,110,463



# Physical & Mathematical Sciences 2003 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Title</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type</u>	<u>Amount</u>	<u>N/C</u>
<i>Chemistry &amp; Biochemistry</i>								
Andrus, Merritt		NIH	Synthesis of MDR Reversing Polyenes	04-01-03	03-31-04	1	\$188,863	C
Burton, Greg		NIH	Follicular Dendritic Cells & HIV Pathogenesis	06-01-03	05-31-04	1	\$277,159	C
Burton, Greg		NIH/JHU	Tissue and Cell reservoirs for HIV	07-15-03	12-31-03	1	\$79,332	N
Burton, Gregory		Johns Hopkins (NIH)	Tissue and Cell Reservoirs for HIV	01-01-04	12-31-04	2	\$161,565	C
Burton, Gregory		Am. Fndtn. AIDS Res.	Genotype of Follicular Dendritic Cell HIV Reservoir	01-01-03	12-31-03	4	\$90,000	N
Castle, Steven		Research Corporation	Strategy for the Synthesis of Three Contiguous Quaternary Centers	01-01-14	12-31-04	4	\$35,000	N
Eatough, Delbert		Stmospheric Research	Analysis	11-01-03	10-31-04	4	\$1,750	N
Eatough, Delbert		Desert Research Institute	Filter Analysis	11-01-03	11-21-03	4	\$6,000	N
Eatough, Delbert		EPA	Measurement of Semivolatile Particulate Matter	08-02-03	09-15-04	1	\$3,650	C
Elton, Terry		NIH	Human Angiotensin II	01-01-03	12-31-03	1	\$219,000	N
Farnsworth, Paul		ACS/PRF	Ion Sampling and Transport....	07-01-03	08-31-04	4	\$80,000	N
Farnsworth, Paul	w/ Lee	NIH	Electromobility Focusing for Separation of Proteins	02-01-03	01-31-04	1	\$135,510	N
Farnsworth, Paul		DOE	Ion Sampling	09-01-03	10-31-06	1	\$125,000	N
Fleming, Steven		NSF	Bioorganic Reaction Animations	02-01-03	01-31-05	1	\$37,230	N
Graves, Steven		Glenveigh	Device	11-01-03	12-31-04	4	\$40,000	N
Graves, Steven		Glenveigh Research	Digibind for the Treatment of Severe Preeclampsia	11-01-03	12-31-04	4	\$66,826	C
Henderson, Doug		NATO	NATO conference	08-27-03	09-30-04	4	\$30,000	N
Henderson, Doug	w/ Rowley	ACS/PRF	Molecular Simulation of Equilibrium	01-01-03	08-31-05	4	\$40,000	N
Izatt, Reed		ARO	Modeling and Thermodynamic Study of Selected Aqueo.	06-01-01	05-31-04	1	\$32,500	C
Lamb, John		Dionex Corp	Macrocyce-Based Ion Chromatography	07-01-13	06-30-04	4	\$28,694	C
Lee, Milton		NIH	Electromobility Focusing for Separation of Proteins	02-01-03	01-31-04	1	\$135,510	N
Lee, Milton		Palmar	High Throughput chemical Analyzer	08-11-03	open	4	\$5,000	C
Lee, Milton		US Army / Dugway	Chemical & Biological Agent Detector	09-17-03	09-16-05	1	\$100,000	N
Lee, Milton L		DOD	Chemical and Biological Agent Detector	05-08-03	05-07-04	1	\$8,274	N
Lewis, James		U of Utah (LLNL, DOE)	C-SAFE	12-16-02	09-30-03	2	\$25,000	N
Lewis, James		U of Utah (LLNL, DOE)	C-SAFE	12-16-02	09-30-03	2	\$15,000	N
Linford, Matt		ACS/PRF	Fundamental Studies of the Frmatio...	01-01-04	08-31-06	4	\$80,000	N
Linford, Matthew		US Synthetic	Research Agreement	09-03-03	12-23-03	4	\$8,500	N
Paul Savage		WAESO (ASU)	Synthesis of Trivalent Antigens	06-02-03	06-01-04	2	\$1,512	N
Robbins, Morris		Kansas (NIH)	AdoHcy Hydrollase Inhibitors as Antiparrasitic Agents	02-01-03	01-31-04	2	\$9,580	C
Robins, Morris		U of Kansas (NIH)	AdoHcy Hydrolase: Structure, Mechanism, Inhibitor Design	02-01-03	01-31-04	2	\$35,300	N
Savage, Paul		NIH-Univ No. Arizona	Receptor Aggregation on the Cell Surfaces	03-01-03	02-29-04	1	\$14,892	C
Savage, Paul		WAESO/ASU	WAESO	10-10-03	06-01-04	2	\$2,268	C
Savage, Paul	w/ Fleming	NSF	Bioorganic Reaction Animations	02-01-03	01-31-05	1	\$37,230	N

# Physical & Mathematical Sciences 2003 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Title</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type</u>	<u>Amount</u>	<u>N/C</u>
Savage, Paul		Princeton (NIH)	Cationic Steroid Antibiotics	01-15-03	12-31-03	2	\$232,167	N
Savage, Paul		NAU (NIH)	Receptor Aggregation on the Cell Surfaces	03-01-03	06-30-04	2	\$108	C
Thulin, Craig		WAESO (ASU)	Student Award	06-12-03	08-31-03	2	\$1,756	N
Vernon, Leo		TheraPro Technologies	Immunotoxins and Immunoregulators	09-01-95	open	4	\$10,500	C
Watt, Gary	w/ Harb, John	NASA	Nanomaterials & Structures for Nanno & Micropower Applications	01-15-02	01-14-05	1	\$40,000	C
Willardson, Barry		NIH	Regulation of Visual Signal Transduction by Phosducin	05-01-03	04-30-04	1	\$172,396	C
Woodfield, Brian		Dept of Education	Improving the Adoption of electronic Instructional Media and Simulations in the Curriculum	10-01-03	09-30-04	1	\$74,962	N
Woolley, Adam		ARO	DNA-Templated Patterning and Fabrication ...	09-01-02	10-31-04	1	\$59,685	C
Woolley, Adam		Army Research Office	Patterning & Fabrication of Nannowires and Connections	09-01-02	10-31-03	1	\$59,209	C
<b>Computer Science</b>								
Barrett, William		LDS Church	Family History	09-01-03	08-31-04	4	\$30,000	N
Egbert, Parris		StorageTek	Using commodity Graphics Boards	09-02-03	03-02-04	4	\$40,764	N
Goodrich, Michael		Nissan	Enhancing Neglect Tolerant Driving	04-01-03	03-31-04	4	\$60,000	N
Seamons, Kent		SPAWAR	Trust Negotiations for Dynamic Coalitions	03-21-01	03-20-04	1	\$393,664	C
Seamons, Kent		NSF	ITR: Automated Trust Negotiation in Open Systems	09-01-03	08-31-04	1	\$192,675	N
Seamons, Kent		UC Irvine (NSF)	Flexible Access Control Systems for Urban Crisis Response	10-01-03	09-30-04	2	\$82,093	N
<b>Geology</b>								
Bickmore, Barry		ACS/PRF	Modeling of Clay Mineral Acid-Base Reactivity	01-01-03	08-31-05	4	\$35,000	N
Harris, Ron		NSF	Geodynamic Evolution of Active Continent Collision	01-01-04	12-31-05	1	\$136,850	N
Kowallis, Bart		USGS	Geologic Mapping, Structure, and the Hazrd of the Dry Fork and Steinkner Reservoir 71/2 minute quadrangles.	05-01-03	04-30-04	1	\$16,650	N
McBride, John		NSF	Investigation of Mantle Structure Beneath Illinois Basin	09-01-03	08-31-05	1	\$99,889	N
McBride, John		UIUC, DOE	Assessment of Geological Carbon Sequestration...	10-01-03	09-30-04	2	\$35,271	N
Morris, Tom		USGS	Geologic Map of the Golden Throne	05-01-03	04-30-04	1	\$4,999	N
Morris, Tom		Ntl Park Svc.	Geologic Map-Golden Throne	04-15-03	12-31-05	1	\$10,000	N
Morris, Tom		Ntl Park Svc.	Geologic Map-Twin Rocks	04-15-03	12-31-05	1	\$10,000	N

# Physical & Mathematical Sciences 2003 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Title</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type</u>	<u>Amount</u>	<u>N/C</u>
<b><i>Mathematics</i></b>								
Bates, Peter	w/ Lu	NSF	Theory and Applications for Infinite Dimensional Dynamical Systems	06-05-03	05-31-04	1	\$28,000	C
Cannon, James		NSF	Asymptotic Properties of 3-Manifolds and their Fundamental Groups	07-01-03	06-30-04	1	\$35,012	C
Dorff, Michael		Natl. Research Council	COBASE Collaborative Fellowship	06-01-03	09-30-03	1	\$8,400	N
Lu, Kening		NSF	Theory and Applications for Infinite Dimensional Dynamical Systems	06-05-03	05-31-04	1	\$28,000	C
Lu, Kening		NSF	US-Asia Worksop on NonLinear Dynamics	07-01-03	06-30-04	1	\$12,000	N
Pollington, Andrew		NSF	IPA Agreement	09-03-03	09-04-04	1	\$162,914	C
Wright, David		Institute for Advanced Study	Professional Development Outreach	01-01-04	12-31-04	2	\$20,000	C
Wright, David G.		Univ Wisconsin-Milwaukee	2003 Workshop in Geometric Topology	05-13-03	open	2	\$10,150	N
Xian-Jin, Li		NSA	Spectral Theory of Automorphic Functions and Beurling-Selberg Extremal functions.	06-20-03	06-29-04	1	\$14,678	N
<b><i>Physics &amp; Astronomy</i></b>								
Allred, David		ASU (NSF)	Oxidization Rates	01-17-03	01-17-14	2	\$756	C
Bergeson, Scott		NSF	Highly Excited, Ultra Cold Atoms	06-30-03	08-30-04	1	\$94,736	C
Blotter, Jonathan	w/ Leishman	LDS Church	Comprehensive Survey and Refinement of Confrence Center Acoustics	07-01-02	12-31-03	4	\$12,521	C
Campbell, Branton	w/ Boerio-Goates	NSF	Acquisition of a Single Crystal CCD Xray Diffractometer	09-01-03	08-31-04	1	\$203,000	N
Campbell, Branton		Research Corporation	Incident neutron wavelength	01-01-04	12-31-04	4	\$35,000	N
Davis, Robert	w/ Harb	NASA	Nannomaterials & Structures for Nanno & Micropower Applications	01-15-02	01-14-05	1	\$40,000	C
Hatch, Dorian		DOE	Structural Transformations in Peroskite-like Nitride Ceramics	08-01-03	08-31-07	1	\$50,477	N
Hirschmann, Eric		NSF	Collaborative Research ITR	09-01-03	08-31-07	1	\$80,000	N
Leishman, Tim		LDS Church	Comprehensive Survey and Refinement of Confrence Center Acoustics	07-01-02	12-31-03	4	\$2,521	C
Leishman, Tim		LDS Church	Comprehensive Survey	01-01-04	04-30-04	4	\$6,470	C
Leishman, Tim		LDS Church	Tabernacle Acquostics	01-01-04	08-31-04	4	\$6,190	N
Lewis, James		U of U (DOE)	C-SAFE	09-01-01	09-30-03	2	\$25,000	C
Lewis, James		Ntl Inst of Strds & Tech	Theoretical Investigation of Surface Effects...	06-01-03	07-01-04	1	\$32,000	N
Lewis, James		UofU/NSF		08-01-03	08-31-07	2	\$76,581	N
Lewis, James P.	w/ Hatch	DOE	Structural Transformations in Peroskite-like Nitride Ceramics	08-01-03	08-31-07	1	\$50,477	N
Lieshman, Timothy		LDS Church	Reinement of Conference Center Acoustics	07-01-02	04-30-03	4	\$9,626	C



# Physical & Mathematical Sciences 2003 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Title</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type</u>	<u>Amount</u>	<u>N/C</u>
Peatross, Justin		ASU (NSF)	Optimal Design of Space Systems, Student Training	01-17-03	01-16-04	2	\$756	N
Peatross, Justin		NSF	REU Supplement	07-03-03	06-30-04	1	\$5,000	C
Peatross, Justin		NSF	REU Supplement	07-01-03	06-30-04	1	\$60,210	C
Sommerfeldt, Scott	w/ Lieshman	LDS Church	Reinement of Conference Center Acoustics	07-01-02	04-30-03	4	\$9,626	C
Sommerfeldt, Scott		Caterpillar Inc.	Noise Control in Earth Moving Equipment	07-23-01	12-31-03	4	\$84,083	C
Sommerfeldt, Scott	w/ Leishman, Blotter	Larson Davis, Inc.	Energy-Based Acoustic Measurement Techniques and Sensors	04-01-03	03-31-04	4	\$58,872	N
Sommerfeldt, Scott	w/ Leishman	LDS Church	Comprehensive Survey and Refinement of Conference Center Acoustics	07-01-02	12-31-03	4	\$2,521	C
Spencer, Ross	w/ Turley	NSF	REU	05-15-03	04-30-04	1	\$33,032	C
Stokes, Harold	w/ Hatch	DOE	Structural Transformations in Perovskite-like Nitride Ceramics	08-01-03	08-31-07	1	\$50,477	N
Turley, Steve		ASU (NSF)	Polarizer	01-17-03	01-17-14	2	\$756	N
Turley, Steven		NSF	REU	05-15-03	04-30-04	1	\$33,032	C
<b>Statistics</b>								
Whiting, David	w/ Rogers	NSF	Systematic Biology & Bioinformatics Research Experiences	08-01-02	07-31-05	1	\$25,000	C

Type: 1=Federal; 2=Federal Subcontract; 3=State; 4=Private

N/C: N=New; C=Continuing

Department Totals	
Chemistry & Biochemistry	\$2,806,929
Computer Science	\$1,147,855
Geology	\$0
Mathematics	\$319,154
Mathematics Education	\$0
Physics & Astronomy	\$1,063,716
Statistics	\$25,000
<b>College Total:</b>	<b>\$5,362,654</b>

# Physical & Mathematical Sciences

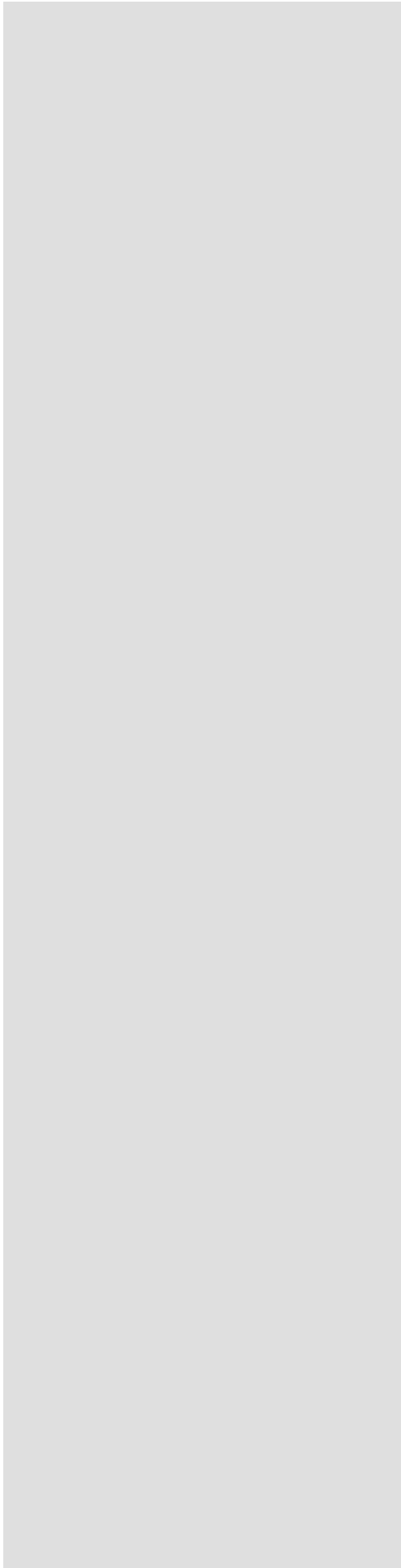
## Source Breakdown of Grants and Contracts

Sponsor	Number Awarded	Total Amount
<b>Federal</b>		
Army Research Office	1	\$59,209
ARO	2	\$92,185
Dept of Education	1	\$74,962
DOD	1	\$8,274
DOE	4	\$276,430
EPA	1	\$3,650
NASA	2	\$80,000
Natl. Research Council	1	\$8,400
NIH	6	\$1,128,439
NIH/JHU	1	\$79,332
NIH-Univ. No. Arizona	1	\$14,892
NSA	1	\$14,678
NSF	18	\$1,303,809
Ntl Inst of Stds & Tech	1	\$32,000
Ntl Park Svc.	2	\$20,000
SPAWAR	1	\$393,664
US Army/Dugway	1	\$100,000
USGS	2	\$21,649
<b>Total</b>	47	\$3,711,573
<b>Subcontracts</b>		
ASU (NSF)	3	\$2,268
Institute for Advanced Study	1	\$20,000
Johns Hopkins (NIH)	1	\$161,565
Kansas (NIH)	1	\$9,580
NAU (NIH)	1	\$108
Princeton (NIH)	1	\$232,167
U of Kansas (NIH)	1	\$35,300
U of U (DOE)	1	\$25,000
U of Utah (LLNL, DOE)	2	\$40,000
UC Irvine (NSF)	1	\$82,093
UIUC, DOE	1	\$35,271
Univ Wisconsin-Milwaukee	1	\$10,150
UofU/NSF	1	\$76,581
WAESO (ASU)	3	\$5,536
<b>Total</b>	19	\$735,619
<b>State</b>		
None		
<b>Total</b>		

# Physical & Mathematical Sciences

## Source Breakdown of Grants and Contracts

Sponsor	Number Awarded	Total Amount
<b>Private</b>		
ACS/PRF	4	\$235,000
Am. Fndtn. AIDS Res.	1	\$90,000
Caterpillar Inc.	1	\$84,083
Desert Research Institute	1	\$6,000
Dionex Corp	1	\$28,694
Glenveigh Research	2	\$106,826
Larson Davis, Inc.	1	\$58,872
LDS Church	8	\$79,473
NATO	1	\$30,000
Nissan	1	\$60,000
Palmar	1	\$5,000
Research Corporation	2	\$70,000
Stmospheric Research	1	\$1,750
StorageTek	1	\$40,764
TheraPro Technologies	1	\$10,500
US Synthetic	1	\$8,500
<b>Total</b>	26	\$915,462

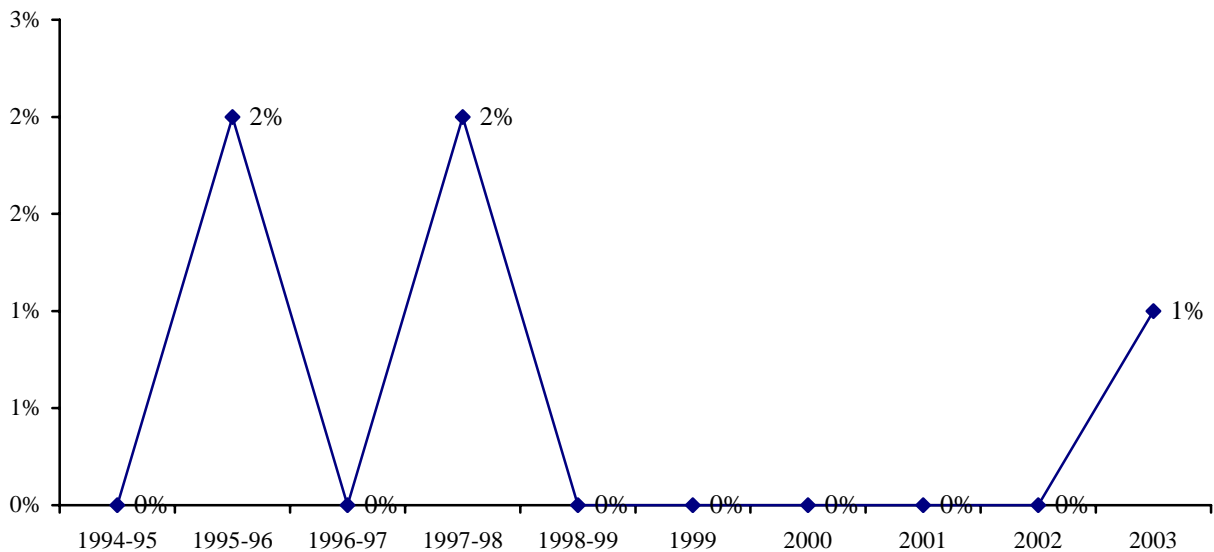


# College of Religious Education

# Summary of Sponsored Research (Grants & Contracts)

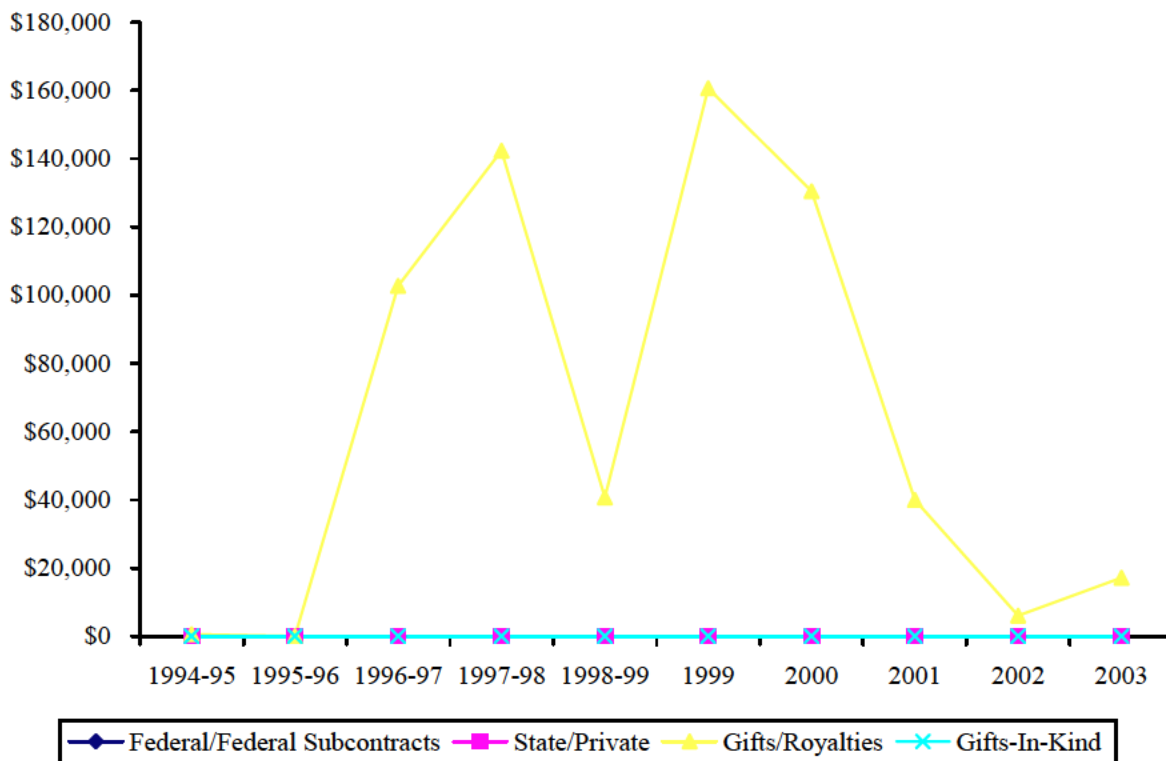
Department	# of Faculty	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Ancient Scripture	37	1	0	0	0
Church History & Doctrine	36	0	0	0	0
<i>TOTALS</i>	73	1	0	0	0

## Proposal Submission Activity



# External Research Funding (All Sources)

Year	Grants/Contracts		Gifts/Royalties	Gifts-In-Kind	Total
	Federal/Federal Subcontracts	State/Private			
1994-95	\$0	\$0	\$567	\$0	\$567
1995-96	\$0	\$0	\$0	\$0	\$0
1996-97	\$0	\$0	\$102,726	\$0	\$102,726
1997-98	\$0	\$0	\$142,371	\$0	\$142,371
1998-99	\$0	\$0	\$40,690	\$0	\$40,690
1999	\$0	\$0	\$160,672	\$0	\$160,672
2000	\$0	\$0	\$130,507	\$0	\$130,507
2001	\$0	\$0	\$40,000	\$0	\$40,000
2002	\$0	\$0	\$6,000	\$0	\$6,000
2003	\$0	\$0	\$17,126	\$0	\$17,126



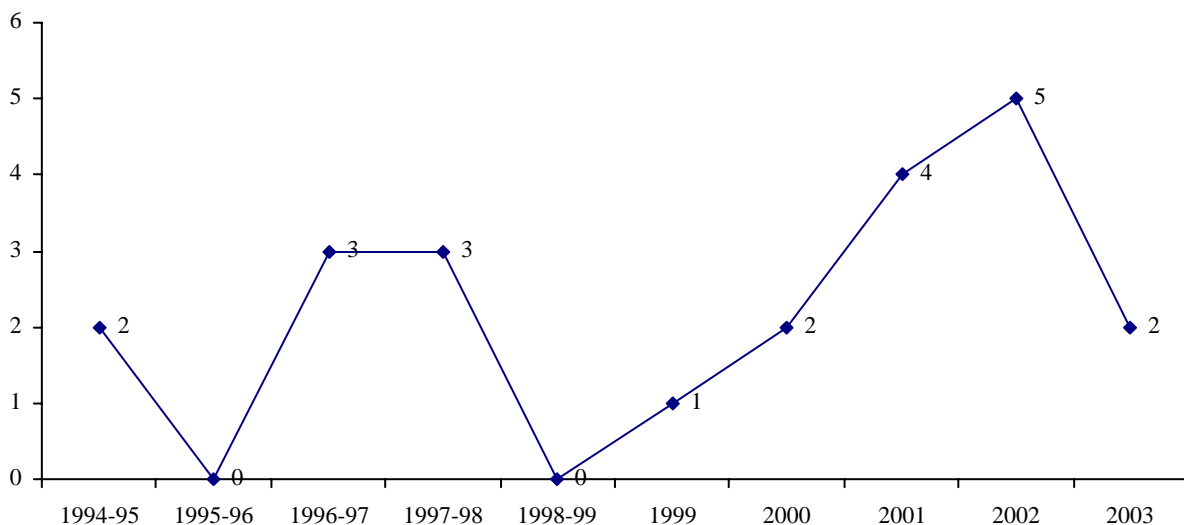


# Non-College Units

# Summary of Sponsored Research (Grants & Contracts)

Department	# of Proposals Submitted	# of Awards	Dollars Awarded
Academic VP Student Life	1	1	\$327,250
Admissions & Records	0	0	\$0
Center for Instructional Design	0	0	\$0
Church Educational System	0	0	\$0
Faculty Center	0	0	\$0
General Education & Honors	0	0	\$0
Harold B. Lee Library	1	1	\$10,000
Information Technology Services	0	0	\$0
Jacobsen Center	0	0	\$0
Media Services	0	0	\$0
Technology Transfer	0	0	\$0
University Accessibility Center	0	0	\$0
University Computing Services	0	0	\$0
<b>TOTALS</b>	<b>2</b>	<b>2</b>	<b>\$337,250</b>

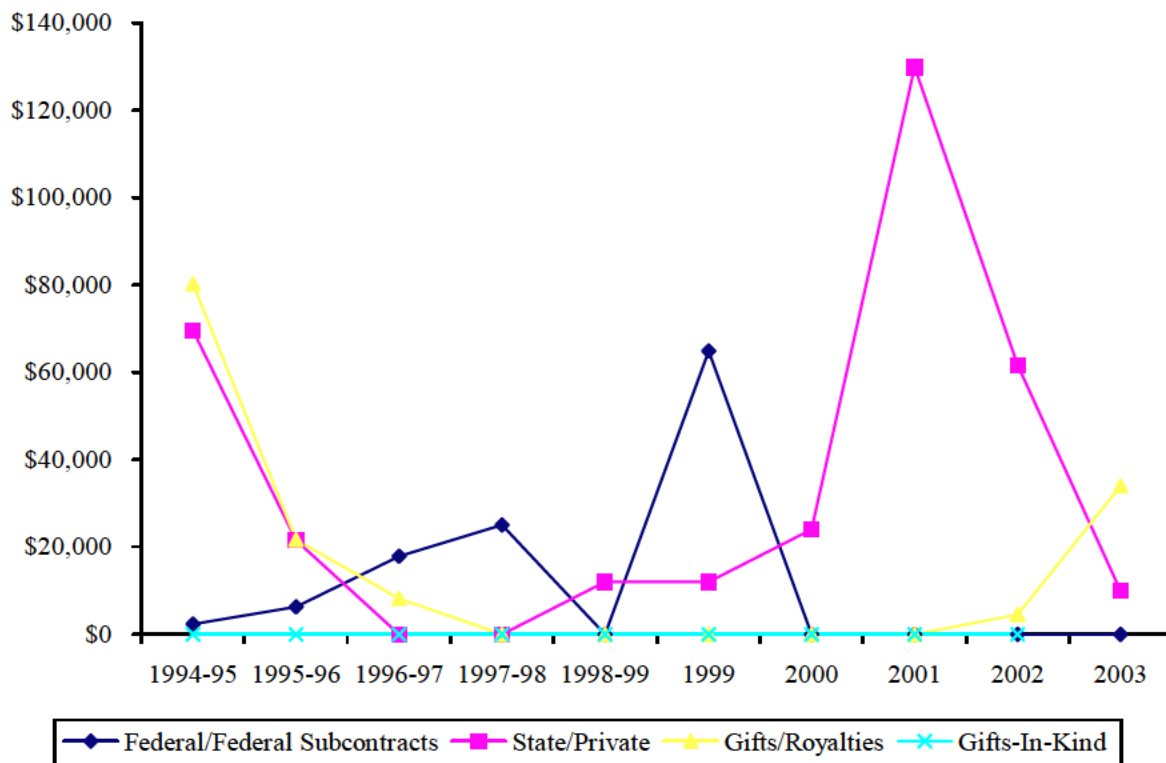
## Proposals Submitted





# External Research Funding (All Sources)

Year	Grants/Contracts		Gifts/Royalties	Gifts-In-Kind	Total
	Federal/Federal Subcontracts	State/Private			
1994-95	\$2,300	\$69,500	\$80,221	\$0	\$152,021
1995-96	\$6,214	\$21,500	\$21,706	\$0	\$49,420
1996-97	\$17,871	\$0	\$8,257	\$0	\$26,128
1997-98	\$25,000	\$0	\$0	\$0	\$25,000
1998-99	\$0	\$12,000	\$0	\$0	\$12,000
1999	\$64,875	\$12,000	\$0	\$0	\$76,875
2000	\$0	\$24,000	\$0	\$0	\$24,000
2001	\$0	\$129,916	\$0	\$0	\$129,916
2002	\$0	\$61,600	\$4,528	\$0	\$66,128
2003	\$327,250	\$10,000	\$33,973	\$0	\$371,223



# Non-College Units 2003 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Title</u>	<u>Start Date</u>	<u>End Date</u>	<u>Type</u>	<u>Amount</u>	<u>N/C</u>
	<i>Academic VP Student Life</i>							
Rogers, Sandra		Temple U (USAID)	English Language Training for China	09-21-03	08-31-04	2	\$327,250	N
	<i>Harold B. Lee Library</i>							
Washburn, Allyson		SIRSI/ALA	Extending Library Services	06-16-03	open	4	\$10,000	N

Type: 1=Federal; 2=Federal Subcontract; 3=State; 4=Private

N/C: N=New; C=Continuing

## Department Totals

	\$327,250
Admissions & Records	\$0
Center for Instructional Design	\$0
Church Educational System	\$0
Faculty Center	\$0
General Education & Honors	\$0
Harold B. Lee Library	\$10,000
Information Technology Services	\$0
Jacobsen Center	\$0
Media Services	\$0
Technology Transfer	\$0
University Accessibility Center	\$0
University Computing Services	\$0
<b>College Total:</b>	<b>\$337,250</b>

# Non-College Units

## Source Breakdown of Grants and Contracts

<u>Sponsor</u>	<u>Number Awarded</u>	<u>Total Amount</u>
<b>Federal</b>		
None		
<i>Total</i>	<hr/>	
<b>Subcontracts</b>		
	1	\$327,250
<i>Total</i>	1	\$327,250
<b>State</b>		
None		
<i>Total</i>	<hr/>	
<b>Private</b>		
SIRSI/ALA	1	\$10,000
<i>Total</i>	1	\$10,000



# Administrative Support of Compliance Committees & Regulations

# Compliance and Certification

There are a number of federal, state, and university regulations which are intended to ensure the safety and well being of those associated with research and creative activities at academic institutions.<sup>1</sup> The Office of Research and Creative Activities specifically supports three university committees and provides other certifications as needed. The following pages contain a record of official actions taken by these committees during the January 2003 through December 2003 time period. In addition to those official actions, the committee—their individual chairs and members—and the staff of ORCA actively reviewed facilities, developed and updated policy, and education the university research community on pertinent issues. The following is a brief description of each committee. Their 2003 membership and activities are on subsequent pages.

**The Institutional Review Board (IRB)** determines that risks to human subjects involved in research are “minimized by appropriate safeguards; that risks are reasonable in relation to anticipated benefits; informed consent is sought from subjects and documented; and that selection of subjects is equitable and guided by consideration for appropriate safeguards for any subjects likely to be vulnerable to undue influences” (Federal Regulations).

At BYU, all research (funded or unfunded) must meet the guidelines and be appropriately reviewed and approved. Since regulations encompass everything from interviews and questionnaires to medical practices, faculty and students should work closely with this committee.

**The Institutional Animal Care and Use Committee (IACUC)** is required by federal regulation and is intended to ensure appropriate housing, care, and humane treatment of animals used in research or other academic activities. It formally approves the maintenance of all such animals for research projects and also reviews any use of laboratory animals on campus. ORCA supports this committee and maintains the university’s “Assurance” status with federal agencies. The “Assurance” document is actually a way of accrediting BYU to maintain and work with laboratory animals.

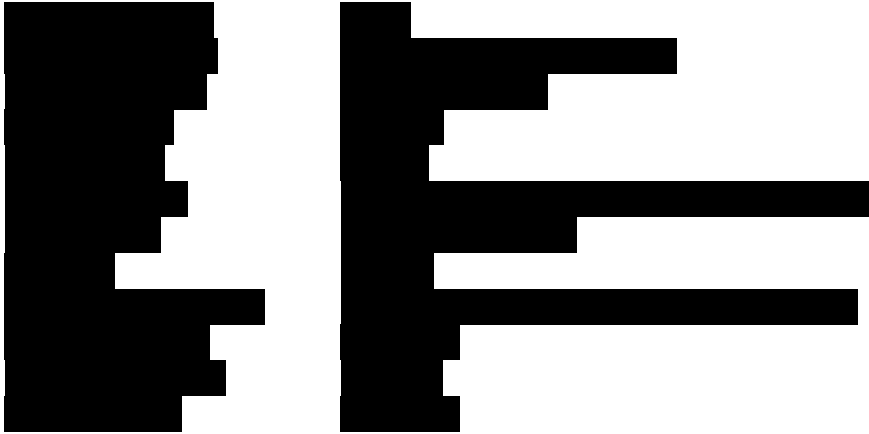
**The Institutional BioSafety Committee (IBC)** supervises the use of recombinant DNA and other biological safety and hazard issues at BYU. Such use might involve constructing and handling DNA molecules in organisms. The Institutional BioSafety Committee must review all proposed experiments and approve such in advance of actual work. As with the other committees listed above, IBC has jurisdiction over any recombinant DNA experiments on campus—be they a part of funded or unfunded research or part of instructional activities.

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<sup>1</sup> Appendix 2 contains a list illustrating the number and kind of regulations with which we must comply.

# The Institutional Review Board (IRB)

Research involving human subjects requires approval of the university's IRB committee. This committee works closely with departmental or college communities and administrators and is composed of the following individuals:



The action of the IRB committee for 2003 are summarized by the following table.

## IRB Protocol Activity 2003

College	Expedited	Full Board	Exempt	Pending	Approved	Withdrawn, Denied or On Hold	Continuing Projects
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# The Institutional Animal Care & Use Committee (IACUC)

The IACUC is a required university committee that oversees animal care and use, whether in research or instructional programs. This committee is composed of the following individuals:



The action of the IACUC committee for 2003 are summarized by the following table.

IACUC Protocol Activity 2003			
College	New Approvals	Continuing	Pending
[Redacted]	[Redacted]	[Redacted]	[Redacted]

# The Institutional BioSafety Committee (IBC)

The BioSafety Committee supervises the use of recombinant DNA and other biological safety and hazard issues within the university to insure that the federal guidelines pertaining to this activity are satisfied. The committee is also responsible for the supervision of all infectious materials used on campus in order to insure that local, state, and federal rules and regulations are understood and observed. This committee is composed of the following individuals:



There were five new projects reviewed and twenty-two annual reviews done by the BioSafety Committee during the 2003 year.





# Faculty Recognition

# Faculty Recognition

Each year the Office of Research and Creative Activities honors one or more faculty who have furthered the progress of research at BYU. Their accomplishments may be in development of their own sponsored research projects or in service to others in support of research.

The Technology Transfer Office also selects one or more individuals who have contributed to the process of transferring research results to societal uses. Both awards are presented at the annual Sponsored Research Luncheon.

The list below includes the most recent winners as well as the winners of the past three years. This group of past winners works with ORCA in selecting those to be recognized the next year.

## *ORCA*

<i>Year</i>	<i>Recipient</i>
2003	Gary Hooper
2002	Michael Bush
2001	Richard L. Rowley
2000	David Magleby

## *Intellectual Properties*

<i>Year</i>	<i>Recipient</i>
2003	Norm Jones James Nelson Alan Zundel
2002	David Jensen
2001	Steve A. Fleming Larry L. Howell Paul B. Savage
2000	Ed Red Sandra Mangum

# 2003 Environments for Mentoring Grant Recipients

The grant proposals are first reviewed at the department and college levels. Following those reviews, a group of faculty representing various disciplines across campus give a final review where they compare protocols to each other based on how well they incorporate the desired goals and elements of a mentored environment. The awards range in value according to the proposal and are given in January to be worked on throughout the calendar year. Final reports are received from the faculty the next year.

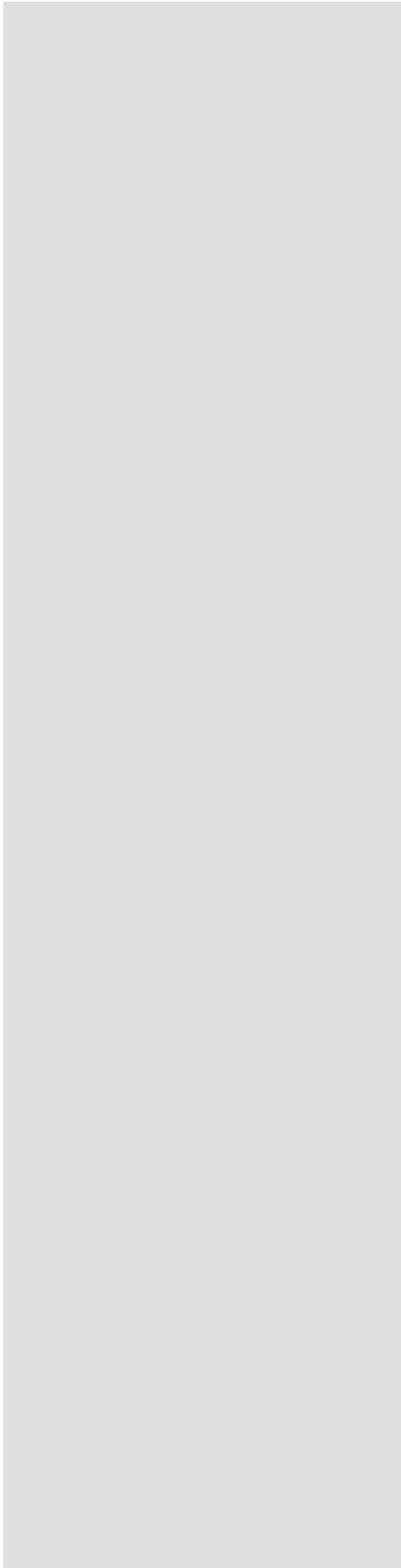
<u>Recipient</u>	<u>Title</u>	<u>Dept</u>	<u>College</u>
Ernest Hawkins	Muscle, Fat and Patability profile of Alpaca Carcasses	ND&FS	B&A
Keith Crandall	Heirarchically mentored Research in Molecular Systematics and Bioinformatics	IB	B&A
David Kooyman	Isolation of the Human Follicular Dendritic Cell(FDC) FC gamma R2 Receptor cDNA	M&MB	B&A
David Busath	Structure and function of M2 channels from Influenza Virus	P&DB	B&A
David McClellan	UG Studies in Bioinformatics: Training, Mentoring, and Collaborating...	IB	B&A
Jack Sites	Evolutionary Genetics of Reptiles-Mentoring BYU Undergraduate Students (renewal)	IB	B&A
Michael Whiting	Phylogeny of Insects: A Hierarchical Mentorship Experience	IB	B&A
William Winder	Targeting of AMP-activate Protein Kinase for treatment of Type 2 Diabetes	P&DB	B&A
Dixon Woodbury	Molecular Reconstitution of Neurotransmitter Release	P&DB	B&A
Allan Judd	Hypothalamic - pituitary- adrenal axis: Regulation by cytokines and role in development of blood pressure regulation	P&DB	B&A
Sterling Sudweeks	Neruronal Nicotinic Acetylcholine Receptors and Alzheimers disease	P&DB	B&A
Richard Terry	The application of geographic information technologies and soil science methods to search for ancient Maya agricultural fields	P&AS	B&A
Russell Rader	Can Temperature and Population Body Size Reduction Diminish the Harmful Impart of Gambusia affinks on least Chub	IB	B&A
Richard Kellems	Develop Training Resource Materials for Dairying in the Developing World	P&AS	B&A
Merrill Christensen	Selenium Inactivation of Prostate Transcription Factors	ND&FS	B&A
Lee Braithwaite	Marine Biology & Biological Oceanography at Starfor University's Hopkins Marine Station	IB	B&A
Donald Breakwell	Diversity of Microbial Populations as and Indicator of Ecological Restoration	M&MB	B&A
Peter J Maughan	The Quinoa Genetic Mapping and Transformation Project	P&AS	B&A
Craig Coleman	comparative Genomics and Gene Discovery in Quinoa	P&AS	B&A
Todd Robinson	Determination of camelid energy and protein requirements	IB	B&A
William McCleary	Genetic and Biochemical Studies of the Phou Protein from Escherichia coli	M&MB	B&A
John Gardner	Brigham Young University Microscopy Lab Outreach Program	IB	B&A
Alan Harker	Microbial Diversity in the Hypersaline Environment of the Great Salt Lake	M&MB	B&A
Brent Nielsen	Chloroplast DNA Replication Initiation Proteins	M&MB	B&A
Kent Hatch	The wintertime survival and behavior of an aquatic frog: Rana luteiventris	IB	B&A
Richard Robison	Studies on the Etiologic Agent of Buruli Ulcer, Mycobacterium ulcerans	M&MB	B&A
Charles Riley Nelson	Insect Diversity on Mount Timpanogos with special reference to training future taxonomists in field and curatorial techniques	IB	B&A
Frost Steele	Alpaca Meat Investigations	ND&FS	B&A
Eric Jellen	Cytogenetic Analysis and Ovule Culture in Cheropodium quinoa	P&AS	B&A
Bruce Nephi Roundy	Academic and Field Experience in Natural Resource Management	IB	B&A
Val Jo Anderson	Use of Plateau herbicide in the control of Cheatgrass and effect of rate on seeded rangeland species	IB	B&A
Leigh Johnson	Plant Systematics and Informatics- A Proposal for Undergraduate Mentored Research at BYU	IB	B&A
Jerran Flinders	Effects of artificial wildlife water catchments (guzzlers) on wildlife population dynamics and habitat usage in Utah	IB	B&A
Phil Allen	Invasive Plant Species: Soil Salinity, weed competition, and GISmodeling	P&AS	B&A

Rex Cates	Testing Natural Products Produced by Plants for Activity Against Human Diseases	IB	B&A
Bruce Nephi Smith	Lifezones, Temperature and Metabolism	P&AS	B&A
Duke Rogers	Mentoring Environment in Molecular Systematics: Nurturing Undergraduate Investigators	IB	B&A
Kim O'Neill	Mentoring Undergraduate Students in the Microbiology and Molecular Biology Undergraduate Research Training Program	M&MB	B&A
Byron Murray	Biological Markers in a Study of the Influence of Behaviour Modification on Chronic Disease Risk Factors	M&MB	B&A
Kay S Mortensen	Human Powered Submarine	MECHE	E&T
Richard Rowley	Undergraduate Research in Molecular Simulations	CHEME	E&T
Travis Oliphant	Development of a portable magnetic resonance imaging device using a Halbach array	ECEN	E&T
Michael Bailey	Creating and IT System Evaluation and Test Facility for Student Research	TECH	E&T
Tim McLain	Undergraduate Mentoring Opportunities in Cooperative control of Multi-Vehicle Teams	MECHE	E&T
Jim Nelson	Student Mentoring and International Collaboration on Watershed and Surface Water Modeling, Santiago Chile	CEEN	E&T
Jerry Bowman	Teaching Aircraft Design to 1st and 2nd Year Engineering Students	MECHE	E&T
Aaron Hawkins	Undergraduate Micro-fabrication Mentoring Project	ECEN	E&T
Daniel Maynes	Electro-osmotic Flow and Heat Transfer	MECHE	E&T
Dale Tree	Investigation of Fuel Properties for Sottless Diesel Combustion	MECHE	E&T
D J Lee	Shape-based Pattern Recognition for Biological Research	ECEN	E&T
C. Greg Jensen	The PACE Undergraduate Skunk Works	MECHE	E&T
Michael Miles	Validation of Friction Stir Welding for Superplastic Manufacture of Titanium Aerospace Components	TECH	E&T
Stephen Renshaw	Extending Self Pace, Module	TECH	E&T
Thomas Erekson	Technology, design, and Engineering: Mentoring a Young Women	TECH	E&T
Richard Helps	Mechatronic System Development	TECH	E&T
Jeffrey Bons	Gas Turbine Basic Research Center	MECHE	E&T
Norm Jones	Ground Water Modeling for Arid Regions in the Middle East	CEEN	E&T
Larry Baxter	Technical Solutions for Renewable Energy Utilization	CEEN	E&T
Olin Campbell	Development of a Casual Model for Online Distributed Learning Completion Rate	IP&T	EDUC
Donald Holsinger	Can Vietnam Reform its Education System?	EL&F	EDUC
Aaron Jackson	Mentoring Native American Students	CP&SE	EDUC
Timothy Smith	Mentoring in Publication & research: Student Editorial & Research Team for the Journal of College Counseling	CP&SE	EDUC
Mary Anne Prater	The Portrayal of Disabilities in Juvenile Literature	CP&SE	EDUC
Barbara Culatta	Systematic and Engaging Early Literacy Instruction	A&SLP	EDUC
Annela Teemant	Development and Evaluation of the Bilingual/ESL Endorsement through Distance Education Program	TED	EDUC
Steven Hite	Multi-Level Mentoring: The BYU Ugandan International Volunteers Program (IVP)	EL&F	EDUC
P. Scott Richards	Mentoring Students in Their Efforts to Integrate LDS Perspectives into Psychological Theory and Practice	CP&SE	EDUC
Betty Ashbaker	Assessing Developmental Progress of Romanian Orphans using the revised-brigance diagnostic inventory	CP&SE	EDUC
Charles Graham	Service and Research with Technology Integration in Guatemalan Schools	IP&T	EDUC
Rodger Sorensen	Archipelago: A Mentored Interdisciplinary Media and Theatre Production	TMA	FAC
Bruce Smith	Towards a Perfection of Beauty	VA	FAC
Dennis Martin	Morals and Modesty: A Cultural Counterrevolution	COMM	FAC
Timothy Threlfall	Music Dance Theatre New York Showcase	TMA	FAC
Lawrence Vincent	Student Participation at the American Institute of Musical Studies (AIM) in Coraz, Austria	MUSC	FAC
Dale Monson	Pergolesi Research Center	MUSC	FAC
Dean Duncan	Media and the Contemporary Family	TMA	FAC
Joel Campbell	Utah Legislature Public Affairs Reporting Program	COMM	FAC
Eliza Hawkins	Mexico International Media Studies-Internship Program	COMM	FAC
Harrison Powley	Critical Edition of the Symphonies of Johann Wilhelm Hertel (1727-1789)	MUSC	FAC
Douglas McKinlay	Crestiou and production of Television Commercials	COMM	FAC
J Arden Hopkin	A Model for an Alternate Approach to Teach Undergraduate Majors in Voice at BYU	MUSC	FAC
Joseph Ostraff	Two Community Based Art Installations	VA	FAC

Cynthia Finlayson	BYU & The Syrian Department of Antiquities Mentored Museum Development Project	VA	FAC
Murray Boren	Scenes'	MUSC	FAC
Kory Katseanes	BYU Philharmonic Orchestra Tour	MUSC	FAC
Steve Lindeman	An Analysis of Woman's Influence in Jazz	MUSC	FAC
Janna Garner	Student Mentoring	KBYU	FAC
Amy Jensen	Media Education Curriculum Design and Instruction Outreach	TMA	FAC
Andrew Dabczynski	New Horizons Orchestra	MUSC	FAC
J Arden Hopkin	A Model for an Alternate Approach to Teach Undergraduate Majors in Voice at BYU	MUSC	FAC
Ivan Beutler	Developing and Testing a Utah-Sensitive High School Personal Finance Curriculum	HOMECE	FHSS
Roberta Magarrell	Multi-Level Internship Learning	MFHD	FHSS
Paul Pixton	An Annotated Edition of Wills and other testamentary instruments: Wrenbyry Chapelry, Cheshire, England-1661-1730	HIST	FHSS
Marti Allen	Mentored Museum Practices: Museum Technical Writing and Digital Collections Management	ANTHRO	FHSS
Randall Day	Re-Entry of Incarcerated Fathers in the Lives and Families of their Children	MFHD	FHSS
Marie Cornwall	Geneva Plant Closing, Community Impact, and family well-being in Utah Valley	SOC	FHSS
Matthew Bekker	Investigation of Tree-rock Pairs in Yellowstone National Park, Wyoming	GEOG	FHSS
Hal Miller	A Multidisciplinary Mentoring Environment for the Study of Altruism and Cooperative Decision-Making	PSYCH	FHSS
Scott Steffenson	Neuropsychology Lab rotations	PSYCH	FHSS
Donald Harreld	Hundredth Penny Tax Registers (1543-1545) Dataset Transcription and Analysis Project	HIST	FHSS
Joel Janetski	Public Archaeology in Escalante, Utah	ANTHRO	FHSS
Ross Flom	The Development of Intersensory Perception in Infancy	MFHD	FHSS
Bruce Brown	Measurement and Evaluation of organizational Change Efforts in Government Organiations	PSYCH	FHSS
Scott Cooper	Great Power Currency Zones and foreign Policy Outcome	POLISCI	FHSS
John Hawkins	Religion and religious change in cultural context in Nahuala and Santa Catarina Ixtahuacan, Guatemala...	ANTHRO	FHSS
Renata Forste	Family Interaction and Children's Well-being in Latin America	SOC	FHSS
Mark Allen	EEG and Object Recognition	PSYCH	FHSS
Stan Taylor	Ideas from LDS Political thought	POLISCI	FHSS
David Dollahite	Faith and Family Life in the Abrahamic Religions	MFHD	FHSS
Robert Ridge	The Mentoring Environment for Multicultural sensitivity research training	PSYCH	FHSS
Jason Carroll	The Marriage Moments Project: Strengthening your marriage as you become parents	MFHD	FHSS
George Ryskamp	Spanish Emigration: To Cuba and Beyond	HIST	FHSS
Kerk Phillips	Compliation and Demographic Analysis of the Tansong Census from 18th Century Korea	ECON	FHSS
Jeff Durrant	Development Community Conservation Program Capacity on Mount Kilimanjaro	GEOG	FHSS
Bruce Chadwick	The Middletown Research Program As A Mentoring Environment	SOC	FHSS
Gary Bryner	Realizing and Perpetuating the free life: the Constitution, Public Policy, and Future Generations	POLISCI	FHSS
Daniel Nielson	Delegation to International Organizations: Common Agency and the Multilateral Development Banks	POLISCI	FHSS
Marilyn Barrett	Kinnect to Brazil	DANCE	H&HP
Michael Barnes	Assessing the Case for Public Health Policy in Childhood Obesity: Research - Driven School-Based Advocacy	HSCI	H&HP
Pat Vehrs	Effects of traditional phys. Ed. and the Leadership in Fitness Training (LIFT) Program in Jr High School Phys. Ed. curriculum	PE	H&HP
Pat Debenham	Opening Doors: Mentoring the Creative Process in Collaborative Choreography Grades 7-12	DANCE	H&HP
Jennie Creer-King	A Mentored Performance and choreographic pedagogical experience partnered through the Am. College Dance Festival Assoc.	DANCE	H&HP
Allen Parcell	Understanding the effects of physical activity on gene responses in human skeletal muscle...	PE	H&HP
Iain Hunter	Analysis of the Hammer Throw & Steeplechase at Elite Track &Field Meets	PE	H&HP
Chuck Stiggins	Fitness, Wellness, and Exercise Science Internship/Mentoring Opportunities	PE	H&HP
Sandra Allen	Snow Queen-an Original Ballet in Three Acts	DANCE	H&HP
Steve Aldana	Lifestyle change Research Trial	PE	H&HP
Michael Bush	Research and Materials Development for Romanian Creating a Mentoring	F&I	HUM

	Environment		
Valerie Hegstrom	Spanish Golden Age Theater Performance Lab	S&P	HUM
Michelle James	Undergraduate Researchers as the Heart of "Sophie: A Digital Library of Early German-Language Women's Writing	G&SL	HUM
Dennis Packard	The LIFESONG Classroom to Television Mentoring Project	PHIL	HUM
Alan Melby	Legal English Electronic Film Review Project	LING	HUM
R. Kirk Belnap	Another Look at Impediments to Literacy in the Arab World	A&NEL	HUM
Christopher Lund	Accessing Early Modern Portuguese Culture and Society Through the Law	S&P	HUM
C Ray Graham	Mentoring Grant for Pedagogical software and Speech Technology Group	LING	HUM
Beverly Zimmerman	A Study of Collaborative, Project-based Mentoring in BYU's Professional Writing Program	ENGL	HUM
Ilona Klein	Website on Rome (Italy) for Italian 420, Ital 421, and Italy Study-Abroad Program	F&I	HUM
Randall Jones	A Study of Biennese Dialect and Colloquial Language Use and Attitudes-Summer 2003	G&SL	HUM
Ronald Dennis	A Computerized Beginning Welsh Course	S&P	HUM
Lynn Henrichsen	International TESOL Internship Program	LING	HUM
James Backman	The Mediation Learning Lab & Performance Evaluation Project		LAW
W. Cole Durham	BYU International Center for Law and Religion Studies Summer Research Fellows		LAW
David Day	Mentoring Environment for Music and Dance Research and Librarianship: International Indexing of Music and Dance Performances		Library
Mark Grover	The Young Oak Takes Root: The LDS Church in Argentina		Library
John Welch	BYU Studies articles and special issues		Library
John Barrick	Research-Focused Colloquium on Dividend Tax Capitalization	SOA&IS	MSM
Lynn Callister	Women's Wellness Centers in the Russian federation: Updating Clinical Standards and Outcomes Evaluation		NURS
Sandra Lookinland	Project Mentor		NURS
Mary Tiedeman	Evaluation of a Transition Program for Adolescents and Young Adults with a Chronic Condition		NURS
Barbara Mandleco	Mentoring Student Research Teams in the Family Adaptation to Disability and Chronic Conditions Project		NURS
Patricia Rushton	Nurses at War		NURS
Patricia Rushton	Male Grief Responses to the Loss of a Spouse		NURS
Greg Burton	Mentoring environment in HIV Pathogenesis: HIV cloning and sequencing	CHMBIO	P&MS
Ron Harris	Saving Lives and Mentoring Students In Active Tectonic Regions of Indonesia	GEOL	P&MS
Heidi Vollmer-Snarr	Explorations in Retinoid Chemistry	CHMBIO	P&MS
Thomas Sederberg	DigitalRoots: A Mentoring Environment for Research and Development in Genealogical Technology	CS	P&MS
Robert Davis	Nanoscale Electrical and Optical Materials	P&A	P&MS
Mark Clement	Cyber Terrorism Defense for BGP	CS	P&MS
Michael Joner	Mentoring Astronomy Students Through Expanded Research Studies ("MASTERS")	P&A	P&MS
Noel Owen	Spectroscopic Studies of Natural Products	CHMBIO	P&MS
Scott Glasgow	Macroscopic Energy Allocation, Transport and Thermodynamics of Dispersive/Dissipative Dielectrics, and Dispersive System Identification/ Reduction	MATH	P&MS
John McBride	Assess Earthquake Hazard in a Major Earthquake Zone Using High-Resolution Seismic Reflection Exploration, Ohio River	GEOL	P&MS
Adam Woolley	Developing Methods for Direct Haplotype Determination Using Atomic Force Microscopy of Single-Stranded DNA on Surfaces	CHMBIO	P&MS
Robert Speiser	Following Mathematics into Dance	MATHED	P&MS
Dallin Durfee	Laser Physics Research Team Mentoring Environment	P&A	P&MS
Parris Egbert	Virtual Environment Generation and Navigation	CS	P&MS
Barry Bickmore	The Earth Science Storybook Project	GEOL	P&MS
Eric Christiansen	Reconstructing Ancient Magmatic Environments	GEOL	P&MS
Michael Dorff	Undergraduate Research Experience in Geometry	MATH	P&MS
Eric Hintz	(TAURUS) Teaching Astronomy Undergraduates Research Under the Stars	P&A	P&MS
Barry Willardson	Mentoring in Proteomics and Molecular Immunology	CHMBIO	P&MS
Steven Fleming	Mechanistic and Synthetic Organic Photochemistry	CHMBIO	P&MS
Juliana Boerio-Goates	Energetics of Materials with Geological, Biological, and Technological Significance	CHMBIO	P&MS
Matthew Peterson	Synthesis and Evaluation of a New Class of Potential HIV Integrase Inhibitors	CHMBIO	P&MS
Steven Castle	The Synthesis of Tryptophan Derivatives via Catalytic Asymmetric Alkylation: Application to the Total Synthesis of Celogentin C	CHMBIO	P&MS
Matthew Linford	Develop Methods to Diagnose Ductal Carcinoma in situ Tissues to Predict Future Health or Disease in Women using ToF-SIMS	CHMBIO	P&MS

David Dearden	"Gas Phase Molecular Recognition"	CHMBIO	P&MS
Brooks Britt	Paleoenvironments of Lower Cretaceous strata in westcentral Utah and the duration of the K1 unconformity	GEOL	P&MS
Eric Hirschmann	Supercomputing in the Physical Sciences: A Mentoring Environment for Undergraduate Students	P&A	P&MS
Terry Elton	Improving the Mentoring Environment For Students Interested in Medical Biochemistry	CHMBIO	P&MS
Dan Ventura	Undergraduate Student Researchers in Machine Learning	CS	P&MS
Branton Campbell	Oxygen correlations in the BiMeVOx superionic conductors	P&A	P&MS
Eric Mercer	Visualization, Simulation and Analysis of the Bee-based Error Exploration algorithm	CS	P&MS
Gary Lawlor	Development of Web and Video Enhancement of Student Learning in Math 190 and Math 315	MATHED	P&MS
Lee Hansen	Thermodynamics of Biological Processes	CHMBIO	P&MS
Alan Mayo	Groundwater flow-North Rim of the Grand Canyon: a field and laboratory experience	GEOL	P&MS
David Allred	Mentoring Undergraduate Students Through EVV and Soft X-ray Research at BYU and at National Synchrotron Light Sources	P&A	P&MS
Paul Farnsworth	Laser excited fluorescence spectroscopy for trace chemical analysis	CHMBIO	P&MS
Thomas Morris	"Petroleum Exploration Mentoring Environment at BYU Using Seismic Exploration Data from the Petroleum Industry"	GEOL	P&MS
Eric Sevy	Laser and computational studies of chemical reaction dynamics and collisional relaxation phenomena	CHMBIO	P&MS
Merritt Andrus	Synthesis of Geldanamycin, Radicicol, and Resveratrol	CHMBIO	P&MS
Mary Jane Woodger	David Galbraith and the Establishment of the Jerusalem Center for Near Eastern Studies	CH&D	REL
Jeffrey Marsh	Eyewitness Church History	AS	REL
Cynthia Doxey	British and Irish Emigration Records	CH&D	REL
S. Kent Brown	The BYU New Testament Commentary	AS	REL
Thomas Wayment	The Greek Manuscript Tradition and its Relationship to the Joseph Smith Translation	AS	REL
Dennis Wright	Saints at War	CH&D	REL
Brent Top	"The Journey to Adulthood: the Experience of LDS Youth"	CH&D	REL



# Student Recognition



# 2003 Undergraduate Scholarship Recipients

This group is selected by a process resembling the faculty pursuit of external research funding. Students prepare proposals for undergraduate research or creative projects and select faculty mentors. A group of faculty and administrators carefully evaluate all proposals and select those deemed outstanding. The \$1,500 grants are awarded in Winter semester and a report on the work is due within a year. These reports are tabulated as the Brigham Young University Journal of Undergraduate Research and Creative Activities, which is published on the Internet under the ORCA homepage (<http://orca.byu.edu>).

Department	Recipient	Faculty Mentor
Ancient Scriptures	Matthew Christensen	Joseph Fielding McConkie
Ancient Scriptures	Curtis Weber	Richard Draper
Ancient Scriptures	Mark Williams	Keith Wilson
Anthropology	Christi Embry	Ray Matheny
Anthropology	Patricia Fifita	William Olsen
Anthropology	Kirstin Johnson	Julie Hartley
Anthropology	Michael Jones	John Hawkins
Anthropology	Megan Petersen	David Crandall
Anthropology	Chelsea Shields	William Olson
Anthropology	Scott Torres	Edwin Andrus
Anthropology	Cady Waldrom	Joel Janetski
Anthropology	Spencer Walsh	Julie Hartley
Anthropology	M. Bryan Wheeler	John Hawkins
Arts Production	Cory Lorenzen	Doug Ellis
Asian & Near Eastern Languages	Nathan Arp	David Honey
Asian & Near Eastern Languages	Mark Chang	Masakazu Watabe
Asian & Near Eastern Languages	Benjamin Coffin	Edward Peng
Asian & Near Eastern Languages	Aaron Cooley	Masakazu Watabe
Asian & Near Eastern Languages	Karin (Mel Li) Inouye	David Honey
Asian & Near Eastern Languages	Christiaan James	James Toronto
Asian & Near Eastern Languages	Jakob Jarvis	Robert McFarland
Asian & Near Eastern Languages	R'el (Rachel) Johnston	Masakazu Watabe
Audiology & Speech Language Pathology	Susanna Pickens	Barbara Culatta
Audiology & Speech Language Pathology	Kathryn Todd	Martin Fujiki
Audiology & Speech Language Pathology	Melissa Willes	Barbara Culatta
Business Management	Mark Bernhisel	Kristie Seawright
Business Management	Gardner Gee	James Brau
Business Management	Shane Hansen	Phillip J Bryson
Business Management	David Penner	Keith Vorkink
Business Management	Bret Rasmussen	James Brau
Business Management	Hsin-yo Wang	Michael Pinegar
Chemical Engineering	Kevin Mayberry	Kenneth Solen
Chemical Engineering	Justin Scott	Larry Baxter

Chemical Engineering	Phillip Smith	Calvin Bartholomew
Chemical Engineering	Steven	Thomas Fletcher
Chemical Engineering	Jarom Webster	Thomas Fletcher
Chemistry & Biochemistry	Scott Burt	Randall Shirts
Chemistry & Biochemistry	Benjamin Farnsworth	Greg Burton
Chemistry & Biochemistry	Daniel Gubler	Matt Peterson
Chemistry & Biochemistry	Michael Haymore	Noel Owen
Chemistry & Biochemistry	Scott Henneman	Steven Fleming
Chemistry & Biochemistry	Brian Hom	Eric Sevy
Chemistry & Biochemistry	Jeffrey Johnson	Greg Burton
Chemistry & Biochemistry	Jason Kenealey	Gerald Watt
Chemistry & Biochemistry	Clinton King	Gerald Watt
Chemistry & Biochemistry	Brian Lofgren	Nolan Mangelson
Chemistry & Biochemistry	Eric Merkley	Earl Woolley
Chemistry & Biochemistry	Karen Merrell	Steven Graves
Chemistry & Biochemistry	Justin Peacock	Matthew Linford
Chemistry & Biochemistry	Marcus Rampton	Daniel Simmons
Chemistry & Biochemistry	Aaron Secrest	Craig Thulin
Chemistry & Biochemistry	David Simpson	John Lamb
Chemistry & Biochemistry	Ryan Spencer	Merritt Andrus
Chemistry & Biochemistry	David Swenson	Paul Savage
Chemistry & Biochemistry	Jeffery Thompson	Eric Sevy
Chemistry & Biochemistry	Jason Wright	Steven Graves
Church History & Doctrine	Gil Bradshaw	Fred Woods
Church History & Doctrine	Joshua Fluckiger	Steven Harper
Church History & Doctrine	Matthew Gardner	Dennis Wright
Church History & Doctrine	Matthew Grey	Richard Holzapfel
Church History & Doctrine	Jared Miller	Dennis Wright
Church History & Doctrine	Nathan Murphy	Cynthia Doxey
Church History & Doctrine	Hollie Pollan	John Livingstone
Church History & Doctrine	Kelli Rane	Richard Holzapfel
Church History & Doctrine	Emily Wilbur	Cynthia Doxey
Civil & Environmental Engineering	Rodney Boynton	David Jensen
Civil & Environmental Engineering	Matthew Earp	Steven Benzley
Civil & Environmental Engineering	Nicholas Stanonis	William Pitt
Communications	Thomas Grover	Brad Rawlins
Communications	Mikell Johnson	Joel Campbell
Communications	Christopher Pope	Edward Adams
Communications	Stephanie Smith	Richard Long
Communications	Marin Turley	Eliza Tanner Hawkins
Communications	Kelly Wight	Alf Pratte
Communications	Benjamin Yrungaray	Allen Palmer
Computer Science	Jacob Fugal	Robert Burton
Computer Science	Jared Holcomb	Scott Woodfield
Computer Science	Kevin Roundy	Michael Goodrich
Computer Science	Nathan Sharp	Mark Clement
Counseling Psychology & Special Education	Leland Anderson	Richard Young
Counseling Psychology & Special Education	Kari O'Grady	Scott Richards
Counseling Psychology & Special Education	Brock Solano	Michelle Marchant
Dance	Jenny Bawden	Jennie Creer-King

Dance	Marney Schaumann	Pat Debenham
Dance	Kristin Silvestro	Pam Musil
Dance	Kristen Smith	Cathy Black
Dance	Aileen Villalba	Jennie Creer-King
Economics	Susan Christiansen	James McDonald
Economics	Steven Coleman	Delawaith Gardner
Economics	Monica Nelson	Norman Thurston
Economics	Aaron Rogers	Scott Bradford
Economics	Maria-Fernanda Sayavedra	Bret Mckay
Economics	Tyler (Ty) Turley	Delworth Gardner
Educational Leadership & Foundations	John Collins	Macleans Geo-JaJa
Educational Leadership & Foundations	Allyson Flake	Steven Hite
Educational Leadership & Foundations	Nathan Sanders	Macleans Geo-JaJa
Educational Leadership & Foundations	Troy Smith	Julie Hite
Electrical & Computer Engineering	Daniel Bates	DJ Lee
Electrical & Computer Engineering	Kevin Campbell	Richard Selfridge
Electrical & Computer Engineering	Ryan Falke	James Archibald
Electrical & Computer Engineering	R. Ryan Halterman	David Long
Electrical & Computer Engineering	Spencer Haycock	David Long
Electrical & Computer Engineering	Justin Henrie	Aaron Hawkins
Electrical & Computer Engineering	Benjamin Ipson	Stephen Schultz
Electrical & Computer Engineering	Kelly Jeppesen	Travis Oliphant
Electrical & Computer Engineering	Spencer Kellis	Aaron Hawkins
Electrical & Computer Engineering	Preston Manwaring	Mark Manwaring
Electrical & Computer Engineering	Thomas Markham	Aaron Hawkins
Electrical & Computer Engineering	Daniel Pulsipher	Craig Petrie
Electrical & Computer Engineering	David Thayer	Travis Oliphant
English	Erin Beck	Jaqueline Thursby
English	Shannon Dayton	Gideon Burton
English	Bethany Dolman	Trenton Hickman
English	Sarah Elkins	Trenton Hickman
English	Arieann Green	Phil Snyder
English	Margaret Holsinger Manchak	Louise Plummer
English	Blaire Mattson	Edward Geary
English	Joy McMurray	Steve Walker
English	Amy Pehrson	Leslee Thorne-Murphy
English	Shauntelle Rowberry	Lance Larsen
English	Erin Steck	Don Norton
English	Aaron Yates	Beverly Zimmerman
English	Benjamin Zimmer	Trenton Hickman
English	Seth Killingbeck	Kristine Hansen
Fine Arts and Communications	Alisa Gordon	Robert Barrett
French & Italian	Naomi Frandsen	Anca Sprenger
French & Italian	Meredith Kearsley	Michael Bush
French & Italian	Julie Nay	Daryl Lee
French & Italian	Adam Rich	Michael Bush
Geography	Maraly Ledezma	Samuel Otterstrom
Geography	Kenneth Rencher	Richard Jackson
Geography	Nathan Simmons	Samuel Otterstrom
Geography	Amanda Tammen	Richard Jackson

Geography	Bradley Whiting	Richard Jackson
Geology	Thomas Campbell	Barry Bickmore
Geology	Laura Cardon	Barry Bickmore
Geology	Julia Kahmann	Scott Ritter
Germanic & Slavic Languages	Kelli Barbour	Robert McFarland
Germanic & Slavic Languages	Matthew Embley	Robert McFarland
Germanic & Slavic Languages	Blaine Evanson	Michelle Stott James
Germanic & Slavic Languages	Daniel Gashler	Walter Whipple
Germanic & Slavic Languages	Christian Marchant	Michael Kelly
Germanic & Slavic Languages	Mark Pahnke	Walter Whipple
Germanic & Slavic Languages	Ruth Seppi	Robert McFarland
Germanic & Slavic Languages	Jesse Wood	Michelle Stott James
Global Management Center	Patrick Tedjamulia	C. Tad Brinkerhoff
Health Sciences	Nathan Barleen	Gordon Lindsay
Health Sciences	Jordana Choucair	Michael Barnes
Health Sciences	Rachel Ekman	Gordon Lindsay
Health Sciences	Brenda Heaton	Kirk Dearden
Health Sciences	Kristin Prusse	Michael Barnes
Health Sciences	Matthew Reed	Gordon Lindsay
Health Sciences	David Stoker	Kirk Dearden
Health Sciences	Evan Thacker	Ray Merrill
History	Julie Harris	Brian Cannon
History	Lindsay Larson	Mary Richards
History	Muriel McClain	William Olsen
History	Mirlinda Qerma	Mark Choate
History	Rachel Seely	William Hamblin
History	Elizabeth Thomas	Kathryn Daynes
History	Jordan Toone	Arnold Green
Humanities, Classics, & Comparative Literature	Kyle Anderson	Steven Sondrup
Humanities, Classics, & Comparative Literature	George Bailey	Steven Sondrup
Humanities, Classics, & Comparative Literature	Kevin Brimhall	Steven Sondrup
Humanities, Classics, & Comparative Literature	Heather Heyman	Allen Christensen
Humanities, Classics, & Comparative Literature	Shannon Johnson	Jesse Crisler
Humanities, Classics, & Comparative Literature	Andrea Lewis	Jay Fox
Humanities, Classics, & Comparative Literature	Lisa Piorczynski	George Tate
Humanities, Classics, & Comparative Literature	Stewart Tanner	Roger Macfarlane
Instructional Psychology & Technology	Richard Culatta	Charles Graham
Insurance, Risk Management, & Financial Services	Lawrence Penner	James Brau
Insurance, Risk Management, & Financial Services	T. Lance Toler	Steven Thorley
Integrative Biology	David Baugh	Lee Braithwaite
Integrative Biology	Diana Brooks	Duke Rogers
Integrative Biology	Seth Bybee	Michael Whiting
Integrative Biology	Matthew Carpenter	Keith Crandall
Integrative Biology	Ryan Christensen	David McClellan
Integrative Biology	Heather Condie	Keith Crandall
Integrative Biology	R Brigham Dastrup	Devon Pearse
Integrative Biology	Joseph Donaldson	Bill Hess
Integrative Biology	Heidi Francis	Steven Peck
Integrative Biology	Raymond William Grams II	David McClellan
Integrative Biology	Margaret Harp	Keith Crandall

Integrative Biology	Christian Hoybjerg	Michael Whiting
Integrative Biology	Ryan Huish	Rex Cates
Integrative Biology	Dallin Inouye	Kent Hatch
Integrative Biology	Ryan Longmore	Mark Belk
Integrative Biology	Jessica Makin	Kent Hatch
Integrative Biology	Laura Moore	Todd Robinson
Integrative Biology	Ashley Nelson	Keith Crandall
Integrative Biology	Theodore Oliphant	Keith Crandall
Integrative Biology	Ryan Peterson	Keith Crandall
Integrative Biology	Joshua Sailsbery	David McClellan
Integrative Biology	Matt Slivka	Bill Hess
Integrative Biology	Sean Taylor	Michael Whiting
Integrative Biology	Victoria Vance	Duke Rogers
Integrative Biology	Jericho Whiting	Jerran Flinders
Integrative Biology	Christopher Wickstrom	Rex Cates
Integrative Biology	Steven Woolley	Keith Crandall
Integrative Biology	Daniel Chappell	Jerran Flinders
Lee Library	Anamae Anderson	David Day
Lee Library	Shelley Jones	David Day
Lee Library	Samuel McGuire	David Day
Lee Library	Kathryn Pope	Thom Edlund
Lee Library	Andrew Ballard	Mark Grover
Lee Library	Daniel Blomberg	Thom Edlund
Linguistics	Anna Anderson	Melvin Thorne
Linguistics	Jonathan Dehdari	Deryle Lonsdale
Linguistics	Jessica Gibson	Lynn Henrichsen
Linguistics	Deryl Hatch	Deryle Lonsdale
Linguistics	Jonathan McCollum	David Bowie
Linguistics	Coogan Rencz	Cynthia Hallen
Linguistics	Nicholas Stetich	Deryle Lonsdale
Linguistics	Aaron Waldrip	Cynthia Hallen
Marriage, Family & Human Development	Melinda Allen	Ross Flom
Marriage, Family & Human Development	Carianne Bacon	David Nelson
Marriage, Family & Human Development	Amy Griffith	David Nelson
Marriage, Family & Human Development	Anna Kohler	Randal Day
Marriage, Family & Human Development	David Latham	Susanne Olsen
Marriage, Family & Human Development	Laurie Moulton	Roberta Magarrell
Marriage, Family & Human Development	Shannon Wright	Susanne Olsen
Marriott School of Management	Ryan Wilson	Ned Hill
Mathematics	Micah Allred	David Clark
Mathematics	Mark Meilstrup	Scott Glasgow
Mathematics	Willis (Lauritz) Peterson	Denise Halverson
Mathematics	Dena Plant	Wayne Barrett
Mechanical Engineering	Daniel Brown	Robert Todd
Mechanical Engineering	Mark Christenson	Robert Todd
Mechanical Engineering	Bart Frischknecht	Larry Howell
Mechanical Engineering	Stephen Griffiths	W. Jerry Bowman
Mechanical Engineering	Craig Pryzbyla	Brent Adams
Mechanical Engineering	Michael Richards	Dale Tree
Mechanical Engineering	Derek Wright	Robert Todd

Microbiology & Molecular Biology	Geoffrey Benton	Alan Harker
Microbiology & Molecular Biology	Peter Crane	Laura Bridgewater
Microbiology & Molecular Biology	Andrew Edmonson	Brent Nielsen
Microbiology & Molecular Biology	Janet Hart	Kim O'Neill
Microbiology & Molecular Biology	Loni Lichfield	Kim O'Neill
Microbiology & Molecular Biology	Shaun O'Dell	Scott Woodward
Microbiology & Molecular Biology	Rachelle Olsen	Kim O'Neill
Microbiology & Molecular Biology	Nicholas Orme	Laura Bridgewater
Microbiology & Molecular Biology	Emira Pazolli	Alan Harker
Microbiology & Molecular Biology	Katherine Secrest	Kim O'Neill
Microbiology & Molecular Biology	David Sonntag	Laura Bridgewater
Microbiology & Molecular Biology	Allison Sparks	William McCleary
Microbiology & Molecular Biology	Amanda Stevens	Kim O'Neill
Microbiology & Molecular Biology	Laurina Ward	Richard Robison
Microbiology & Molecular Biology	Brandon Webb	Richard Robison
Microbiology & Molecular Biology	Michael Zundel	Brent Nielsen
Nursing	Allison Ash	Barbara Mandleco
Nursing	Tamara Baird	Renea Beckstrand
Nursing	Breann Brady	Joan Baldwin
Nursing	Jessica Brinton	Lynn Clark Callister
Nursing	Lisa Ewert	Renea Beckstrand
Nursing	Jaclyn Fowler	Barbara Mandleco
Nursing	Rachel Matthews	Lynn Clark Callister
Nursing	James Meadows	Barbara Mandleco
Nursing	Lucille Woolfton (Christensen)	Renea Beckstrand
Nutrition, Dietetics & Food Science	Josie Johnson	Merrill Christensen
Nutrition, Dietetics & Food Science	Aimee Taylor	Merrill Christensen
Organizational Leadership & Strategy	Aaron Brough	Kristen DeTienne
Organizational Leadership & Strategy	Alan Hyatt	Michael Thompson
Organizational Leadership & Strategy	Peter Maughan	Kristen DeTienne
Organizational Leadership & Strategy	Mike Poelman	Warner Woodworth
Organizational Leadership & Strategy	Natalie Sheffield	Kristen DeTienne
Organizational Leadership & Strategy	Ammon Spiller	Timothy Gardner
Philosophy	John Manchak	David Grandy
Philosophy	Jason Scoffield	David Paulsen
Physical & Mathematical Sciences	Trever Burgon	
Physical Education	Sheldon Knight	Brent Feland
Physical Education	Nathan Miller	Allen Parcell
Physical Education	Erin Nasson	Iain Hunter
Physical Education	Katie Stellmon	Allen Parcell
Physical Education	Daniel Swinton	Barbara Lockhart
Physical Education	Jared Tucker	Larry Tucker
Physical Education	Christena Wood	Ken Knight
Physics & Astronomy	Luke Bissell	David Allred
Physics & Astronomy	Thomas Butler	William Evenson
Physics & Astronomy	Gordon Dix	Tim Leishman
Physics & Astronomy	Jason Gilbert	J.W. Moody
Physics & Astronomy	James Hart	Ross Spencer
Physics & Astronomy	Bonnie McLaughlin	Scott Bergeson
Physics & Astronomy	Catherine Morris	Eric Hintz

Physics & Astronomy	Rebecca Olson	Scott Bergeson
Physics & Astronomy	Jorj Owens	Robert Davis
Physics & Astronomy	Eric Peterson	Ross Spencer
Physics & Astronomy	Ross Robinson	David Allred
Physics & Astronomy	Mark Scott	Steven Jones
Physics & Astronomy	Jared Stenson	Jean-Francois Van Huele
Physics & Astronomy	Jed Whittaker	Robert Davis
Physiology & Developmental Biology	Jacob Durrant	David Busath
Physiology & Developmental Biology	Daniel Jensen	James Porter
Physiology & Developmental Biology	Stephen Merino	Dixon Woodbury
Physiology & Developmental Biology	Tyler Prestwich	Michael Stark
Physiology & Developmental Biology	Dennis Seager	Allan Judd
Physiology & Developmental Biology	Kathryn Taketa	Allan Judd
Physiology & Developmental Biology	Rodney Welling	Dixon Woodbury
Plant & Animal Sciences	David Wright	Ricard Terry
Political Science	Lindsay Baxter	Scott Cooper
Political Science	Daniel Butler	Danny Damron
Political Science	Brian Dowdle	Ray Christensen
Political Science	Adam Ekins	Daniel Nielson
Political Science	Alexia Green	Donna Lee Bowen
Political Science	Ryan Keller	Donna Lee Bowen
Political Science	Margo Larson	Donna Lee Bowen
Political Science	David Martin	Ray Christensen
Political Science	Jessica Preece	Daniel Nielson
Political Science	Ryan Scoville	Ray Christensen
Psychology	Berkeley Bate	Kim Manwaring
Psychology	Matthew Crane	Paul Robinson
Psychology	Tyler Faux	Bruce Brown
Psychology	Kimberly Hales	Scott Steffensen
Psychology	Jotham Manwaring	Erin Bigler
Psychology	Richard McMurtrey	Donovan Fleming
Psychology	Anna Packard	Ramona Hopkins
Psychology	Kenichi Shimokawa	David Shwalb
Psychology	Daniel Shipp	Scott Steffensen
Psychology	David Sloan	Hal Miller
Psychology	Lael Stander	Scott Steffensen
Psychology	Daniel Whitney	Dawson Hedges
Psychology	Bradford Wiggins	Edwin Gantt
School of Accountancy & Information Systems	Bryant Blanchard	Erv Black
School of Accountancy & Information Systems	Brandon Buhler	T. Jeff Wilks
School of Accountancy & Information Systems	Jacob Given	T. Jeff Wilks
School of Accountancy & Information Systems	Joseph Hillstead	Theodore Christensen
School of Accountancy & Information Systems	Terry Jackson	Ronald Worsham
School of Accountancy & Information Systems	Tim Lovell	Robert Jackson
School of Accountancy & Information Systems	Michael Orser	Mark Zimbelman
School of Accountancy & Information Systems	Jason Smith	Douglas Prawitt
School of Accountancy & Information Systems	Benjamin Titera	T. Jeff Wilks
School of Accountancy & Information Systems	Kyle Welch	Earl Kay Stice
School of Accountancy & Information Systems	Jaron Wilde	Peter Johnson
School of Accountancy & Information Systems	Eric Williams	Earl Kay Stice

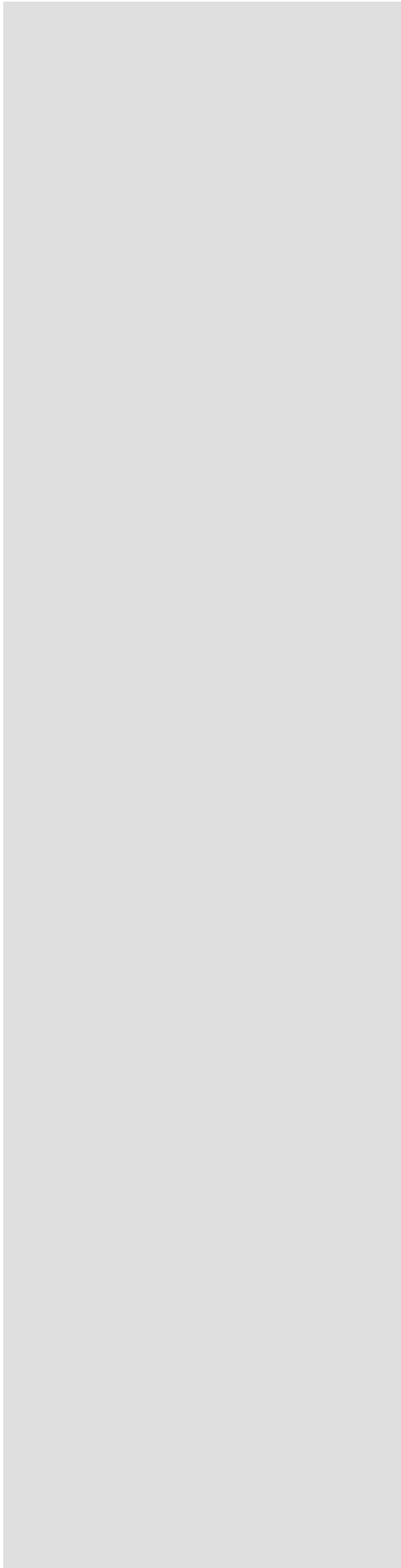
School of Accountancy & Information Systems	Stephen Hunt	W. Steve Albrecht
School of Music	Sara Black	Larry Shumway
School of Music	Matthew Bryner	Ronald Staheli
School of Music	Erika Edwards	J. Arden Hopkin
School of Music	Ryan Gee	(blank)
School of Music	Daniel Henderson	Steve Call
School of Music	Scott Homer	Ron Brough
School of Music	Tyler Jensen	Ray Smith
School of Music	David Macdonald	Harrison Powley
School of Music	Steven Nordstrom	David Day
School of Music	Bret Pimentel	Ray Smith
School of Music	Morgan Quigley	Steven Ricks
School of Music	Marilyn Reid	Lawrence Vincent
School of Music	Leslie Richards	Claudine Bigelow
School of Music	Rebekah Stuetz	Paul Broomhead
School of Technology	Craig VanDyke	Brent Adams
Social Work	Jamie Wyatt	Jini Roby
Sociology	Bryan Johnson	Mikaela Dufur
Sociology	Rebecca Olsen	Stephen Bahr
Sociology	Archie Sessions	Ralph Brown
Sociology	Janet Shumway	Mikaela Dufur
Sociology	Kelly Troutman	Mikaela Dufur
Sociology	Stephanie Williamson	Bruce Chadwick
Spanish & Portuguese	Jessie Christensen	Valerie Hegstrom
Spanish & Portuguese	James Dewey	Willis Fails
Spanish & Portuguese	Brittany Hodges	Douglas Weatherford
Spanish & Portuguese	Nicholas Hundley	Christopher Lund
Spanish & Portuguese	Amber Jensen	Jeffrey Turley
Spanish & Portuguese	Curtis Snyder	Willis Fails
Spanish & Portuguese	Emily Stout	Ronald Dennis
Spanish & Portuguese	Carmen Cecilia Tocaimaza	Robert Smead
Spanish & Portuguese	Jonathan Wade	Dale Pratt
Special Collections	Natalie Clark	J. Gordan Daines
Statistics	Alexis Allen	Shane Reese
Statistics	Jordan Ash	Shane Reese
Statistics	Jedediah Brinton	Sterling Hilton
Statistics	Geraldine Hansen	Shane Reese
Statistics	Sherstin Merx	Scott Grimshaw
Teacher Education	David Boren	Paul Cook
Theatre & Media Arts	Meredith Bak	Dean Duncan
Theatre & Media Arts	James Chad Erekson	Kelly Loosli
Theatre & Media Arts	D. Kohl Glass	Stan Ferguson
Theatre & Media Arts	Anthony Gunn	Rodger Sorensen
Theatre & Media Arts	Michael Hammari	Paul Duerden
Theatre & Media Arts	Angela Jensen	Mary Farahnakian
Theatre & Media Arts	Ashley Ogzewalla	Barta Heiner
Theatre & Media Arts	Benjamin Sansom	Bob Nelson
Theatre & Media Arts	Stacey Snider	Thomas Russell
Theatre & Media Arts	Corina Thompson	Thomas Russell
Theatre & Media Arts	Bradley Wilson	Stan Ferguson



Visual Arts  
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Ashley Allen  
David Amott  
Ashlee Baldwin  
Amy Blake  
Dave Bown  
Beau Brady  
Wendy Carr  
Jennifer Champoux  
Bryant Cutler  
Merete Grimmer  
Brandon Gunn  
Amy Beth Harrison  
Carie Jackson  
Courtney Jensen  
Stephen Johnson  
Michelle Lee  
Eric Lewis  
Ty Mecham  
Tyson Monson  
Emily Morris  
Becky Ravenberg  
Chelsy Smith

C. Mark Hamilton  
Cynthia Finlayson  
Von Allen  
Donna Kay Beattie  
Bryon Draper  
Gary Barton  
Cynthia Finlayson  
Martha Peacock  
Raymond Elder  
John Telford  
Wayne Kimball  
Von Allen  
Richard Hull  
Martha Peacock  
Linda Sullivan  
Mark Magleby  
Cynthia Finlayson  
Val Brinkerhoff  
Val Brinkerhoff  
Heather Jensen  
Mark Magleby  
Bryon Draper



# Appendix 1

# The Office of Research & Creative Activities

**Purpose.** The office exists to support students, staff, faculty, and the BYU administration in their efforts to encourage and support research, creative activities, and other expressions of academic scholarship.

**Functional Organization.** The office is organized to provide service to organized research and creative activities and to provide supportive leadership to such policy matters as appropriate. The office is under the direction of the Associate Academic Vice President for Research and Graduate Studies. The staff consists of a Directory, an Associate Director, a Research Administrator, and office staff.

The office has a close relationship with the Technology Transfer Office and the Creative Works Office for coordination of certain pre-award contacts, with the Accounting Office for post-award grant and contract accounting, and with the Faculty Personnel Office for payment of research compensation.

## Personnel.

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Title	Personnel
Director:	Gary R. Reynolds
Associate Director:	Melvin J. Carr
Research Administrator:	Nancy A. Davis
Office Manager/Secretary:	Skylar Rencher
Part-time Secretaries:	Amy Buell, Jennifer Ishihara, Heather Ray

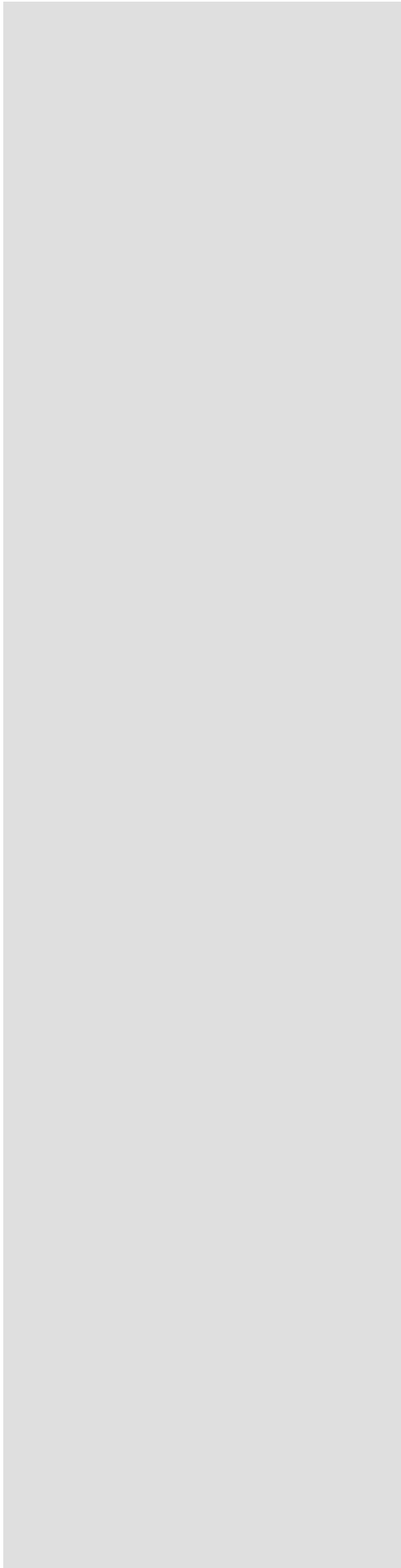
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## Office Functions.

- 1) Policy Review and Development
  - ◆ Monitor research accounts in conjunction with Financial Services to assure compliance with contract requirements, government regulations, and BYU policy.
  - ◆ Review and update BYU policies relative to research.
- 2) Opportunity and Expertise Matching
  - ◆ Represent the university's research program to other research organizations, funding agencies, and other universities.
  - ◆ Match-making (requests for proposals and faculty).
  - ◆ Monitor requests for proposals and deadlines.
  - ◆ Disseminate information on funding opportunities to faculty.

- ◆ Maintain up-to-date reference files of funding sources, agency directories, and BYU faculty research.
  - ◆ Distribute a monthly newsletter containing funding opportunities and other information to faculty members on campus.
- 3) Proposal Preparation and Submission
- ◆ Coordinate the preparation of large, inter-collegiate, and inter-institutional research proposals.
  - ◆ Assist with proposal budgets and processing for signatures.
  - ◆ Assist in developing process/software for budgets and forms.
  - ◆ Copy, mail, log, and file proposals.
- 4) Negotiating and Interacting with Sponsors
- ◆ Negotiate and manage grants and contracts.
  - ◆ Interface with sponsoring agencies to maintain awareness of research funding trends.
  - ◆ Represent the university's research programs to other research organizations, funding agencies, and other universities.
- 5) Compliance with Federal and Other Requirements
- ◆ Monitor government regulations pertaining to federal grants and contracts.
  - ◆ Work with the Inventory Office to manage government property to assure compliance with federal regulations.
  - ◆ Assure compliance with reporting requirements and manage closeout documentation.
  - ◆ Oversee three compliance committees and assist them through secretarial support for meetings, correspondence, and proposal approval.
- 6) Negotiating and Interfacing with Subcontractors and Independent Contractors/Consultants
- ◆ Negotiate terms of agreement or subcontract.
  - ◆ Monitor agency regulations and BYU policy and procedures for stipulations concerning subcontracts and/or independent consultants/contractors.
  - ◆ Prepare contracts, amendments, payment documents, and initiate processing through the university.
  - ◆ Administer contractual terms between prime contractor (BYU) and subcontractors and or/consultants.
  - ◆ Approve payment of invoices from subcontractors and consultants.
  - ◆ Educate principal investigators.
- 7) Project and Account Management (Post-Award)
- ◆ Control assignment of account numbers and coordinate activation with Financial Services.
  - ◆ Certify expenditure documents on research accounts.
  - ◆ Monitor research accounts in conjunction with Financial Services to assure compliance with contract requirements, government regulations, and BYU policy.
  - ◆ Manage government property to assure compliance with federal regulations.
  - ◆ Assist Financial Services with audits of project accounts.
  - ◆ Assure compliance with reporting requirements and manage closeout documents.
  - ◆ Act as a liaison between researchers, other university offices, and sponsors to facilitate and administrate management of projects.
  - ◆ Administer the activities of the office dealing with the management of research contracts.
  - ◆ Prepare paperwork and correspond with faculty to request payment of salaries and supplemental research compensation of research accounts.
- 8) Financial Management
- ◆ Establish research accounts.
  - ◆ Document cost sharing.

- ◆ Process cost transfers.
  - ◆ Document and report time and effort.
  - ◆ Compile and publish monthly and yearly financial reports.
  - ◆ Invoice and manage funds from sponsors.
  - ◆ Monitor university compliance with appropriate federal and state regulations.
  - ◆ Assist with completion of annual audits.
  - ◆ Compile, maintain, and distribute reports on waived indirect costs.
- 9) Student Mentoring Program
- ◆ Host Annual Sponsored Research Achievement Luncheon and present Sponsored Research Achievement Award.
  - ◆ Conduct Undergraduate Research and Creative Activities Scholarship competition.
  - ◆ Conduct Environments for Mentoring Grants competition.
  - ◆ Build library database of mentored environments from across campus.
  - ◆ Represent the university in national, regional, and state research organizations.
  - ◆ Administer recognition awards.
  - ◆ Assist in coordinating graduate fellowships.
- 10) Policy Review and Development
- ◆ Develop policies and procedures to foster research.
  - ◆ Publish policy brochures for dissemination to campus community.
  - ◆ Update BYU policies relevant to research and creative activities in the electronic handbook.
- 11) University Negotiations/Trouble Shooting
- ◆ Participate in DHHS indirect costs justification.
  - ◆ Review/respond to internal and external audits.
  - ◆ Direct negotiations with sponsors/federal agencies on problems such as termination or nonpayment of invoices.
- 12) Management of Undergraduate Research and Creative Activities Program
- ◆ Work with the honors program and existing college and departmental programs to assure students of opportunities to participate and receive recognition for their efforts.
  - ◆ Approve proposals, award fellowships, and administer scholarships.
  - ◆ Approve research employment and indirect cost recognition.
  - ◆ Attend the National Undergraduate Research Administration meetings.
  - ◆ Identify and assist existing efforts through financial incentives, recognition, and formal participation in a university-wide program.
- 13) Office Management
- ◆ Assist in budget management and accounting of office accounts.
  - ◆ Put together an annual report of university research activities.
  - ◆ Monitor and compile Full-time Equivalency reports.
  - ◆ Type and distribute a monthly Funding Activity Report (FAR).
  - ◆ Generate summer salary and supplemental research payments.
  - ◆ Assist in preparation of reports and paperwork.
  - ◆ Produce the Annual Report of Scholarly Productivity.
  - ◆ Produce the Journal of Undergraduate Research and Creative Activities on the Internet.
  - ◆ Maintain ORCA homepage (<http://orca.byu.edu>).



# Appendix 2

# Compliance Obligations (As Per Federal Statue or Regulation)

The following pages list those areas where formal compliance to federal statutes and regulations is required to participate in federal funding. The full list is included to illustrate the range of possible certification or other compliance. Specific grants and contracts may involve only a subset of these compliance obligations.

## *Regulatory Framework*

- Office of Management and Budget

  - Circular No. A-21

  - Circular No. A-110

  - Circular No. A-133

- Federal Acquisition Regulations

- Defense Federal Acquisition Regulations

- The Coordinated Review Process-Executive Order 12372

- Rights to Inventions Made by Nonprofit Organizations and Small Business Firms

- Compliance Information for Specific Circumstances

  - Facilities Management

  - Historic Preservation

  - Paperwork Reduction Act

## *Individual Rights*

- Antidiscrimination

  - Civil Rights Act of 1964—Title VI

  - Employment of the Handicapped-Rehabilitation Act of 1973

  - Americans with Disabilities Act

  - Title IX—Sex Discrimination

  - Age Discrimination

  - Equal Employment Opportunity

  - Affirmative Action for Special Disabled and Vietnam Era Veterans

  - Utilization of Women-Owned Small Business

  - Utilization of Labor Surplus Area Concerns

  - Utilization of Small and Small Disadvantaged Business Concerns

- Privacy

  - Privacy Act of 1974

  - Freedom of Information Act

  - Confidentiality of Patient Records

## *Protection Issues*

- Environmental Protection
  - Clean Air Act and Clean Water Act
  - Hazardous Materials
- Protection of Living Organisms
  - Human Subjects Compliance
  - Use of Animals in Research
  - Marine Mammal Act
  - Research Involving Recombinant DNA Molecules

### *Employee Directives*

- Drug-free Workplace
- Drug-free Work Force
- Drug-free Schools and Campuses Act
- Lobbying
- Occupation Safety and Health
  - David Bacon Act
- Walsh-Healey Public Contracts Act
- Service Contract Act
- Contract Work Hours and Safety Standards Act of 1962

### *Fraud, Waste, and Abuse*

- Misconduct in Science
- Procurement Integrity
- Debarment and Suspension
- Covenant Against Contingent Fees
- Anti-Kickback Act of 1986
- Officials Not to Benefit

### *Specific Administrative Requirements*

- General Requirements
  - Buy American Act
  - Fly American Act
  - Competition in Contracting
  - Export Administration Act and Arms Export Control Act
  - Insurance-Immunity from Tort Liability
  - Prompt Payment
  - Non-delinquency of Federal Debt
  - Certificate of Current Cost and Pricing Data
  - Acknowledgment of Federal Grant Support (Stevens Amendment)
- Agency Specific Requirements
  - Certificate of Technical Data Conformity
  - Certification of Accuracy of Indirect Costs
  - Student Unrest
  - NEA Clause on Obscenity