



2008
Annual Report
Of
Sponsored Research

Office of
Research and
Creative Activities

Published by the
OFFICE of RESEARCH and CREATIVE ACTIVITIES (ORCA)
Brigham Young University

Table of Contents

Preface.....	3
The University.....	4
Information by College or School.....	13
David O. McKay School of Education.....	18
Engineering & Technology.....	23
Family, Home & Social Sciences.....	34
Fine Arts & Communications.....	40
Health & Human Performance.....	44
Humanities.....	49
J. Reuben Clark Law School.....	54
Life Sciences.....	59
Marriott School of Management.....	66
Nursing.....	71
Physical & Mathematical Sciences.....	76
Religious Education.....	85
Non-College Units.....	88
Administrative Support of Compliance Committees and Regulations.....	93
Faculty Recognition.....	98
Student Recognition.....	104
Appendix 1.....	112
Appendix 2.....	116

Preface

This report covers January 1, 2008 to December 31, 2008.

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

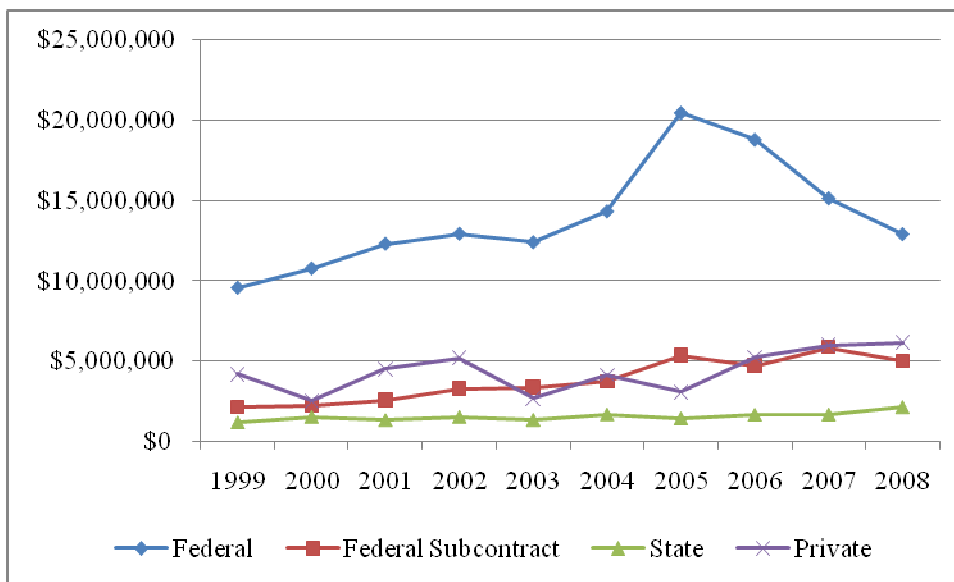
- *Reports of Sponsored Programs:* Sponsored programs at BYU are those funded by external sources through ORCA. They are largely research projects, but many include programs that are designed to develop or support instructional or service activities. Support for creative activities such as performance, 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

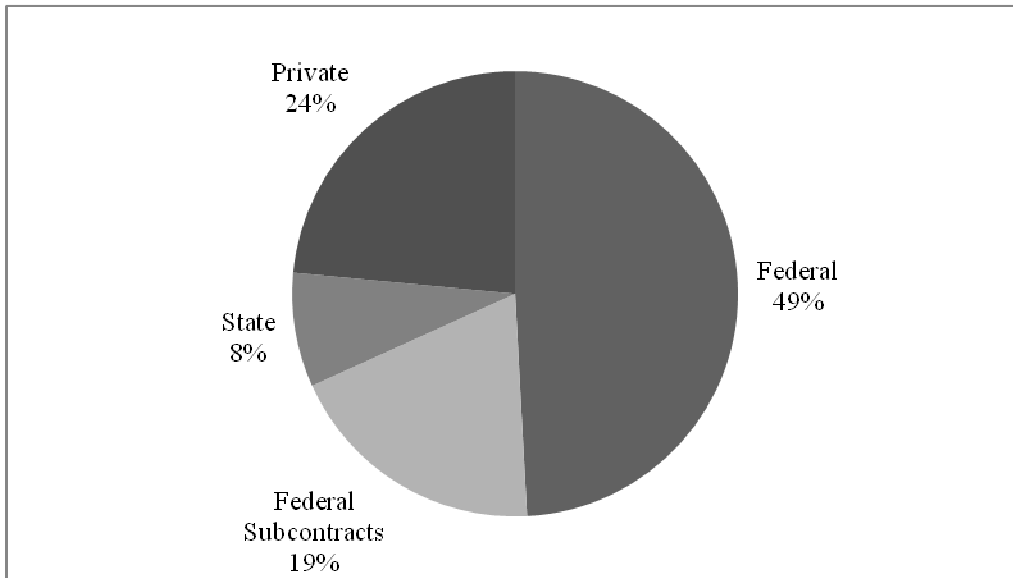
External Research Funding

Grants/Contracts						
Year	Federal	Federal Subcontract	State	Private	Total	%Federal
1999	\$9,579,892	\$2,147,400	\$1,189,443	\$4,192,998	\$17,109,733	69%
2000	\$10,786,727	\$2,194,176	\$1,551,853	\$2,525,966	\$17,058,722	76%
2001	\$12,319,534	\$2,560,829	\$1,336,012	\$4,526,380	\$20,742,755	72%
2002	\$12,942,472	\$3,271,259	\$1,547,471	\$5,210,390	\$22,971,592	71%
2003	\$12,412,311	\$3,359,540	\$1,352,811	\$2,694,628	\$19,819,290	80%
2004	\$14,330,621	\$3,741,503	\$1,708,839	\$4,137,035	\$23,917,998	76%
2005	\$20,464,956	\$5,366,648	\$1,449,466	\$3,098,213	\$30,379,283	85%
2006	\$18,789,401	\$4,716,016	\$1,686,117	\$5,263,840	\$30,455,374	77%
2007	\$15,146,329	\$5,858,590	\$1,706,455	\$5,992,229	\$28,703,602	73%
2008	\$12,914,957	\$5,012,840	\$2,179,789	\$6,169,053	\$26,276,639	68%



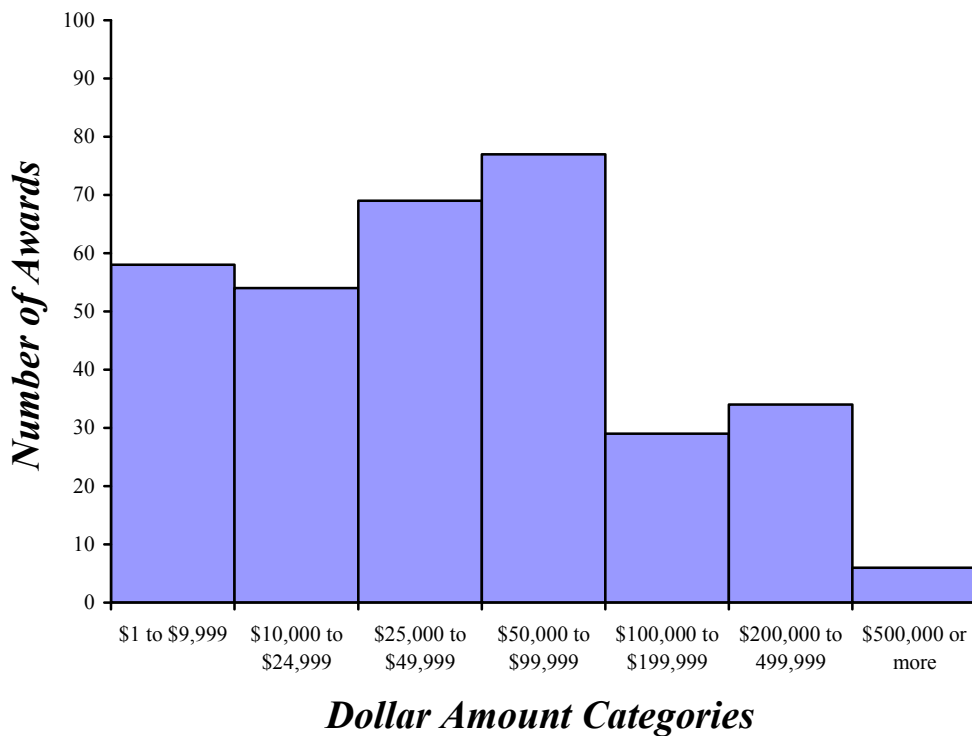
External Funds by Source—2008

Source	Amount	% of Total
Federal	\$12,914,957	49%
Federal Subcontracts	\$5,012,840	19%
State	\$2,179,789	8%
Private	\$6,169,053	24%
<i>Total Funding</i>	\$26,276,639	100%

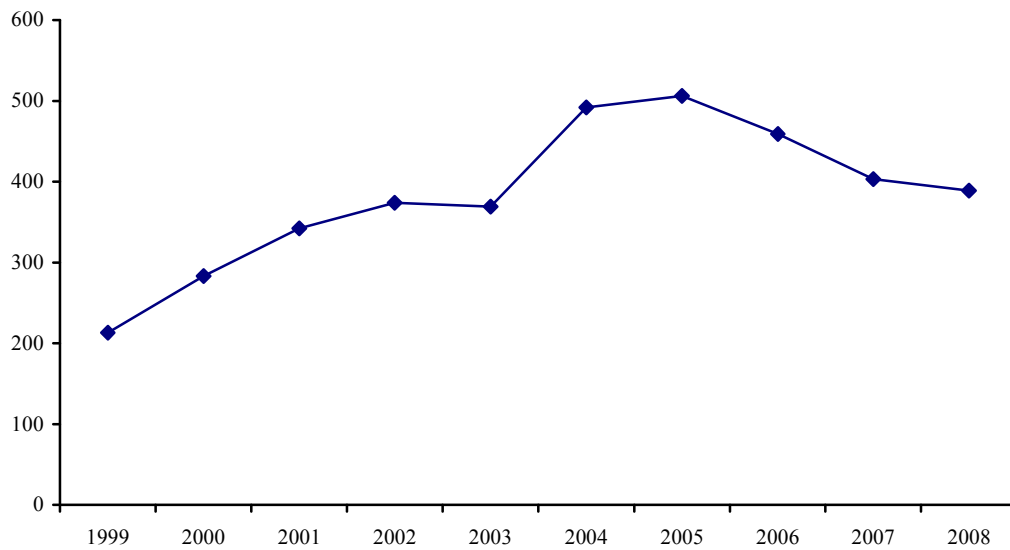


Grant/Contract Awards by Amount—2008

Dollar Amount Categories	# of Awards	% of Total Awards by #	\$ Awards	% of Total Awards by \$ Amount
\$1 to \$9,999	58	18%	\$289,941	1%
\$10,000 to \$24,999	54	17%	\$866,817	3%
\$25,000 to \$49,999	69	21%	\$2,410,854	9%
\$50,000 to \$99,999	77	23%	\$5,342,100	20%
\$100,000 to \$199,999	29	9%	\$3,680,611	14%
\$200,000 to \$499,999	34	10%	\$10,007,077	38%
more than \$500,000	6	2%	\$3,679,239	15%
Totals	327	100%	\$26,276,639	100%

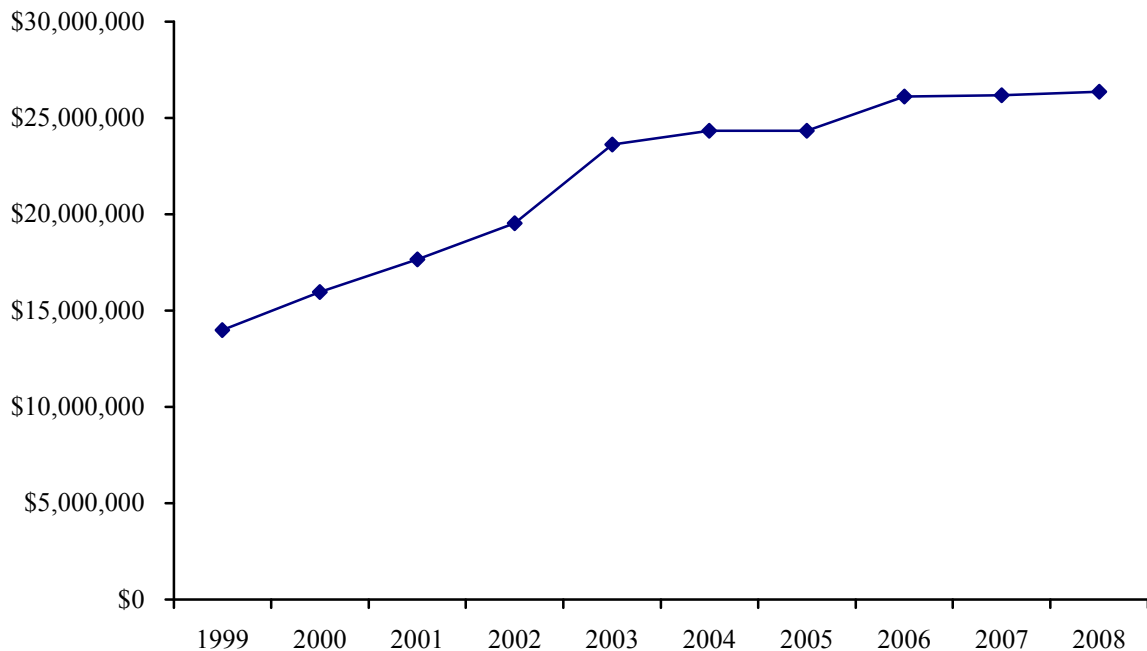


Proposals Submitted



Total Expenditures (Grants and Contracts)

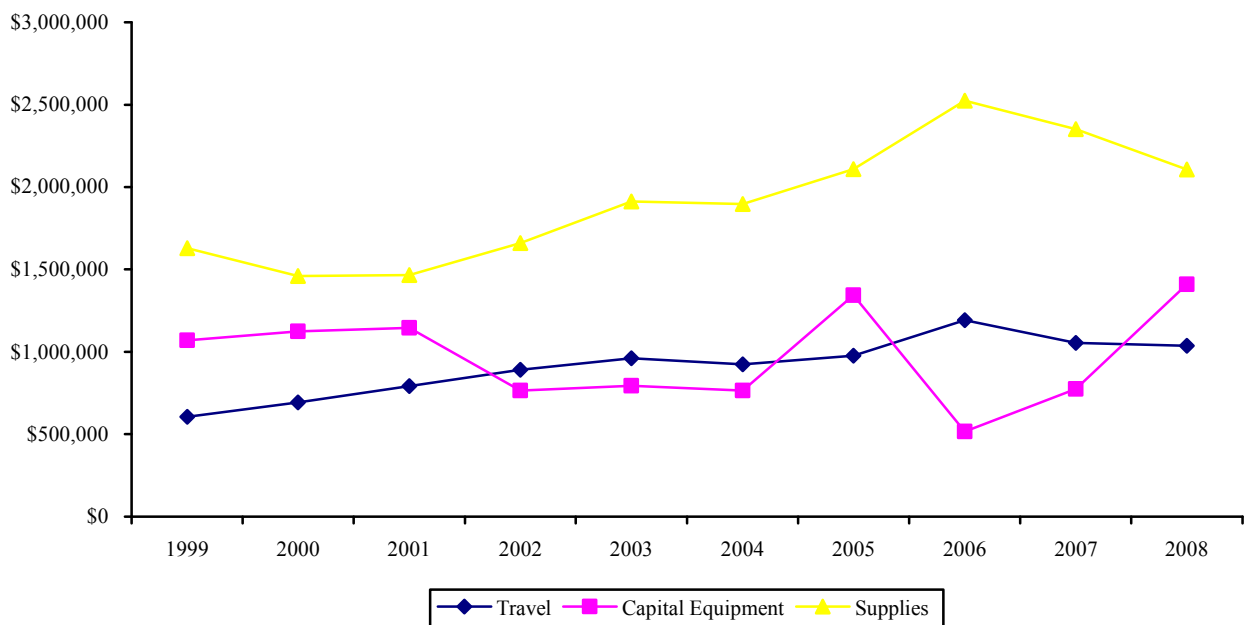
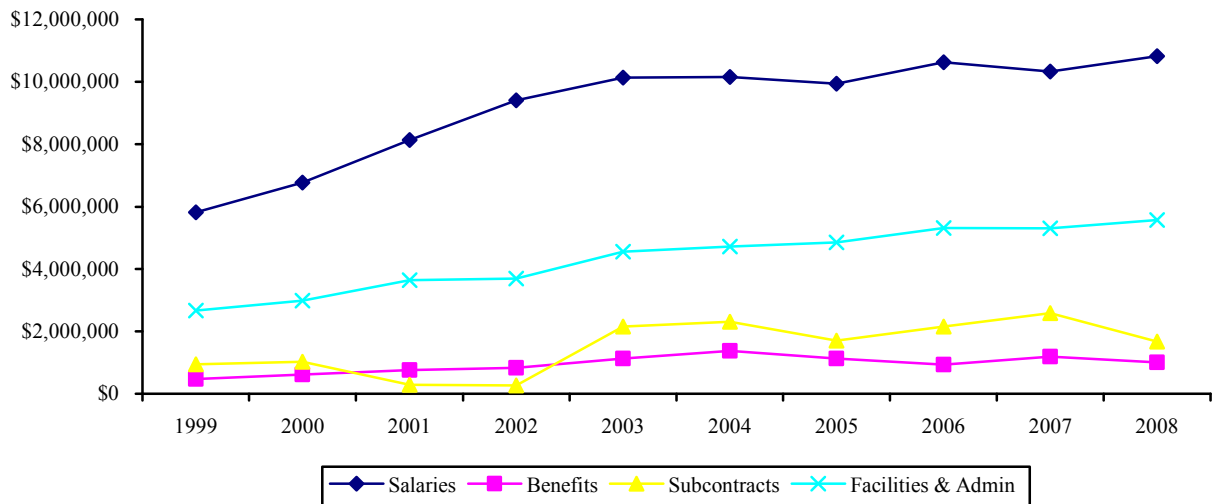
Year	Total Expenditures
1999	\$13,988,008
2000	\$15,966,274
2001	\$17,652,928
2002	\$19,536,264
2003	\$23,623,643
2004	\$24,339,292
2005	\$24,334,391
2006	\$26,117,033
2007	\$26,178,686
2008	\$26,364,124



2008 Research Contract/Grant Expenditures by Category

<i>Personnel Costs</i>	<i>Amount</i>
<i>Salaries & Wages</i>	
Administrative Salaries	467,752
Faculty Salaries	484,695
Faculty—Spring/Summer	1,849,247
Faculty—Supplemental	411,245
Faculty—Visiting, Foreign, Post Docs	926,262
Part-time Faculty Salaries	349,981
Other Wages	294,844
Staff Salaries	297,563
Student Contracts	3,170,440
Student Wages	2,567,720
Total Salaries & Wages	\$10,819,748
Fringe Benefits	\$1,000,368
Total Personnel Costs	\$11,820,116
<i>Other</i>	
Access Equipment	12,836
Advertising	1,955
Capital Equipment	1,408,081
Conference & Symposium Costs	270,209
Consultants	217,905
Contract Services	408,655
Employee Development/Training	81,615
Equipment Repair & Maintenance	12,179
Facilities Repair & Maintenance	6,192
Facilities & Administration	5,574,645
Fellowships	5,467
Hosting, Food, Entertainment	12,871
Non-Computer Non-Capital Equipment	114,971
Postage & Mailing	30,078
Printing & Copying	22,845
Program Income	(554)
Purchase Discounts Earned	(77)
Rental Expense	100,114
Research Participants Stipend	227,170
Research Publications Costs	23,014
Software Purchases	82,164
Student Aid	1,093,085
Subcontracts	1,673,290
Supplies	2,106,647
Telecommunications	23,193
Travel	1,035,458
Total Other Expenditures	\$14,544,008
Total Research Expenditures	\$26,364,124

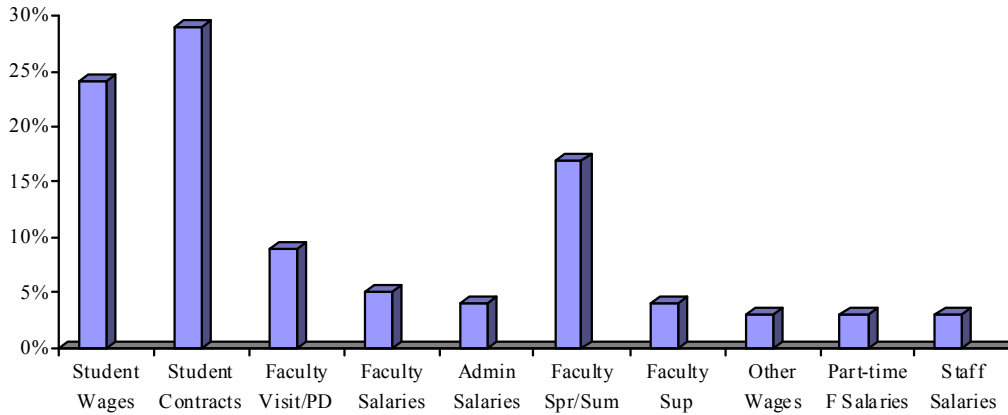
Research Dollars Expended (Grants and Contracts Only)



Salary and Wage Expenditures (Grants and Contracts Only)

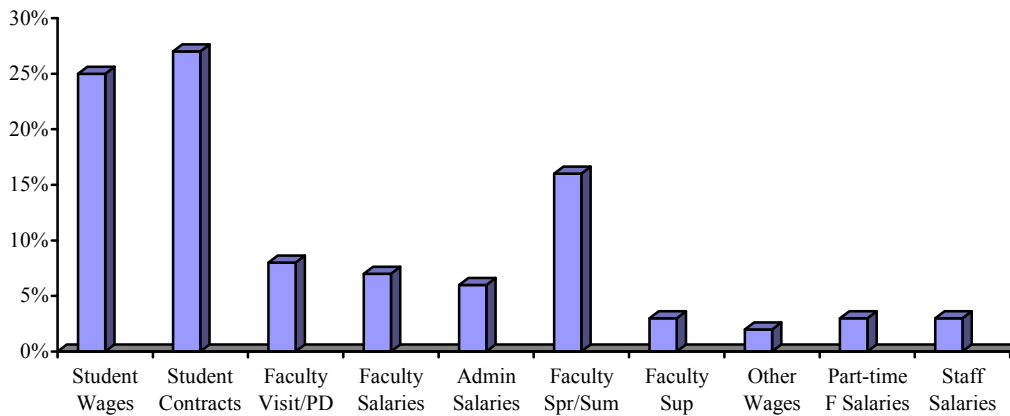
2008

Total: \$10,819,748



2007

Total: \$10,332,127

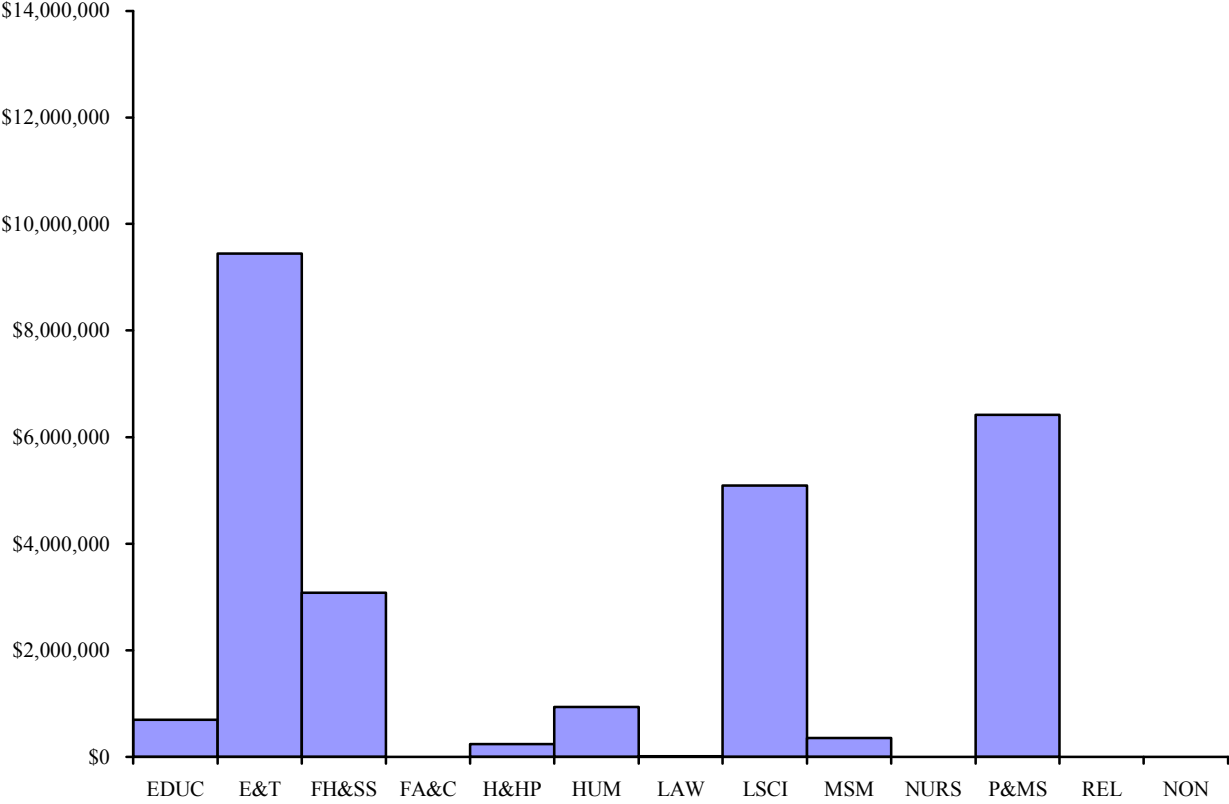




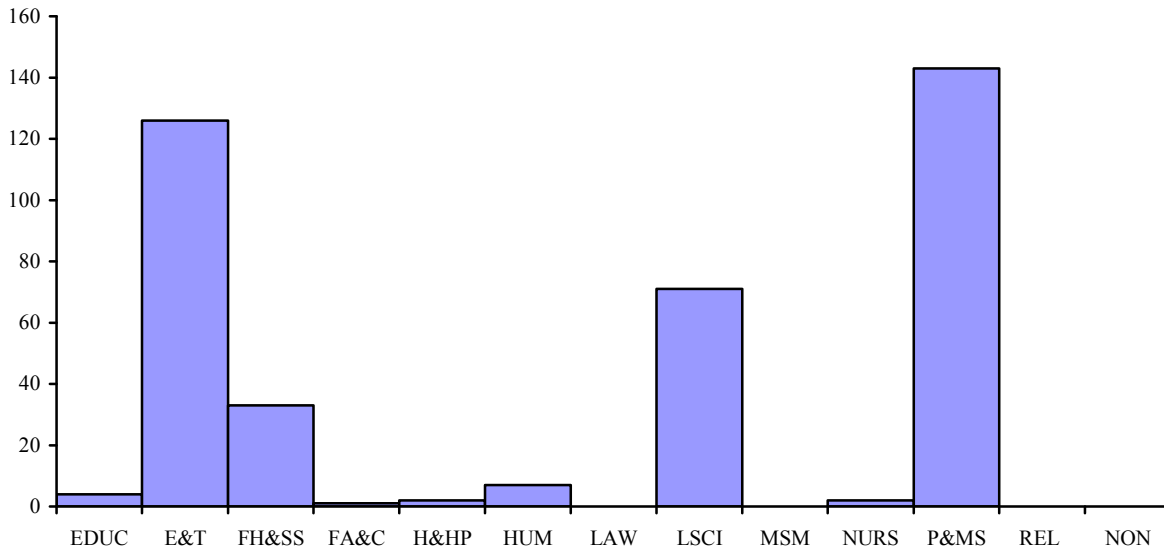
Information by College or School

Award Amount Totals 2008

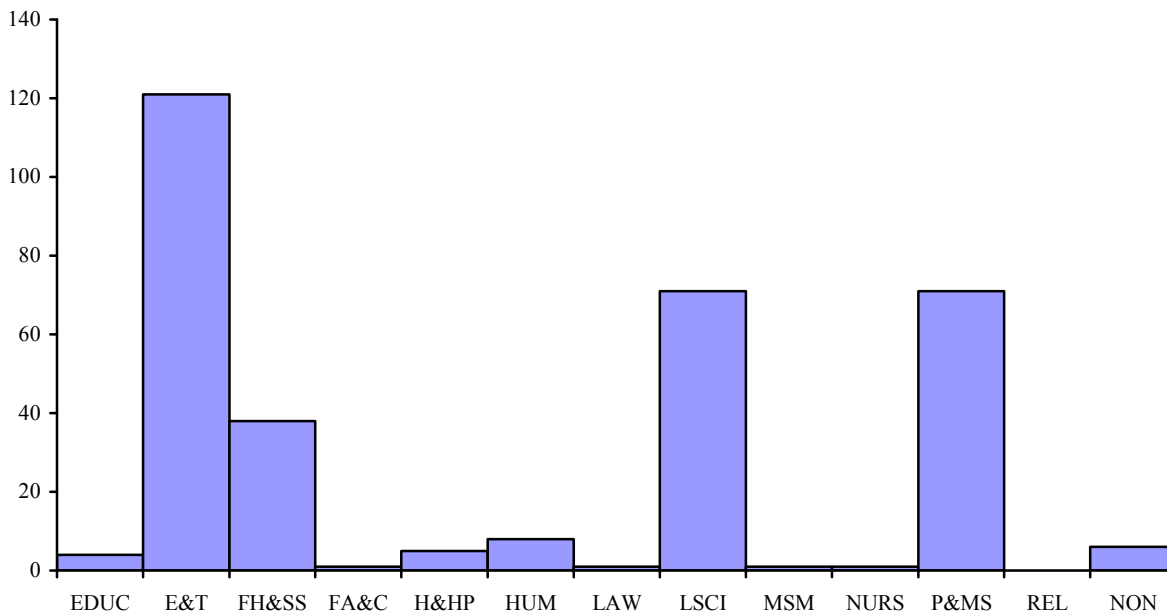
<i>College or School</i>	<i>Total</i>
Education	\$698,489
Engineering & Technology	\$9,441,902
Family, Home & Social Sciences	\$2,961,932
Fine Arts & Communications	\$120,000
Health & Human Performance	\$240,115
Humanities	\$935,113
J. Reuben Clark Law School	\$10,000
Life Sciences	\$5,090,868
Marriot School of Management	\$353,000
Nursing	\$2,500
Physical & Mathematical Sciences	\$6,420,317
Religious Education	\$0
Non-College Units	\$2,403
<i>University Total</i>	\$26,276,639



Number of Proposals 2008



Number of Awards 2008



Research Contract/Grant Awards by College and Department 2008

<i>College and Department</i>	<i>Amount</i>
<u>Education</u>	
CITES	0
Communication Disorders	86,138
Counseling and Career Center	0
Counseling and Special Educ	0
Dean's Office Education	0
Education Leadership & Foundations	268,305
Instructional Psychology	45,011
Teacher Education	299,035
TOTAL	\$698,489
<u>Engineering & Technology</u>	
Chemical Engineering	2,394,702
Civil and Environmental Eng	672,315
Electrical and Computer Eng	3,418,092
Mechanical Engineering	2,621,346
School of Technology	335,447
TOTAL	\$9,441,902
<u>Fine Art and Communications</u>	
Museum of Art	120,000
TOTAL	\$120,000
<u>Family Home & Social Sciences</u>	
Anthropology	88,356
Economics	0
Geography	0
History	27,900
Museum of Peoples and Cultures	13,400
Office of Public Archeology OPA	172,907
Political Science	1,318,617
Psychology	1,180,389
School of Family Life	37,663
Sociology	113,038
Social Work	9,662
TOTAL	\$2,961,932

<i>College and Department</i>	<i>Amount</i>
<u>Health & Human Performance</u>	
Dance	118,000
Exercise Science	118,200
Health Sciences	3,915
TOTAL	\$240,115
<u>Humanities</u>	
Asian & Near East Languages	588,349
Humanities, Classic, Comp Lit	48,000
Linguistics	298,764
TOTAL	\$935,113
<u>J. Reuben Clark Law School</u>	\$10,000
<u>Library</u>	\$ 0
<u>Life Sciences</u>	
Bean Museum	21,500
Biology	1,439,531
Microbiology & Molecular Biology	510,130
Nutrition, Dietetic, & Food Science	186,321
Physiology & Developmental Biology	607,491
Plant & Wildlife Sciences	2,200,814
TOTAL	\$4,965,787
<u>Marriott School of Management</u>	
Business Management	0
School of Accountancy	353,000
TOTAL	\$353,000
<u>Nursing</u>	\$ 2,500
<u>Office of Research & Creative Activities</u>	\$ 2,403
<u>Physical & Math Sciences</u>	
Chemistry and Biochemistry	3,674,525
Computer Science	775,103
Geology	211,631
Mathematics	418,605
Physics & Astronomy	1,340,453
Statistics	0
TOTAL	\$6,420,317
Grand Total	\$ 26,276,639