

OFFICE OF RESEARCH ADMINISTRATION & ADVANCEMENT

ANNUAL REPORT
OF
SPONSORED PROGRAM ACTIVITIES
Fiscal Year 2005

This report, prepared by the Office of Research Administration and Advancement (ORAA), provides an overview of sponsored program activities for the fiscal year ending 30 June 2005

TABLE OF CONTENTS

Table Of Contents	2
Introduction: Responsibilities Activities & Organization	3
Combined Sponsored Program Totals: FY 2005	4
ORAA Administered Proposal and Award Activity: FY 2005	6
Proposal and Award Activity – Historical Data	10
Sponsored Program Expenditures	11
The University’s Ranking Among its Peers	14
Appendix: FY 2004 & 2005 Comparative Data	18

CONTACT INFORMATION

Office of Research Administration & Advancement (ORAA)
3112 Blair Lee Building
University of Maryland
College Park, MD 20742-5141

Phone 301.405.6269 • Fax 301.314.9569
Website: <http://www.umresearch.umd.edu/ORAA>

COPYRIGHT NOTICE

Copyright © 2005 University of Maryland, College Park. All rights reserved.

INTRODUCTION: RESPONSIBILITIES, ACTIVITIES & ORGANIZATION

I. Summary of Activities

The University of Maryland, College Park (UM) has experienced considerable growth in extramural funding over the past ten years, more than doubling our award totals (FY96: \$146 million) to \$329.3 million in FY05. On average, each faculty member brought in \$405,052 in research funds and 64 brought in \$1 million or more.

In addition to an increase in proposal and award activity, the intensity of activity has also increased. Proposals are multi-disciplinary and require close coordination between the sponsors and UM. The resulting awards are often complex, involving multiple parties and containing special requirements.

The Office of Research Administration and Advancement (ORAA) recognizes the importance in sustaining this growth by being both responsive and flexible in its management of sponsored projects. ORAA seeks to promote research in this dynamic environment by providing expertise and support in a user-friendly environment for the faculty, staff and sponsors.

II. ORAA Organization

ORAA is comprised of two main units. The administration unit has responsibility for providing support and service to Colleges, Departments and Principal Investigators in the areas of research compliance, proposal submission and award negotiation, acceptance and administration. The advancement unit has responsibility for promoting funding opportunities, managing training and implementing electronic Research Administration (eRA) initiatives.

III. ORAA Responsibilities:

- Identify sources of extramural funds for research and scholarly activities;
- Coordinate eRA system development;
- Provide funding links for faculty to sponsors and links to UM researchers for sponsors wishing to initiate collaborative research;
- Coordinate the submission of sponsored project proposals to potential sponsors;
- Review and approve all proposals submitted to potential sponsors;
- Negotiate and accept all sponsored project awards;
- Provide post-award administration (except invoicing);
- Issue, negotiate and administer subawards;
- Recommend, create and implement research administration compliance policies and procedures;
- Provide oversight to research compliance review boards;
- Coordinate, under the direction of the Vice President for Research, the selection of faculty to be nominated for prestigious awards that limit the number of applicants (e.g., Packard Fellowships);
- Coordinate the selection of proposals for programs that limit the number of submissions by institution (e.g., NSF Instrumentation Program) in any given competition;
- Provide research administration and compliance training programs for campus community;
- Review and recommend all Facilities & Administrative costs waiver requests;
- Represent UM on national research administration associations, panels and committees; and
- Coordinate other research – related functions.

COMBINED SPONSORED PROGRAM TOTALSI. Explanation

UM has a combined sponsored research award total of \$329.3 million for FY 2005. This combined total includes:

- ORAA – administered awards (\$288.9 million total in 2005)
- UM affiliated foundation grants & sponsored projects not granted through ORAA from:
 - University Research Corporation International (URCI)
 - University of Maryland Foundation (UMF)
 - University of Maryland College Park Foundation (UMCPF)
- Federal appropriations for the Agriculture Experiment Station (AES) and Cooperative Extension Service (CES)
- Research center memberships
- Units with delegated signature authority: Maryland Fire & Rescue Institute (MFRI), Office of Professional Studies (OPS) and the Maryland Technology Enterprise Institute (MTECH)

II. Tables & Charts:

The following tables and charts illustrate combined research dollars at UM. Overall, the University experienced a 6.56% decrease from FY 2004. When comparing FY 2004 & 2005, it is important to note the following:

- FY 2004 was the “banner year” for sponsored funding at UM, with a combined total of \$352 Million.
- State of Maryland funding dropped \$22 Million in FY 2005.

Table 1
Combined Sponsored Program Awards*
(by sponsor type)

<u>Source</u>	<u>Combined 2004</u>	<u>Combined 2005</u>	<u>% Change</u>
Federal	\$234,705,891	\$234,402,334	-0.13%
State	\$46,453,782	\$24,336,724	-47.61%
Corporate	\$23,427,095	\$21,736,670	-7.22%
Foundations	\$15,371,586	\$15,721,925	2.28%
Other	\$32,463,808	\$33,110,183	1.99%
TOTAL	\$352,422,162	\$329,307,836	-6.56%

Chart A
Combined Data: Awards Activity - FY 2005

The majority of funding during FY 2005 was from Federal sources. UM experienced a negligible increase in Federal funding compared to FY 2004.

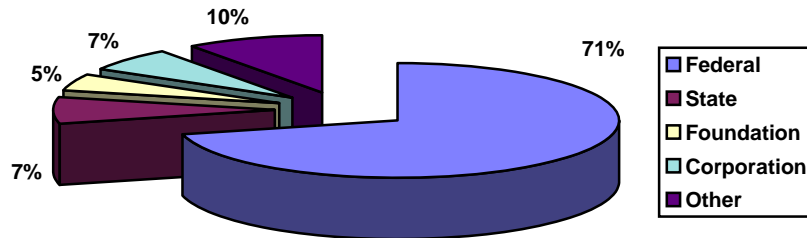
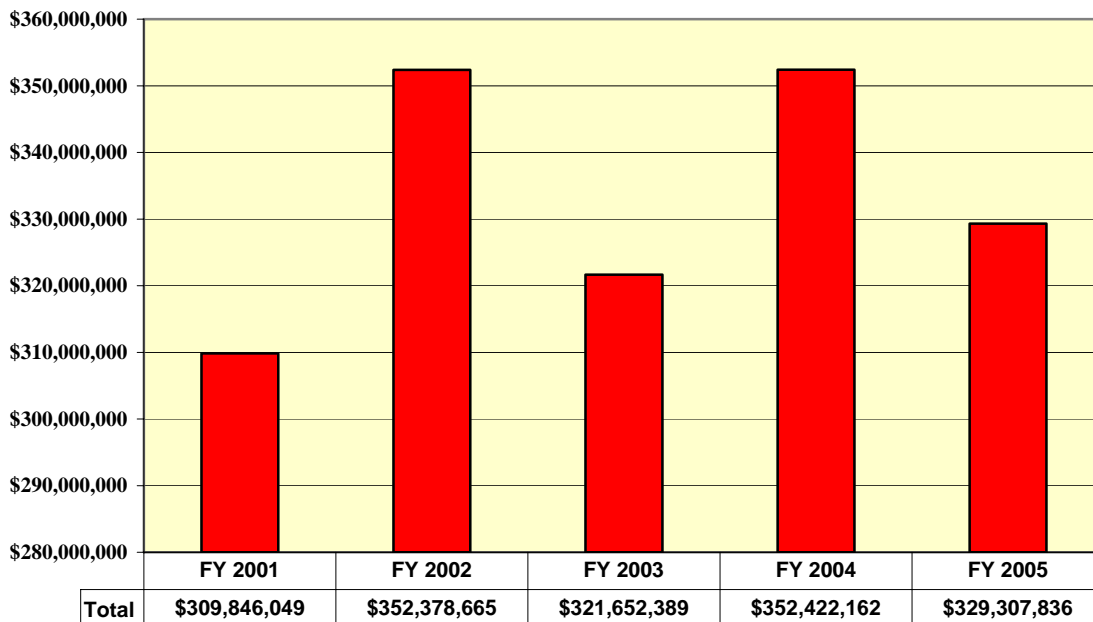


Chart B – Five Year Combined† Total Research Dollars at UM
FY 2001 - 2005



† “Combined” totals reflect the sum of ORAA & Non-ORAA administered sponsored funding

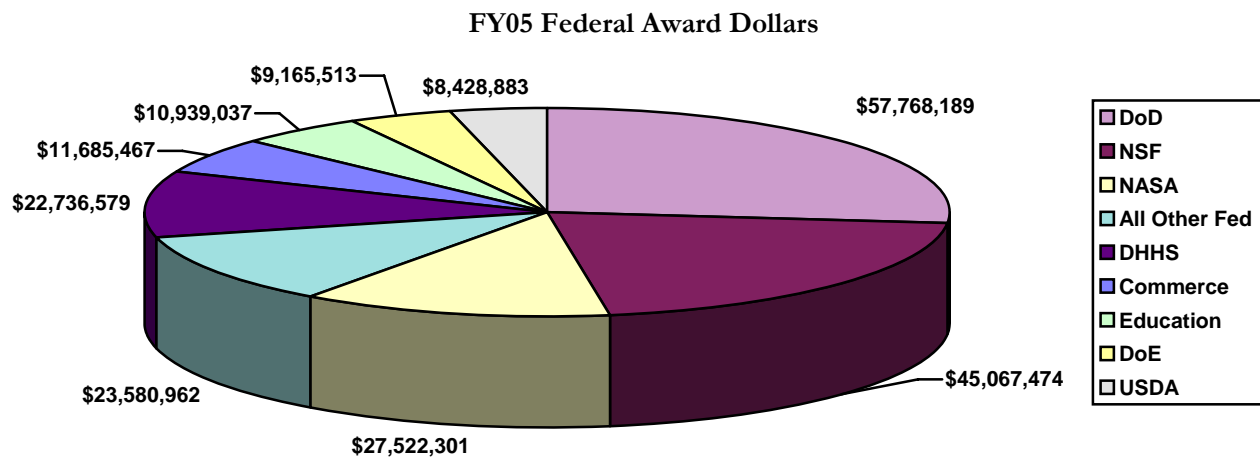
ORAA - ADMINISTERED PROPOSAL AND AWARD ACTIVITY

In Fiscal year 2005:

- The University's three top sponsors are:
 - **Department of Defense (DoD)****
 - FY 2005 funding of \$57,768,189 (17.8% of FY05 total)
 - DoD award dollars increased \$8.43 million from FY 2004 (\$49.7 million)
 - 538 award actions were recorded for FY 2005
 - **National Science Foundation (NSF)**
 - FY 2005 funding of \$45,067,474 (13.7% of FY04 total)
 - NSF award dollars decreased slightly \$6.8 million from FY 2004 (\$46.2 million)
 - 551 award actions were recorded for FY 2005
 - **National Aeronautics & Space Administration (NASA)**
 - FY 2004 funding of \$27,522,301 (8.4% of FY05 total)
 - NASA award dollars increased \$1.75 million from FY 2004 (\$25.7 million)
 - 315 award actions were recorded for FY 2005

ORAA processed 4,047 award actions, totaling nearly \$289 million. This is a moderate change of -4.4% from FY 2004.

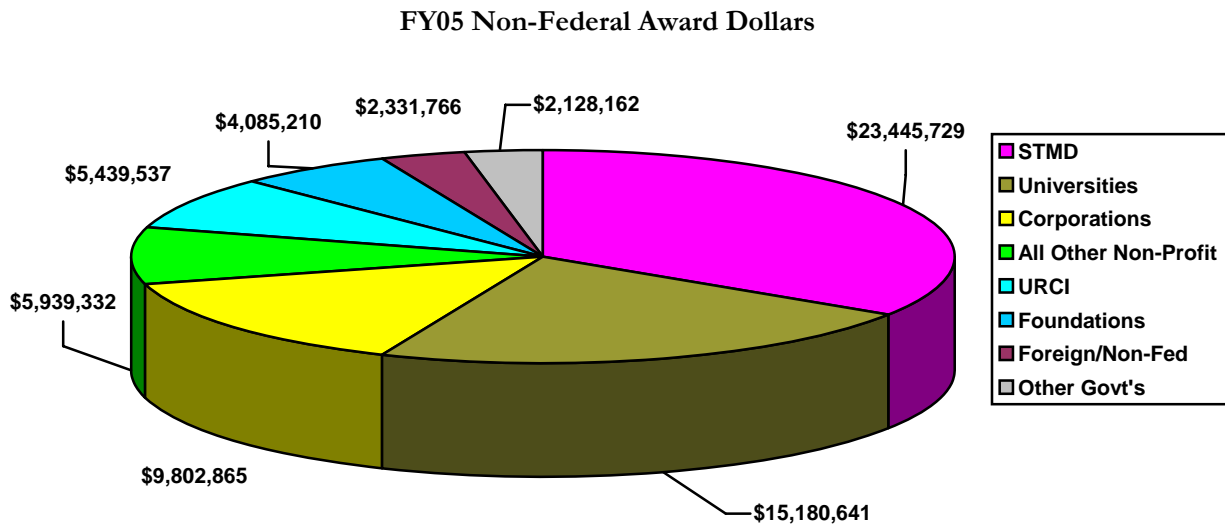
Chart B & Table 2 below display the distribution of ORAA-administered **Federal** award dollars during FY 2005.



**Table 2
Federal Award Dollars - FY 2005**

Agency or Sub-category	Award Amount	Percentage of Federal	Percentage of 2005 Total
Department of Defense	\$57,768,189	26.19%	20.00%
National Science Foundation	\$45,067,474	20.43%	15.60%
NASA	\$27,522,301	12.48%	9.53%
All Other Federal	\$23,580,962	10.69%	8.16%
Department of Health & Human Services	\$22,736,579	10.31%	7.87%
Department of Commerce	\$11,685,467	5.30%	4.04%
Department of Education	\$10,939,037	4.96%	3.79%
Department of Energy	\$9,165,513	4.16%	3.17%
Department of Agriculture	\$8,428,883	3.82%	2.92%
FEDERAL TOTAL	\$220,549,951	100.00%	76.34%

Chart C & Table 3 displays the distribution of ORAA-administered **Non-Federal** funds during FY 2005.



**Table 3
Non-Federal Award Dollars - FY 2005**

Agency or Sub-category	Award Amount	Percentage of Non-Federal	Percentage of 2005 Total
State of Maryland	\$23,445,729	34.30%	8.12%
Universities	\$15,180,641	22.21%	5.25%
Corporations	\$9,802,865	14.34%	3.39%
All Other Non-Profit	\$5,939,332	8.69%	2.06%
Univ. Research Corp. Int'l.	\$5,439,537	7.96%	1.88%
Foundations	\$4,085,210	5.98%	1.41%
Foreign & Other Non-Federal	\$2,331,766	3.41%	0.81%
Other Govt. Entities	\$2,128,162	3.11%	0.74%
NON-FEDERAL TOTAL	\$68,353,242	100.00%	23.66%

ORAA - ADMINISTERED PROPOSAL AND AWARD ACTIVITY

The following table lists the top sponsors in FY 2005.

Table 4
Individual Agencies Awarding a Total of \$1,000,000 or more in FY 2005*

Total Rank	Sponsor Name	Dollars Awarded
1	Department of Defense	\$57,768,189
2	National Science Foundation	\$45,067,474
3	NASA	\$27,522,301
5	State of Maryland	\$23,445,729
4	Department of Health & Human Services	\$22,736,579
6	Universities	\$15,180,641
7	Department of Commerce	\$11,685,467
8	Education	\$10,939,037
9	Corporations	\$9,802,865
10	Other Federal	\$9,570,028
11	Department of Energy	\$9,165,513
12	Department of Agriculture	\$8,428,883
13	Department of Transportation	\$6,259,941
14	URCI	\$5,439,537
15	Institutes	\$4,850,573
16	Foundations	\$4,085,210
17	Department of Homeland Security	\$3,655,546
18	Govt. Labs	\$2,310,209
19	Central Intelligence Agency	\$2,082,482
20	Local Government	\$1,342,702
21	All other Non-Federal	\$1,187,293
22	Foreign Organization	\$1,144,473

Source: UM Data Warehouse

*All totals are ORAA administered totals

** Represents all DOD sources, including Air Force, Army and Navy

Table 5
Proposal Activity by College Five - Year Proposal Volume processed through ORAA

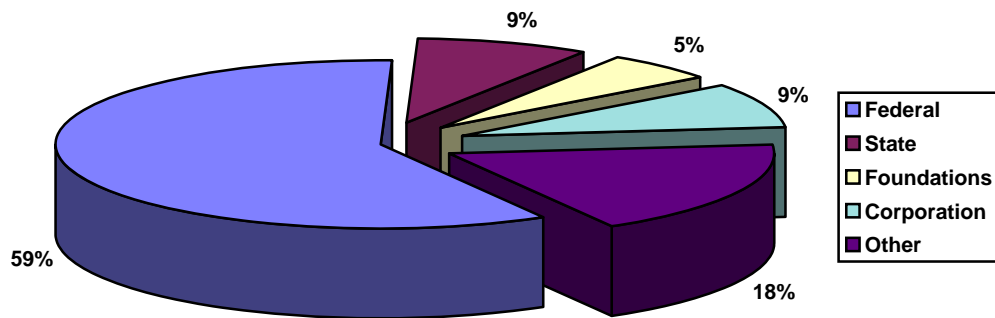
<u>School/College</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
A. James Clark School of Engineering	564	548	572	647	588
College of Agriculture & Natural Resources	206	206	215	230	220
College of Arts & Humanities	54	49	61	67	71
College of Behavioral & Social Sciences	266	323	316	280	283
College of Chemical & Life Sciences	174	182	189	184	233
College of Education	113	91	107	123	112
College of Health & Human Performance	56	61	66	54	64
College of Information Studies	9	7	7	6	8
College of Math, Computer & Physical Sciences	490	433	577	564	521
Other Administrative Units	75	75	101	103	103
Philip Merrill College of Journalism	4	1	4	11	3
Robert H. Smith School of Business	8	16	18	23	26
School of Architecture	5	9	18	20	38
School of Public Affairs	52	19	22	22	40
<i>Fiscal Year Totals</i>	<u>2076</u>	<u>2020</u>	<u>2273</u>	<u>2334</u>	<u>2310</u>

Source: UM Data Warehouse

- Data in table 5 are a counts of all non-zero UM proposals processed by ORAA that were NOT in pre-proposal mode..

In FY 2005, 2310 proposals were processed by ORAA.

Chart D
Proposal Volume - FY 2005



Source: UM Data Warehouse

* Number of processed proposals through ORAA

Proposal and Award Activity – Historical Data

Table 6
Award Totals by College – Five -Year Combined Funding at UM*

<u>School/College</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
A. James Clark School of Engineering	\$68,003,872	\$73,844,493	\$82,537,371	\$96,251,991	\$76,127,531
College of Agricult. & Natural Res.	\$23,287,133	\$22,583,738	\$21,598,869	\$24,560,698	\$20,465,494
College of Arts & Humanities	\$5,101,261	\$6,561,365	\$5,470,159	\$13,676,424	\$7,110,547
College of Behavioral & Social Sciences	\$63,502,087	\$69,277,058	\$58,899,109	\$57,668,765	\$53,815,535
College of Chemical & Life Sciences	\$20,922,580	\$23,627,878	\$23,465,996	\$22,553,819	\$18,923,672
College of Education	\$14,812,358	\$15,489,154	\$11,682,041	\$20,097,330	\$17,565,066
College of Health & Human Perf.	\$4,950,193	\$7,116,133	\$8,880,529	\$9,945,871	\$7,084,632
College of Information Studies	\$313,147	\$149,633	\$132,275	\$383,337	\$380,105
College of Math, Comp & Phys Science	\$72,322,987	\$101,937,758	\$72,629,065	\$76,156,018	\$86,933,073
Other Administrative Units ¹	\$21,983,554	\$17,840,563	\$24,167,017	\$18,312,279	\$28,957,593
Philip Merrill College of Journalism	\$2,786,588	\$4,886,150	\$2,138,841	\$2,249,102	\$2,367,874
Robert H. Smith School of Business	\$5,601,362	\$4,981,643	\$4,292,013	\$5,157,883	\$4,176,344
School of Architecture	\$144,104	\$102,384	\$724,222	\$1,086,260	\$588,805
School of Public Policy	\$6,114,823	\$3,980,715	\$5,034,882	\$4,322,385	\$4,811,565
<i>Fiscal Year Totals</i>	<u>\$309,846,049</u>	<u>\$352,378,665</u>	<u>\$321,652,389</u>	<u>\$352,422,162</u>	<u>\$329,307,836</u>

- In Table 6, amounts include all projects at UM that were active between 1 July – 30 June

Table 7
Award Actions by College Five - Year Award Volume processed through ORAA**

<u>School/College</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
A. James Clark School of Engineering	901	878	1034	1117	1048
College of Agriculture & Natural Resources	306	372	347	357	343
College of Arts & Humanities	83	90	93	107	71
College of Behavioral & Social Sciences	418	522	546	587	480
College of Education	140	201	192	196	362
College of Health & Human Performance	80	78	114	99	170
College of Information Studies	13	10	15	8	94
College of Life Sciences	300	305	354	373	4
College of Math, Computer & Physical Sciences	1012	1107	1118	1294	1146
Other Administrative Units ¹	134	198	157	247	242
Philip Merrill College of Journalism	4	7	5	5	8
Robert H. Smith School of Business	12	10	21	28	39
School of Architecture	4	11	22	19	32
School of Public Policy	54	58	51	55	49
<i>Fiscal Year Totals</i>	<u>3461</u>	<u>3847</u>	<u>4069</u>	<u>4492</u>	<u>4088</u>

* This includes all award activity at UM in FY 2001 – 2005.

** This includes all award actions processed through ORAA only in FY 2001 – 2005.

¹ Other Administrative Units include the VP Office of Academic Affairs, Student Affairs, Office of Information Technology, Graduate School/VP for Research, & Undergraduate Studies

Overview of ORAA Sponsored Program Expenditures

In Fiscal Year 2005, the UM expenditures were in excess of \$309 million for sponsored activities.* This is an increase of \$21.5 million from FY 2004.

Chart E
Sponsored Program Expenditures
Total University
(Dollars in thousands)

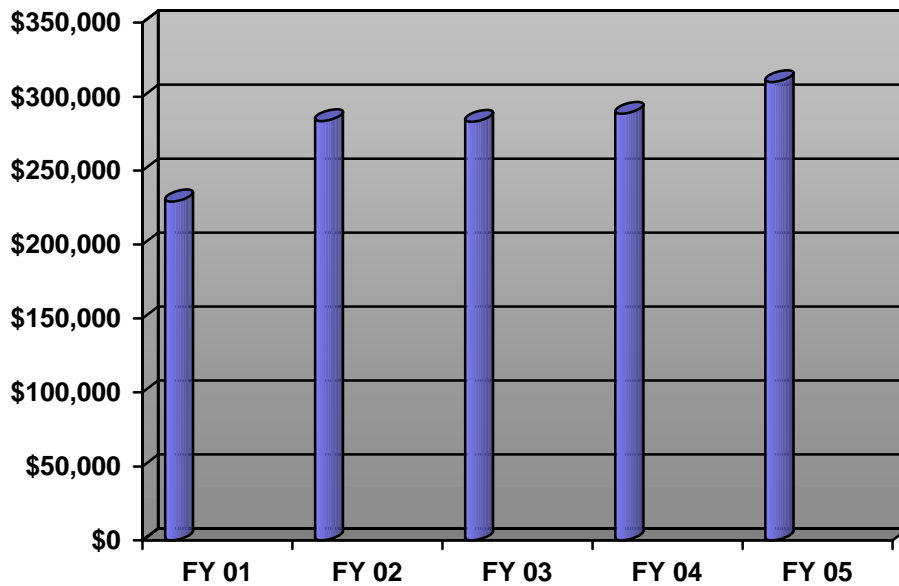


Table 8
Sponsored Program Expenditures
Total University

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total University	\$229,095,551	\$283,477,679	\$283,095,601	\$288,452,630	\$309,898,312

Source: UM Comptroller

Table 9
Fiscal Year Comparison: Sponsored Program Expenditures by Cost Element

Cost Element	FY 2004	FY 2005	% Change
1. Salaries & Benefits	\$156,874,651	\$165,365,612	5.41%
2. Materials & Supplies	\$27,908,111	\$26,506,426	-5.02%
3. Equipment	\$6,194,206	\$7,159,057	15.58%
4. Travel	\$7,190,911	\$7,397,778	2.88%
5. Contractual Services	\$3,380,257	\$4,921,864	45.61%
6. Subcontracts	\$30,232,814	\$37,447,713	23.86%
7. Other *	\$4,273,724	\$5,191,018	21.46%
8. Indirect Costs (F&A)	\$52,397,958	\$55,908,844	6.70%
<u>TOTAL</u>	<u>\$288,452,630</u>	<u>\$309,898,312</u>	<u>7.43%</u>

* Including "Transfer" totals
Source: UM Comptroller

Chart F
FY 2004 Sponsored Program Expenditures by Cost Element

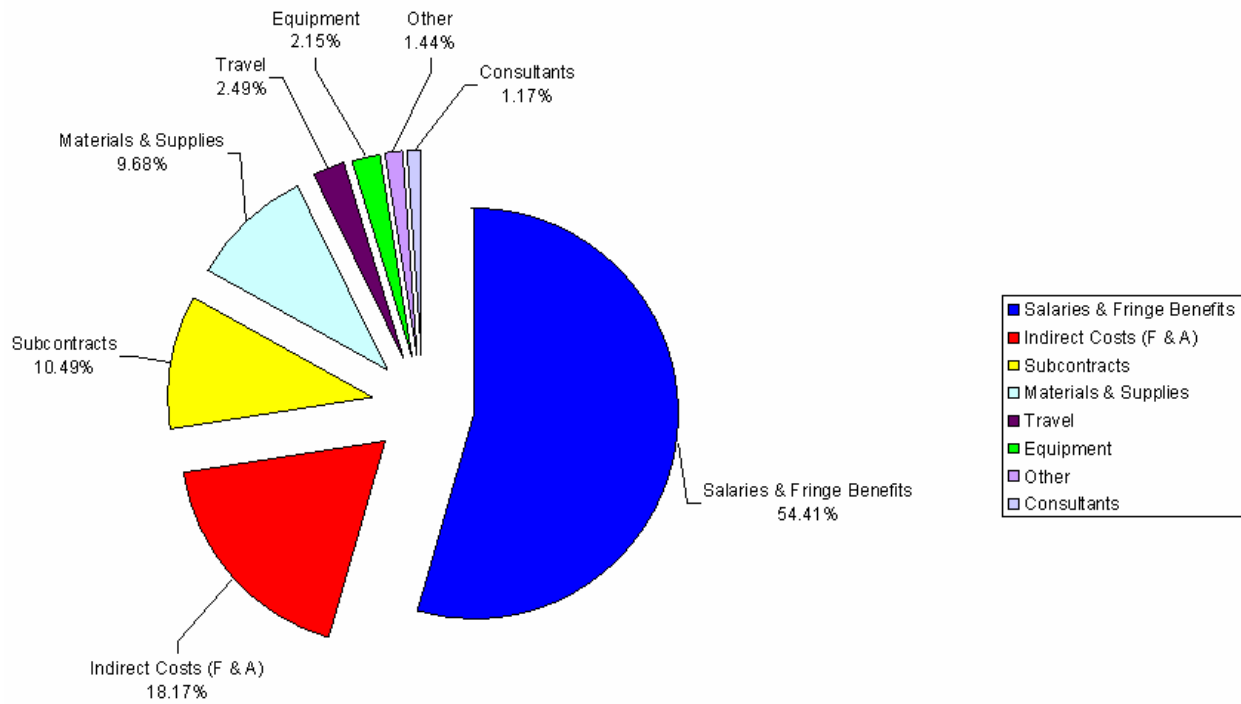
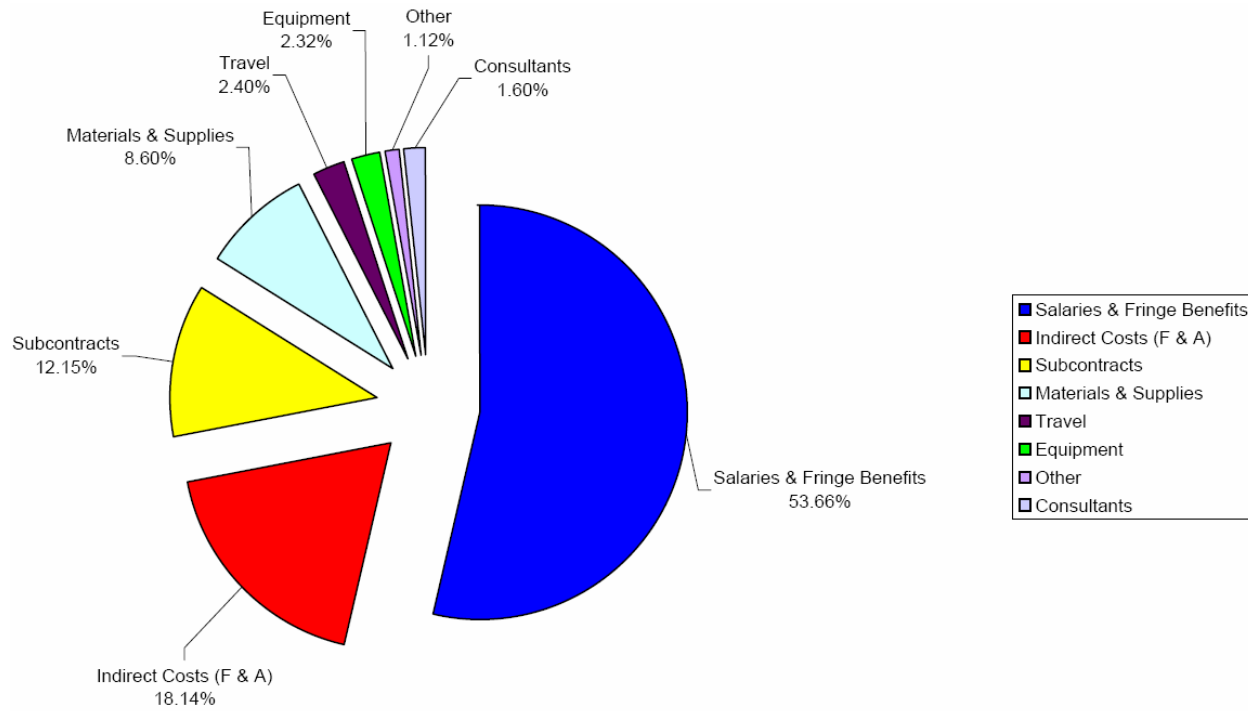


Chart G
FY 2005 Sponsored Program Expenditures by Cost Element



Source: UM Comptroller

THE UNIVERSITY'S RANKING AMONG ITS PEERS

The University's ranking of its sponsored program activities compared with colleges and universities nationwide is illustrated in the following statistics furnished by NSF and NASA:

National Science Foundation (NSF) Summary data, FY 2003:

On An Expenditure Basis¹

- **22nd** in Federally financed research and development (R&D) expenditures at public universities and colleges by science & engineering field: FY 2003
- **43rd** in Federally financed R&D expenditures at universities and colleges: FY 2003
- **35th** in total R&D expenditures at universities and colleges (*see table 10*)

National Institutes of Health (NIH) FY 2004 data:

- Ranked **112th** nationally for all award types to Institutions of Higher Education (*see table 11*).

National Aeronautics and Space Administration (NASA) FY 2003 data:

- Ranked **6th** nationally for total obligations to educational institutions (*see table 13*).

¹.All data taken from NSF Academic Research and Development Expenditures tables for Fiscal Year 2002.

². All data taken from NSF Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions: Fiscal Year 2002

Table 10
NSF: FY 2003 R&D expenditures at Universities and Colleges
(Dollars in thousands)

<u>Rank</u>	<u>Institution</u>	<u>Total Amount</u>
1	Johns Hopkins U.	\$1,244,132
2	U. CA, Los Angeles	\$849,357
3	U. MI all campuses	\$780,054
4	U. WI Madison	\$721,248
5	U. WA	\$684,814
6	U. CA, San Francisco	\$671,443
7	U. CA, San Diego	\$646,508
8	Stanford U.	\$603,227
9	U. PA	\$564,716
10	Cornell U. all campuses	\$554,760
11	PA State U. all campuses	\$533,427
12	Duke U.	\$520,191
13	U. MN all campuses	\$508,557
14	U. CA, Berkeley	\$507,186
15	OH State U. all campuses	\$496,438
16	U. IL Urbana-Champaign	\$493,581
17	MA Institute of Technology	\$485,764
18	U. CA, Davis	\$482,145
19	Washington U. St. Louis	\$474,328
20	Baylor C. of Medicine	\$461,763
*	*	*
29	U. NC Chapel Hill	\$390,542
*	*	*
30	Yale U.	\$387,644
31	GA Institute of Technology all campuses	\$364,190
32	U. TX Austin	\$343,854
33	IN U. all campuses	\$337,669
34	Emory U.	\$323,224
<u>35</u>	<u>U. MD College Park</u>	<u>\$321,899</u>
36	MI State U.	\$321,410
37	Northwestern U.	\$319,722
38	U. TX M. D. Anderson Cancer Ctr.	\$315,169
39	LA State U. all campuses	\$314,665
40	Purdue U. all campuses	\$309,476
*	*	*
42	Univ. MD Baltimore	\$297,271

Source: National Science Foundation/SRS, Academic Research and Development Expenditures: Fiscal Year 2003
 Table B-33. R&D expenditures at universities and colleges, fiscal year 2003

Table 11
NIH: Awards (all types) to Institutions of Higher Education FY 2004*
Ranked by Amount

Rank	Institution	Number	Amount
1	JOHNS HOPKINS UNIVERSITY	1,304	\$599,151,309
2	UNIVERSITY OF WASHINGTON	1,031	\$473,432,138
3	UNIVERSITY OF PENNSYLVANIA	1,176	\$464,076,925
4	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	977	\$438,778,831
5	WASHINGTON UNIVERSITY	885	\$388,307,875
6	UNIVERSITY OF MICHIGAN	945	\$368,176,446
7	UNIVERSITY OF CALIF. LOS ANGELES	890	\$361,593,433
8	UNIVERSITY OF PITTSBURGH	938	\$360,635,035
9	DUKE UNIVERSITY	759	\$343,825,304
10	HARVARD UNIVERSITY	723	\$325,665,202
11	YALE UNIVERSITY	852	\$323,614,091
12	UNIVERSITY OF CALIFORNIA SAN DIEGO	663	\$304,039,410
13	COLUMBIA UNIVERSITY	747	\$303,714,701
14	STANFORD UNIVERSITY	739	\$301,733,744
15	UNIVERSITY OF NC CHAPEL HILL	777	\$289,652,932
16	UNIVERSITY OF WISCONSIN MADISON	653	\$264,059,408
17	VANDERBILT UNIVERSITY	642	\$251,147,207
18	CASE WESTERN RESERVE UNIVERSITY	670	\$250,009,613
19	BAYLOR COLLEGE OF MEDICINE	559	\$248,951,313
20	UNIVERSITY OF ALABAMA AT BIRMINGHAM	553	\$243,443,313
*	*	*	*
33	UNIVERSITY OF MD BALT PROF SCHOOL	419	\$159,949,796
*	*	*	*
53	UNIVERSITY OF CALIFORNIA BERKELEY	335	\$96,892,378
*	*	*	*
74	UNIVERSITY OF IL URBANA-CHAMPAIGN	199	\$56,740,179
*	*	*	*
107	CHARLES R. DREW UNIV. OF MED & SCI	32	\$25,471,707
108	LOYOLA UNIVERSITY OF CHICAGO	96	\$24,460,553
109	ARIZONA STATE UNIVERSITY	78	\$23,977,130
110	SUNY DOWNSTATE MEDICAL CENTER	51	\$23,742,229
111	DREXEL UNIVERSITY	75	\$23,481,940
112	UNIVERSITY OF MD COLLEGE PK	102	\$23,214,288
113	UNIVERSITY OF DELAWARE	61	\$22,833,669
114	NEW YORK MEDICAL COLLEGE	59	\$22,403,655
115	TEXAS A&M UNIVERSITY HEALTH SCIENCE CTR	83	\$21,624,039
116	UNIVERSITY OF SOUTH CAROLINA	74	\$21,392,622
117	IOWA STATE UNIVERSITY	53	\$21,016,006

* Amounts are total costs from FY 2004 obligations.

Table 12
NASA: 50 Educational Institutions Listed according to Total obligation – FY 2003

Rank	Institution	Total Obligations (in Thousands)
1	Johns Hopkins University	186,950,953
2	Stanford University	87,267,231
3	University of Colorado – Boulder	43,306,382
4	Baylor College of Medicine	33,271,626
5	University of California – Berkeley	31,897,335
6	University of Maryland – College Park	28,671,918

Source: NASA: University Program Management Information System: (NASA/TM—2004-212986) p.6
 < http://education.nasa.gov/pdf/56152main_2003umis508nbc.pdf >

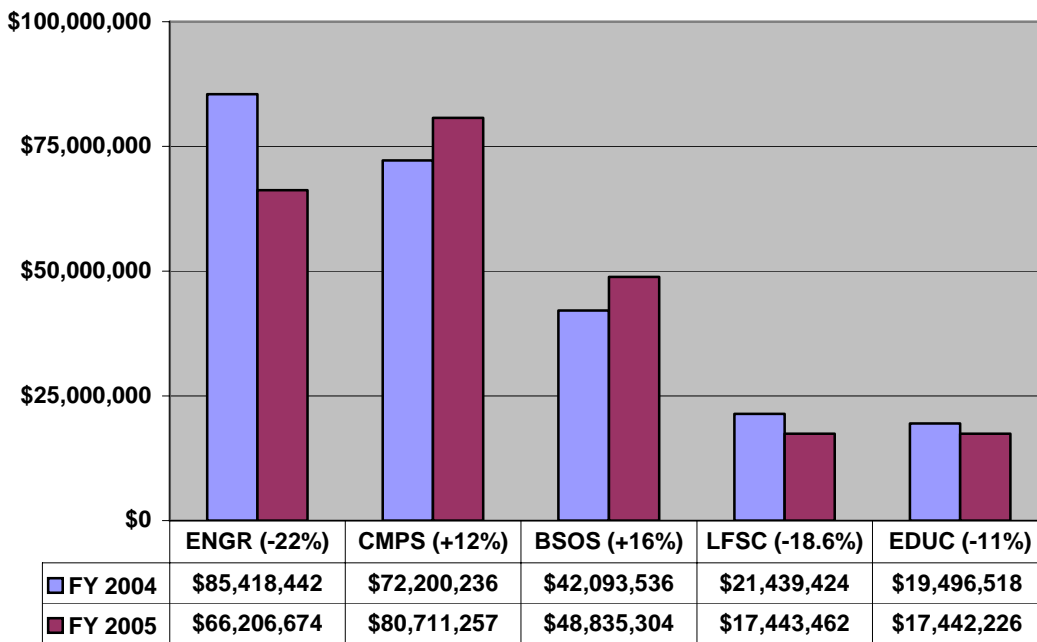
APPENDIX: FY 2004 & 2005 ORAA COMPARATIVE DATA

I. Highlights of current changes in ORAA award dollars for FY 2005.

The Top Five Academic Colleges (ORAA-only totals):

- College of Math, Computer & Physical Sciences (CMPS)
- A. James Clark School of Engineering (ENGR)
- College of Behavioral & Social Sciences (BSOS)
- College of Chemical & Life Sciences (CLFS)
- College of Education (EDUC)

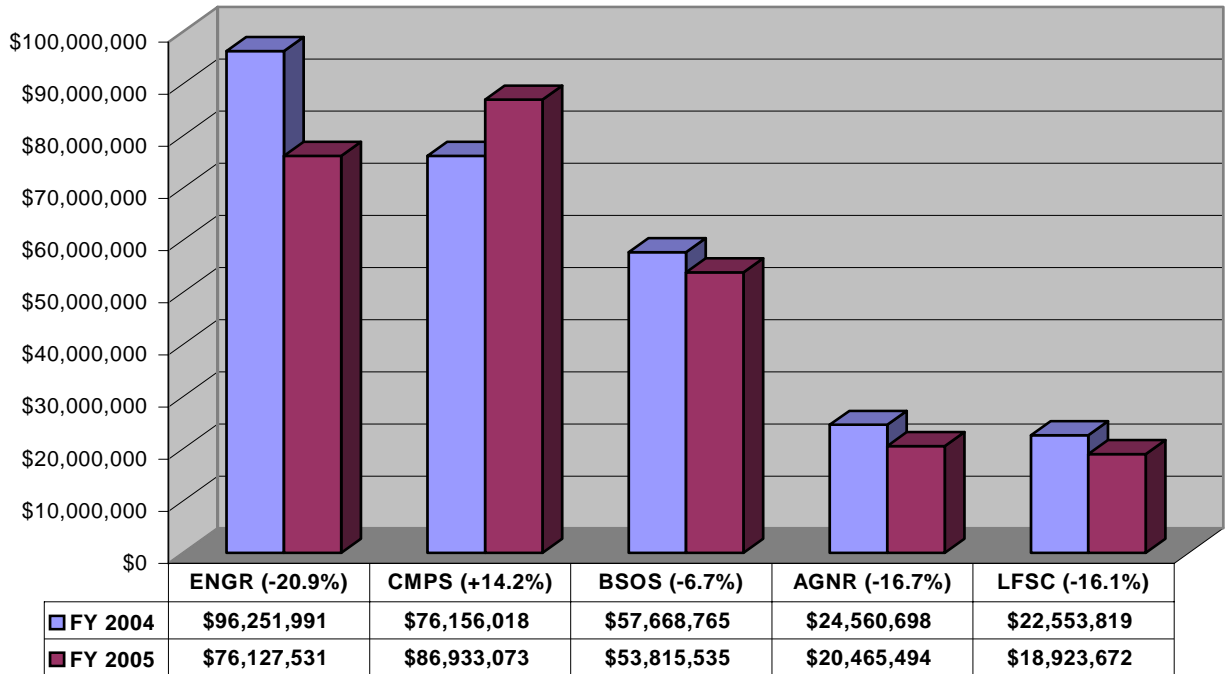
**Top 5 UM Colleges ORAA Award Activity
FY 2004 - 2005**



II. The top five academic colleges in COMBINED* funding for FY 2005 :

- College of Math, Computer & Physical Sciences (CMPS)
- A. James Clark School of Engineering (ENGR)
- College of Behavioral & Social Sciences (BSOS)
- College of Agriculture & Natural Resources (AGNR)
- College of Chemical & Life Sciences (CLFS)

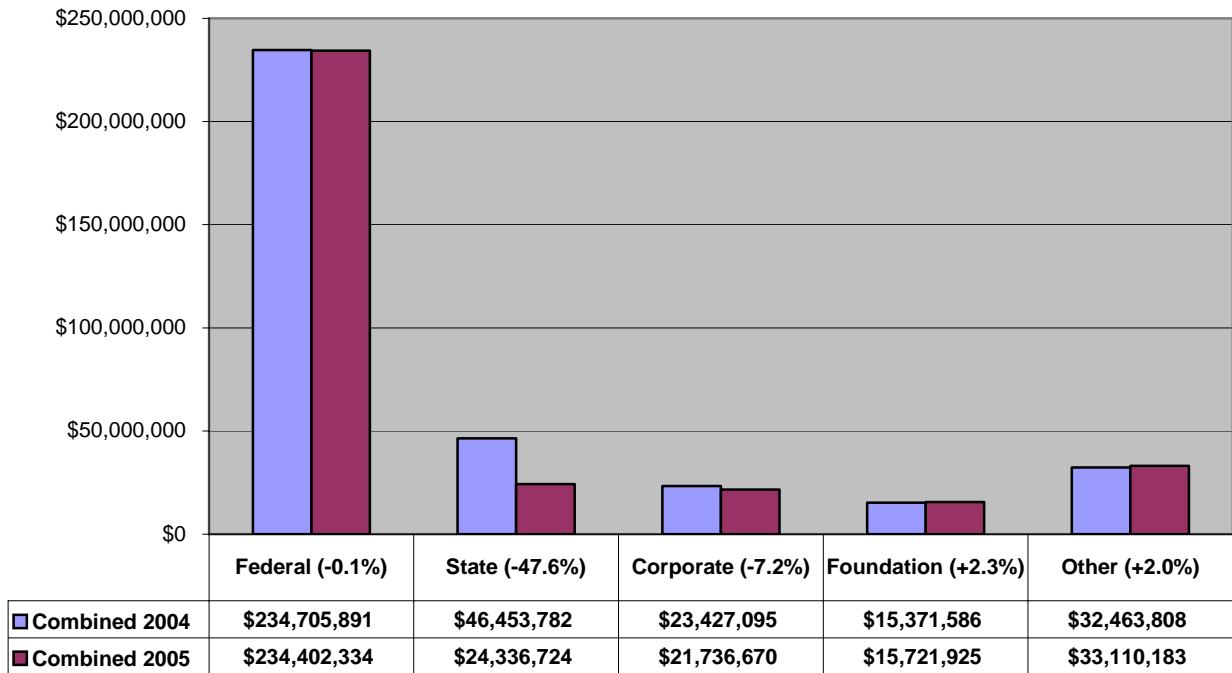
**Top 5 Colleges COMBINED Award Activity
FY 2004 - 2005**



*“Combined” totals reflect the sum of ORAA & Non-ORAA sponsored funding

III. The chart below shows the change in funding by agency type in FY 2005. Federal sources came out on top again for FY 2005 with a very minor (0.1%) drop.

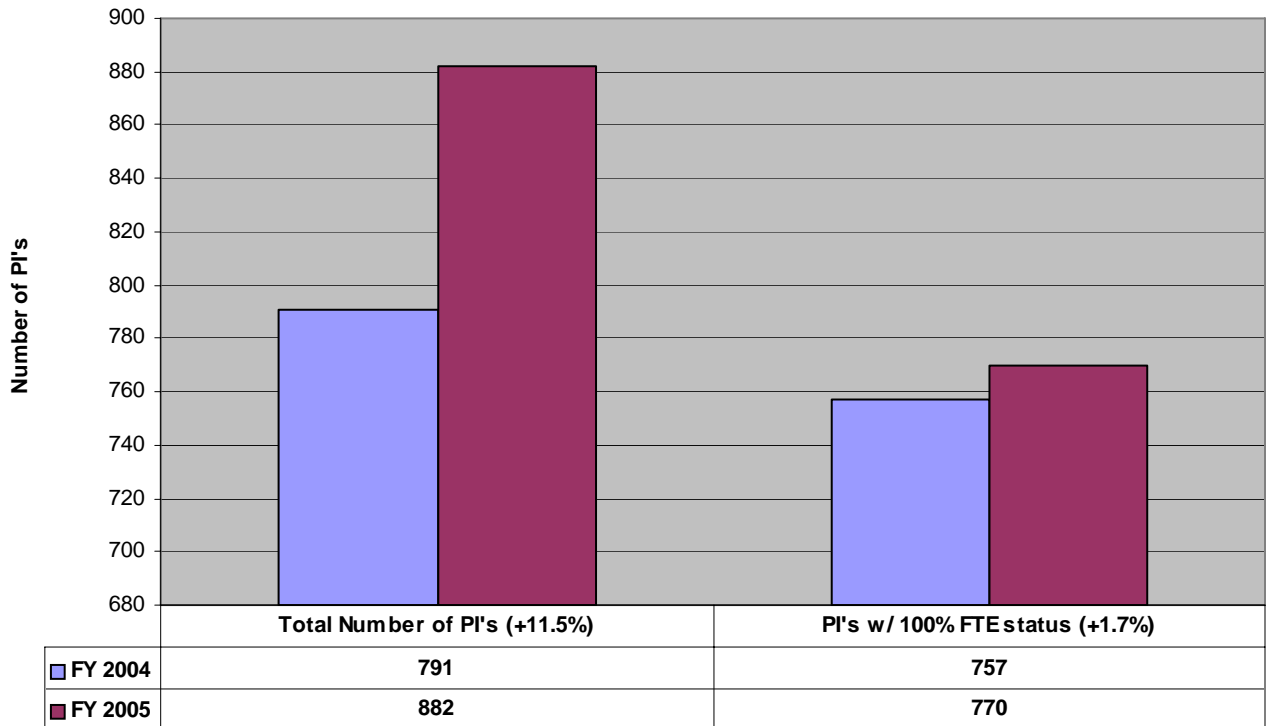
FY 2004 - 2005 Combined Research Activity Comparison Graph



* Other includes all other non-federal, non-state & non-foundation entities (e.g Professional Societies, other Universities, etc)

IV. Principal Investigators (PIs) in FY 2005 increased from 791 to 882, with a large portion of those numbers (96% and 87% respectively) being full time UM employees (FTE).*

Principal Investigators: FY 2004 - 2005



* It is important to note here that the number of PIs represented in this chart constitute a distinct count of PIs on projects that have received some amount of funding in FY 2003, 2004.