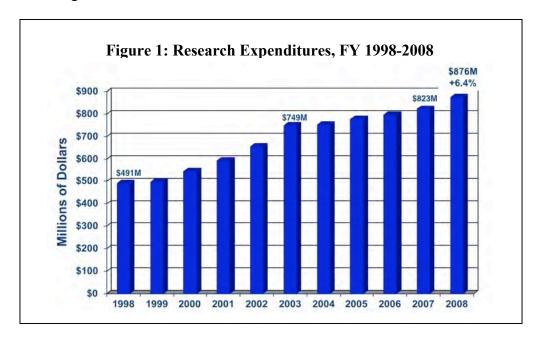
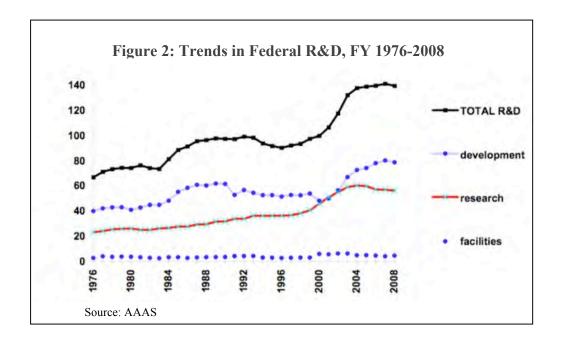
Annual Report on Research and Scholarship FY2008 Financial Summary

Stephen R. Forrest Vice President for Research Office of the Vice President for Research January 22, 2009

The University of Michigan expenditures in support of research, scholarship and creative activity continued to grow during Fiscal Year 2008 with total expenditures reaching \$875,753,507. The total is an increase of 6.4% over FY2007. Overall, the University's research portfolio remains one of the largest in the country, consistently appearing in the top four university research programs according to statistics tabulated by the National Science Foundation. The University's research expenditures growth trend for the last decade is summarized in Figure 1.



Total research expenditures have nearly doubled during the decade, although growth in the last half of the period has slowed, reflecting a decline in Federal funding trends, particularly for research. These trends are shown in Figure 2. This year, of special note, is that Medical School funding from the National Institutes of Health raises it to the 7th largest in the nation – an all-time record for the U-M. This is indicative of the U-M's ability to continue to grow its "market share" in the face of a declining resource base.



Just under one-third of the University's non-hospital budget comes from research funding by external entities – the federal government, industry, foundations, and other categories. Table 1 shows the total research expenditures divided into the three major sponsor groups of Federal, Nonfederal and University spending. Within the Nonfederal group, the Industry, Foundation and State of Michigan components are broken out.

Sponsor Group	Expenditures	% of tota
Total Federal Government	\$611,370,548	69.8%
Total Non-Federal Sponsors	\$105,461,564	12.0%
Industry	\$42,888,528	4.9%
Foundations	\$21,343,396	2.4%
State of Michigan/Counties/Cities	\$5,096,990	0.6%
Total U-M Funds	\$158,921,396	18.1%

Federal funding, which comprises 70% of the U-M's current total, has long been the largest source of research funding at the U-M. University research spending by schools and colleges, departments, and OVPR (broken down by unit in Table 2) – extremely important contributors to

our success in obtaining external funding -- accounted for 18% of the year's spending¹. From the Nonfederal group, industry sources provided 4.9% of total research expenditures, continuing a robust growth trend of the last several years.

A	FY08 (change from FY07)		FY08 (change from FY07)
Medical School	\$357.9M (3.0%)	Information	\$5.1M (3.2%)
Engineering	\$135.1M (1.8%)	Nursing	\$4.9M (13.8%)
ISR	\$90.5M (20.1%)	Social Work	\$4.9M (-10.2%)
LSA	\$80.6M (12.5%)	Rackham	\$4.2M (-0.5%)
Public Health	\$49.9M (4.5%)	Kinesiology	\$3.8M (-1.5%)
OVPR Units	\$33.7M (-12.2%)	Public Policy	\$2.6M (40.0%)
Dentistry	\$13.8M (-13.4%)	Law	\$1.7M (-13.9%)
Education	\$13.7M (1.2%)	CA&UP	\$1.0M (-4.2%)
SNRE	\$11.4M (-0.9%)	Music	\$344K (26.3%)
Business	\$9.3% (17.6%)	UM-Flint	\$647K (-1.0%)
Pharmacy	\$7.1M (-1.7%)	Art and Design	\$114K (-36.1%)
UM-Dearborn	\$6.5M (35.9%)	Other Units	\$19.2M (23.2%)

A closer examination of the sources of research expenditures indicates that future growth from federal sources may not be as rapid as it has been in the past. Our spending from federal sources has grown slowly for several years, increasing by 2.7% over last year, and 4.4% since FY06. By comparison, one of the largest one-year increases in federal research spending on our campus jumped by 9.5% from FY1999 to FY2000. Furthermore, expenditures by the National Institutes of Health projects, our single largest source of support, grew by 14.5% between FY1999 and FY2000, whereas the NIH total has been nearly flat since FY06, increasing only 1.2%. A summary of the funding increases between FY07 and FY08 from a sampling of sources is provided in Table 3.

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¹ Beginning in FY 2008, the University implemented Governmental Accounting Standards Board Statement No. 45 "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions." This Standard requires accrual of postemployment benefits such as healthcare, dental, etc. As a result, the University's Internally Funded Research increased by \$14,764,106 in FY 2008 as a result of this accounting change. FY 2007 does not reflect this new accounting standard.

Per	cent Change by	y Major S	Sponsor Group), FY 20	007-2008	
Sponsor		% of	T	% of	.	0.4 57
Group	FY07	total	FY08	total	\$ Chg.	% Chg
Total Federal	\$595,551,058	72.4%	\$611,370,548	69.8%	\$15,819,490	2.7%
NIH	\$387,738,690	47.1%	\$393,033,824	44.9%	\$5,295,134	1.4%
NSF	\$65,319,711	7.9%	\$64,800,692	7.4%	-\$519,019	-0.8%
DOD	\$51,075,003	6.2%	\$59,378,407	6.8%	\$8,303,404	16.3%
Energy	\$16,794,966	2.0%	\$17,476,457	2.0%	\$681,491	4.1%
NASA	\$16,041,111	1.9%	\$15,888,114	1.8%	-\$152,997	-1.0%
Transportation	\$15,418,486	1.9%	\$14,803,527	1.7%	-\$614,959	-4.0%
Commerce	\$6,713,205	0.8%	\$5,905,347	0.7%	-\$807,858	-12.0%
Total Non-Federal	\$96,726,492	11.8%	\$105,461,564	12.0%	\$8,735,072	9.0%
Industry	\$38,594,118	4.7%	\$42,888,528	4.9%	\$4,294,410	11.1%
Foundations	\$18,689,966	2.3%	\$21,343,396	2.4%	\$2,653,430	14.2%
State of Mich.	\$7,003,489	0.9%	\$5,096,990	0.6%	-\$1,906,499	-27.2%
Γotal U-M	\$130,690,125	15.9%	\$158,921,396	18.1%	\$28,231,271 ²	21.6%
Total Expenditures	\$822,967,550		\$875,753,507		\$52,785,833	6.4%

We can see, however, that industry grew by a healthy 11% in FY08. While we do not know how sustainable such growth may be over the next few years, it is nevertheless clear that industry research funding does present a significant opportunity for the future growth of our research enterprise. In Table 4, we see that the extent of the U-M's partnerships with industry is growing by several measures. In addition to research sponsored directly, there is research under industry subcontracts, philanthropy, licensing, professional development opportunities on the campus and direct economic development projects.

Table 4: U-M Cor	: U-M Corporate Engagement, FY 2007-2008			
	FY07	FY08	% Chg.	
Industry Research (total)	\$53,174,713	\$58,636,309	10.3%	
Direct Contract	\$38,049,137	\$42,888,528	12.7%	
Subcontract	\$13,503,916	\$14,136,767	4.7%	
Corp. Foundations, Prof. Org., etc.	\$1,621,660	\$1,611,014	-0.7%	
Philanthropy (excludes gifts given to specific research	\$22,637,474 projects)	\$27,124,816	19.8%	
Licensing Revenue	\$12,800,000	\$25,000,000	95.3%	
Student Project Fees	\$510,500	\$462,500	-9.4%	
Professional Development	\$22,731,997	\$23,248,160	2.3%	
Economic Development Projects (IRLEE)	\$1,154,597	\$2,003,244	73.5%	
Total	\$113,009,281	\$136,475,029	20.8%	

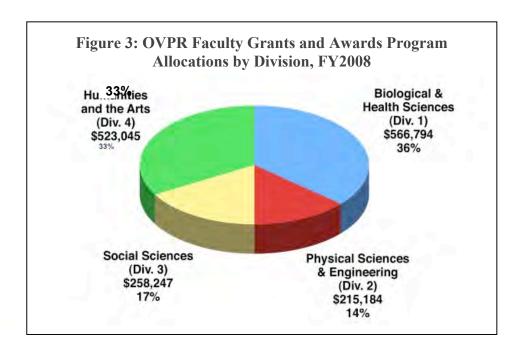
² See footnote 1.

Even as the prospects for industry partnerships grow, our experience also continues to be favorable with regard to federal block grant applications, as U-M faculty groups have success in winning grants against stiff competition (e.g. the new Michigan Institute for Clinical and Health Research grant, an \$11M per year project; and the 5-year, \$25M extension of the ISR project, Lifestyles of American Youth).

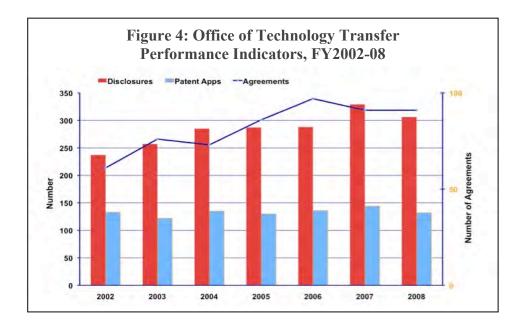
There is hope, however, that research in some areas, such as energy and transportation, will be included in the pending "stimulus" package. It is apparent that the American Competitiveness Initiative passed with near-unanimous support two years ago will be revisited in the current Congress.

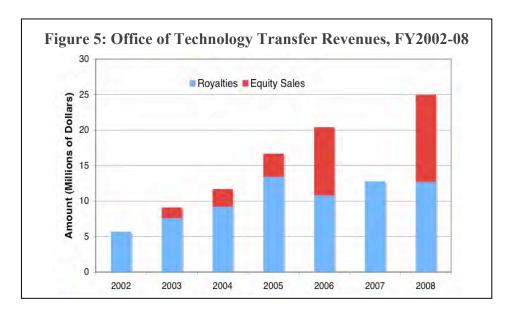
The University of Michigan devotes a significant portion of internal funds to support research and scholarship. In FY08, this amounted to \$159M, with \$14M of the increase due to an accounting change described in footnote 1. One of OVPR's major goals is to use some of its budget to support new initiatives, and provide cost-sharing and seed funding that make our faculty proposals to external funding entities more competitive. OVPR also provides support to faculty who conduct work in areas not typically funded by federal agencies or other groups. In FY08, this spending totaled \$4.5M, with the majority of our funds matched by the proposing faculty members' school, college, or department.

A primary source of OVPR support is our Faculty Grants and Awards program. Figure 3 shows the breakdown of OVPR allocations by broad disciplinary area, as defined by the Rackham Graduate School divisions. The program provides bridging funds for externally supported but lapsed projects, seed funding for young faculty, as well as more senior faculty who are changing research directions. One-third of the total funding from this program alone was directed at supporting the arts and humanities, although the total external funding brought in by these fields is less than 1% of our total research volume. OVPR funds went to four dozen humanities and arts projects, from support for the production of a publication or recording, to larger grants that made a performance, conference, or exhibit possible.

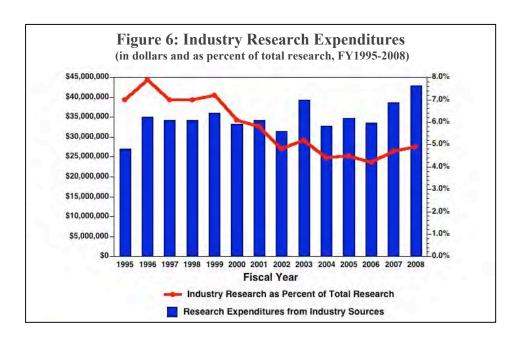


Another significant responsibility for OVPR is overseeing the management of our intellectual property, largely handled by the Office of Technology Transfer. One measure of our effectiveness in working with industry is found in OTT's performance trends. Figures 4 and 5 show those trends since 2002.





In FY08, disclosures of new technologies dropped slightly, although licensing revenues and royalties nearly doubled to \$25 million. We launched 13 start-ups, bringing to 75 the number of new companies formed between 2001 and 2008. We note that these numbers are by no means indicative of all that we do, or that we must do to improve our interactions with the business community. Some of the non-numeric actions include moving the Office of Technology Transfer to main campus, and co-locating with the new Business Engagement Center, which is designed



to improve the U-M's accessibility to the private sector. Figure 6 suggests that our efforts are working. Note that we may be seeing the start of a trend since FY2006 to grow the percent of total research that is supported by industry.

We expect the challenges to our research enterprise to test us for some time to come. However, we are optimistic that the strategic planning of OVPR and others on campus, combined with the excellence of our faculty, will see the University through these difficult times.