

OFFICE OF RESEARCH ADMINISTRATION & ADVANCEMENT
FISCAL YEAR 2008 ANNUAL REPORT



UNIVERSITY OF
MARYLAND

ABOUT ORAA

The Office of Research Administration and Advancement (ORAA) is key to the University's success in achieving its vision of becoming one of the nation's preeminent public research universities. By functioning as an advocate and facilitator, ORAA encourages and assists administrators, faculty and leadership in engaging with the nonprofit, business, and government communities.

ORAA is the designated pre- and (non-financial) post-award administration office for the University of Maryland, providing top quality support to the campus community's research, creative activity, and outreach initiatives. ORAA identifies research opportunities and partnerships; implements electronic Research Administration (eRA) initiatives; facilitates the submission of all sponsored project proposals on behalf of the University; negotiates and executes agreements; provides sponsored projects education and communication and assists faculty, staff, and students in managing projects that are awarded to the University.

Summary of Activities

The University of Maryland, College Park (UM) has experienced considerable growth in extramural funding over the past ten fiscal years, nearly doubling our award totals (FY99: \$203.2 million) to over \$400 million in FY08. A total of 143 investigators were credited with \$500,000 or more in sponsored research funding.

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, UM and other partner institutions and corporations. The resulting awards are often complex, involving multiple parties and containing special requirements.

ORAA recognizes the importance in sustaining this growth by being both responsive and flexible in its management of sponsored projects. As well as providing expertise and support for the faculty and staff.

Cryptorhynchus lapathi—Common name is Poplar and Willow borer—Photo by Christian Che-Castaldo. Used with permission from the Fagan Lab.



Inside This Report

About ORAA

Sponsored and Extramural Award Totals

College Sponsored and Extramural Award Totals

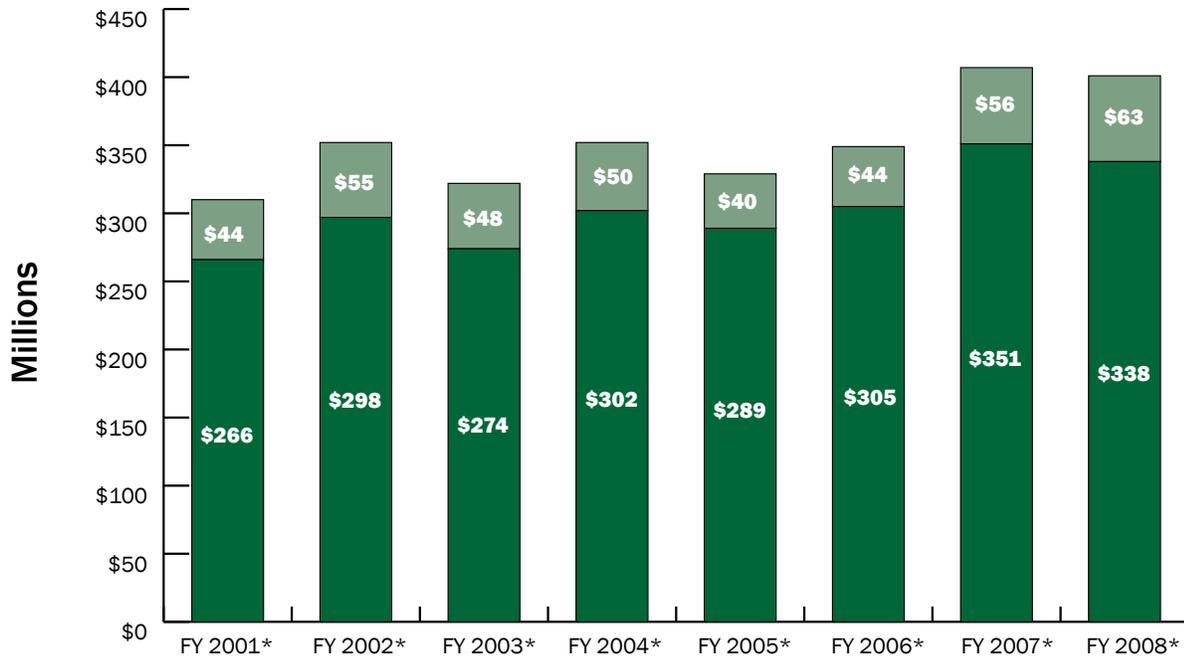
Federal and Non-federal Award Dollars by Sponsor

Award Expenditure Totals/MITH Digitizes Shakespeare Works

Professional Development/Office of Technology Commercialization

M Square

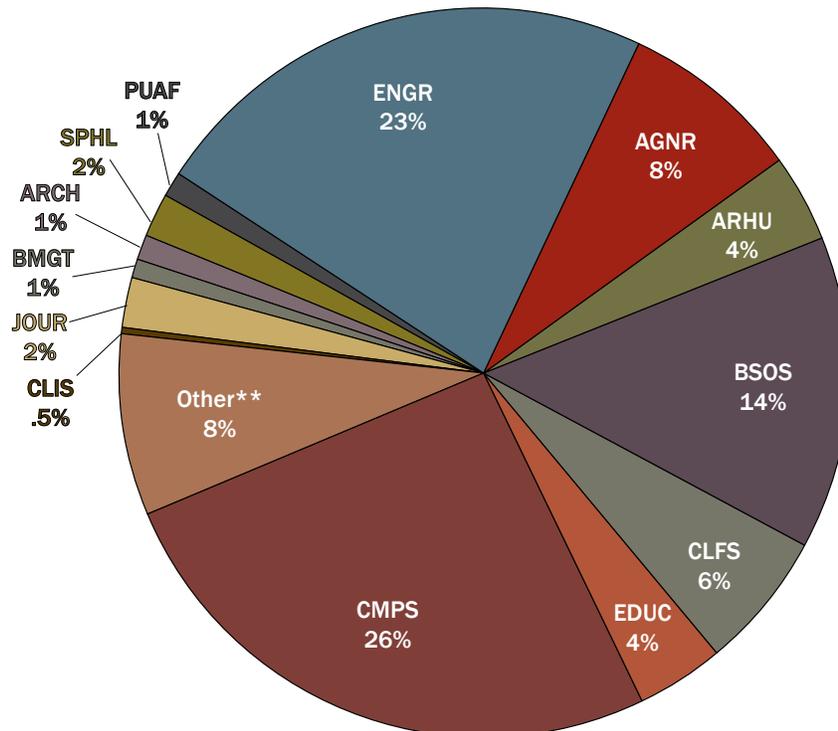
Sponsored & Extramural Award Dollars



*In FY 2000, non-ORAA awards were collected using a different collection strategy. This FY 2000 total has been retroactively adjusted using the collection formula standardized for FY 2001.

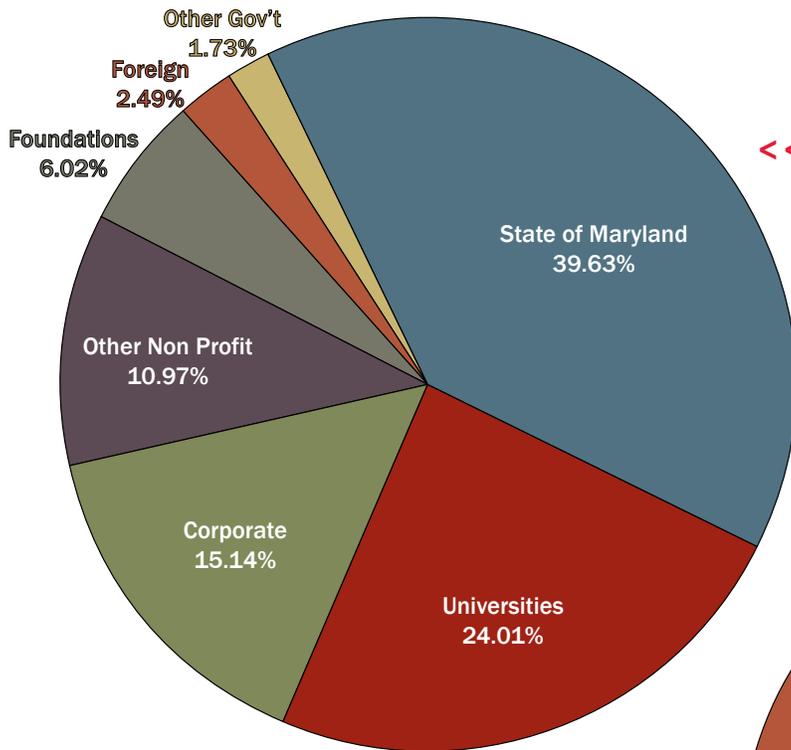
**Fys 2001-2008 represent a standard collection of ORAA and Non-ORAA award activity.

FY08 Sponsored & Extramural Funding by College

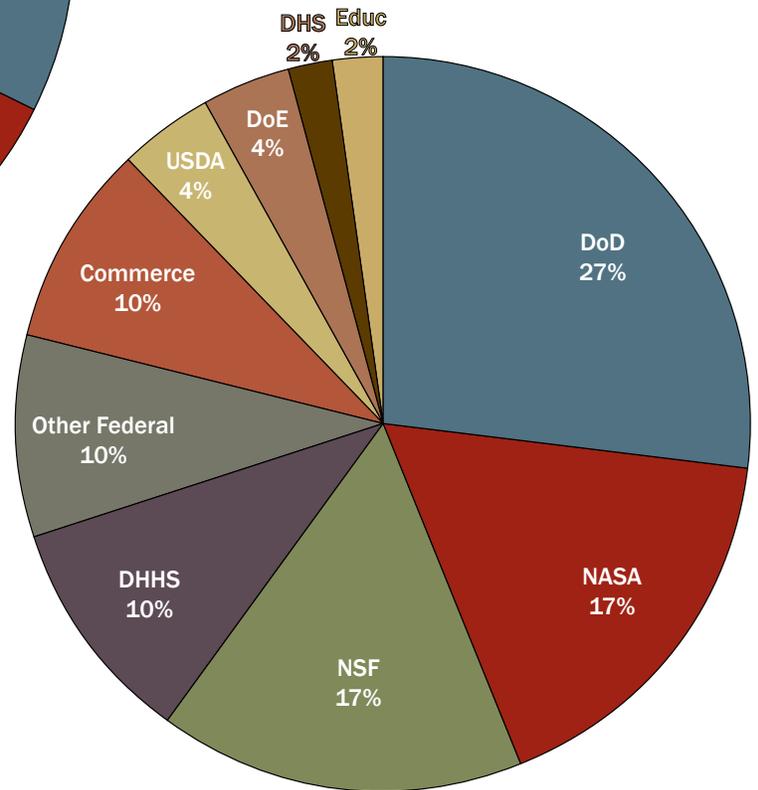


**Other units on campus:

GRAD, LIBR, OIT, PRES, SVAAP, UGST, VPAA, VPR, VPSA



<< FY 2008 Non-Federal Award Dollars



FY 2008 Sponsored Federal Award Dollars >>

Facts & Figures



- On average, faculty members secure \$3 in external research funding for every \$1 paid in salary.
- \$340,754—Average award dollars per PI
- 992—number of lead PIs on active projects in FY08
- The UM Small Business Development Center assisted 109,523 businesses during the last 10 years, securing \$318 million in federal and private loans. The State's and University's investment totaled \$9 million.
- Companies served by the Maryland Technology Enterprise Institute (MTEch) sold \$19.7 billion in goods and services over the last 25 years. The State's cost was \$88.8 million.

MITH in International Partnership Shares new NEH/JISC Grant

The University of Maryland's Institute for Technology in the Humanities (MITH) is part of a transatlantic digital collaboration to create an interactive archive of William Shakespeare's pre-1641 quartos. These living artifacts reveal how some of Shakespeare's most famous works originally circulated in print. The National Endowment for the Humanities (NEH) funding for the project will allow UM's MITH Director Neil Fraistat to create a technical proof of concept model for the project by digitizing

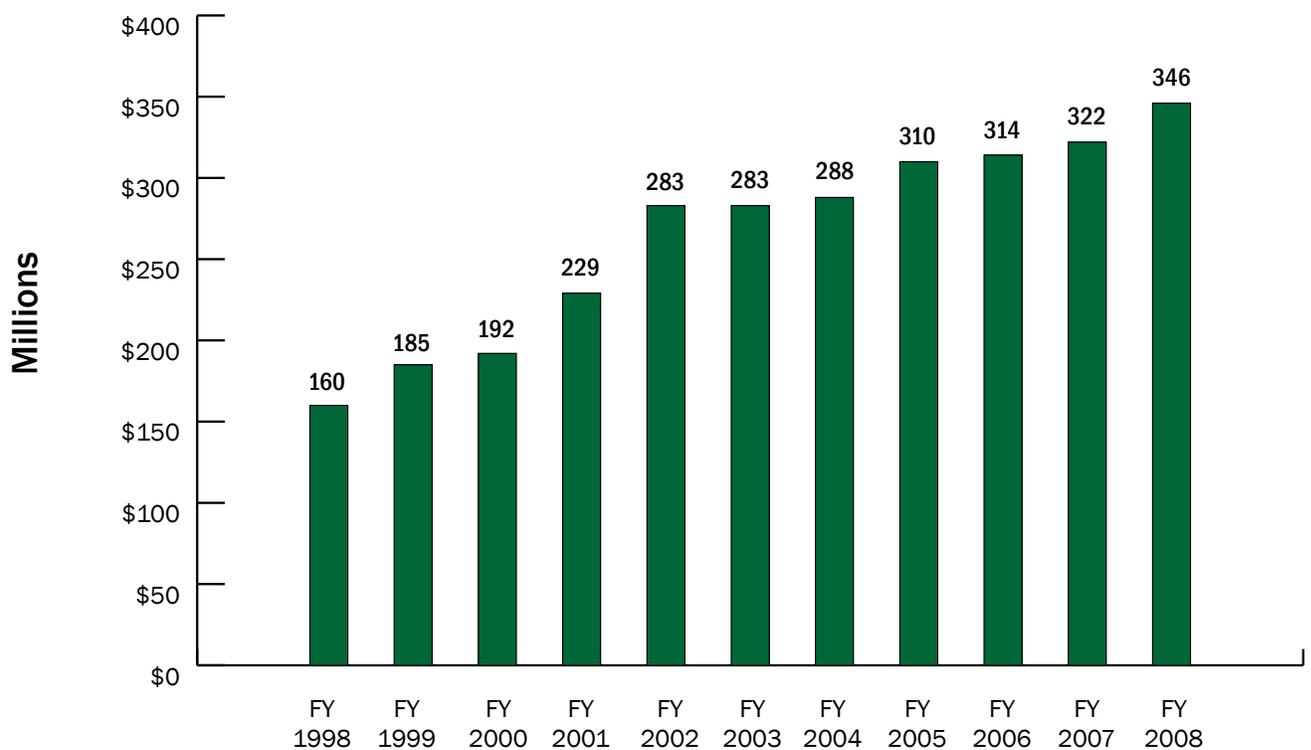
pre-1641 versions of Hamlet held by participating libraries – including the Folger Shakespeare Library in Washington, DC and the Huntington Library in California.



“The Shakespeare Quartos Archive heralds the future of textual studies, bringing these rare early texts out of their separate archives and onto the screens of individual scholars,” says Folger Director Gail Kern Paster. Because Shakespeare himself did not authorize a printed edition of his plays, what was published at the time represented what others heard, memorized or took from the marked-up “foul papers” of a particular production. The quartos were essentially paperbacks produced soon after a play was produced and were meant to be read and thrown away.

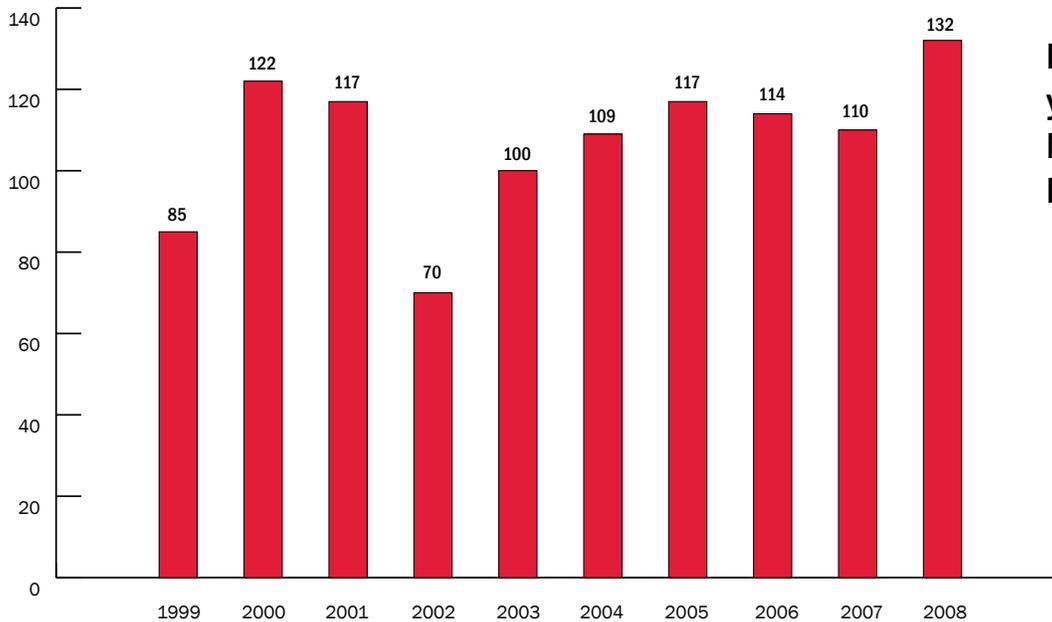
The MITH Director states, “We are proud to have as partners such institutions as the Folger Shakespeare Library, the Huntington Library, the British Library, and the Bodleian Library of Oxford University.” MITH's interactive site will ultimately be housed by Oxford University.

Expenditures



OFFICE OF TECHNOLOGY COMMERCIALIZATION

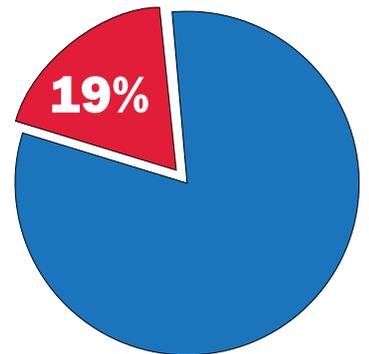
Disclosures over the past 10 years



FY2008 was a record high year for disclosures received. Numbers are up 20% from FY2007.

Joint Ownership

19% of FY2008's 132 disclosures (25) are jointly owned with 15 different universities, businesses, and government institutions.



OTC Success Stories:

Komoku, Inc.

Komoku, Inc., created by computer science professor William Arbaugh in 2004, was bought by Microsoft on March 20th, 2008 for its cutting edge developments in malware detection and protection. The software has been used by a number of high-security government agencies, including the Defense Advanced Research Projects Agency, the U.S. Navy, the U.S. Department of Homeland Security, and the U.S. Department of Defense, and will now

be used as Microsoft's newest addition to its already impressive arsenal of anti-malware software. As computer viruses become more sophisticated, so too must the software to prevent them, and Komoku's technique of real-time, independent auditing of a system's integrity is up to the challenge. The Columbia, MD company's name and product line will gradually be retired and the majority of the staff will join Microsoft in the Access and Security Division.

PROFESSIONAL DEVELOPMENT & OUTREACH

Division of Research Seminar Series

New Faculty Orientation

How to be Successful when Applying for Foundation Funding

Mining the Farside: DARPA

Responsible Conduct in Research

NIH Grant Writing Workshop

National Institute of Standards and Technology: Technology Innovation Program

Overview of the Office of Naval Research (ONR) Strategic Objectives

Air Force Research Priorities and Strategies

National Science Foundation's Priorities & Future Directions

Business and Technical Challenges to Adopting Alternate Fuel Technologies in Commercial Fleets

National Institute of Biomedical Imaging and Bioengineering Research Priorities and Future Directions

NACS Series: Scientific Integrity and Authorship

Intelligence Advanced Research Projects Activity (IARPA)

A Field Guide to Federal Funding for Environmental Research and Education

ORAA Sponsored Professional Development

Putting the OMB Circulars to Work in our Daily Lives

Managing Intellectual Property in an Academic Research Environment

Federal Acquisition Regulations

Industry Contracting

Cost Sharing

Coelus Reporting via Warehouse on the Web

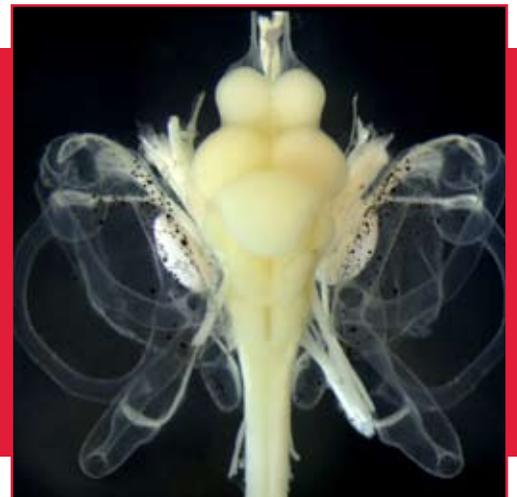
Train the Trainer

Departmental Research Administration

Coelus Electronic Research Administration System

Grants.Gov

Light microscope photo of two ears and a brain from the deep-sea fish "Parins's grenadier" (*Nezumia parini*). Photo by Xiaohong Deng



UNIVERSITY OF MARYLAND

RESEARCH PARK



The University has chosen to expand its role in the world of research and to build more bridges to the commercial world. Perhaps the most dramatic reflection of the University's

ambitions is the development of M Square Research Park, expected to ultimately comprise 2.5 million square feet of research/development and office space when fully developed. The site for the research park comprises 124 acres next to the College Park/UM Metro Station.

The scale of this project is striking. At full build-out, M Square Research Park will be as large as the biotech parks currently being developed in Baltimore City by Johns Hopkins University and the University

of Maryland, Baltimore. Up to 65,000 new jobs are projected at full build-out and annual property tax revenues have been estimated at \$47 million.

While the full build out of M Square Research Park is years away, tenants have already begun to arrive. The first, newly-constructed 120,000 square-foot office building is nearly complete, with the first tenants taking up approximately 50% of available space, including groups studying global climate change and prediction. Construction is nearly complete on a 290,000 square-foot building that will house the National Oceanic and Atmospheric Administration Center for Weather and Climate Prediction, making the park one of the largest clusters in the world in terms of earth scientists and policy analysts, with representatives from NASA, Department of Energy and NOAA in one setting.

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Sources:

- * UM Newsdesk *Shakespeare Experts at the University of Maryland*
- * UM Department of Biology, Fagan Lab, C. Iapathi photo by graduate student Christian Che-Castaldo
- * UM Department of Biology, Aquatic Bioacoustics Laboratory, "Parin's grenadier" (*Nezumia parini*), photo by doctoral candidate Xiaohong Deng
- * UM Division of Research
- * UM Office of Research Administration and Advancement
- * UM Office of Technology Commercialization
- * UM Small Business Development Center
- * Maryland's Institute for Technology in the Humanities