

Addressing Climate Change Needs

A NATIONAL WORKSHOP AT THE UNIVERSITY of Maryland this fall will address how scientists and government agencies involved with climate research can better collaborate with public and private stakeholders affected by climate change. "We believe the Earth will experience real climate change over the next 50 years, substantially exceeding the scope of natural variability. A paramount question facing society is how to adapt to these changes," says **Antonio Busalacchi**, co-chair of the workshop and director of the university's Earth System Science Interdisciplinary Center.

Busalacchi says one of the goals of the workshop is to foster dialogue between the providers of climate information—a group that includes Maryland faculty researchers and government scientists working at NASA and NOAA—and a diverse user community.

These "climate consumers," as Busalacchi calls them, include businesses, federal government agencies, policy organizations, public planning officials on the local level, as well as the farming community. "These are groups that need specific kinds of information to ensure the best decisions in adapting to climate change," Busalacchi says.

Some of the conference objectives are: to identify how users, stakeholders and decision makers are influenced by climate—on time



scales from seasons to decades; to identify the needs and requirements of users, stakeholders, and decision makers for climate information, observations, predictions and services—from global to local scales; and to identify what adaptation measures are being considered in the private and public sectors, and how this might result in new classes of information for decision support.

The University of Maryland is sponsoring the workshop in partnership with NOAA, NASA and the American Meteorological Society.

For complete information, or to register, go to www.climateneeds.umd.edu.

A MESSAGE FROM THE VICE PRESIDENT FOR RESEARCH

Welcome to this inaugural issue of a research focused newsletter prepared specifically for University of Maryland faculty and staff. During my first year here it became clear that many outstanding and unique research projects, which benefit our state and nation, are not widely known on our own campus. Also, many faculty and other researchers were not fully aware of the services and support provided by the Division of Research. I hope this publication will not only provide information about interesting new discoveries but also offer avenues for enhanced collaboration and participation in the university's research endeavors. We expect to publish each month during the academic year. Please send us your suggestions and comments on future topics to be included.



Photo by Al Santos

—Mel Bernstein

The University of Maryland is a leader in earth science prediction and other research related to global climate change. Research and expertise across the university includes:

- The Earth System Science Interdisciplinary Center, or ESSIC, which spans three departments from two colleges and includes faculty with joint appointments in NASA-Goddard and NOAA.
- The Joint Global Change Research Institute, established in 2001 as a joint venture between the university and the Department of Energy.
- Numerous public policy experts on climate change, including **Steve Fetter**, dean of the School of Public Policy, and **Mathias Ruth**, professor of environmental policy and director of the Center for Integrative Environmental Research.

Research Funding Reaches \$407 Million

Research awards to the university surged to an all-time high of **\$407 million during the past fiscal year—\$57 million more than last year's total of \$350 million in sponsored research.** Vice President for Research **Mel Bernstein** attributed the significant jump in funding to "the energy and quality of our researchers, to the leadership provided by the university's deans and the directors of our research centers, and to the benefits of supporting interdisciplinary teams to compete successfully for an increasing number of large multi-year grants."

NEWS You Can Use

Information From the Office of Research Administration and Advancement (ORAA)



ORAA welcomes **Denise Clark** as its new director. Clark brings a wealth of research administration and training experience to her role as head of ORAA's operations, and looks forward to meeting and working with faculty and staff to advance the university's research mission.

Electronic Research Administration (eRA)

Changes are coming to Grants.gov—the federal government's portal for federal funding opportunities—with the advent of Adobe Forms and a new Google search engine. ORAA will provide additional eRA information on electronic submissions, training opportunities and agency updates in future issues of *Research@Maryland*. Please visit our Web site at www.umresearch.umd.edu/ORAA to locate the latest eRA information, including Grants.gov training schedule.

NIH October Deadlines are

Oct. 5th (R01) and Oct. 16th (R03, R21)

Reminder: All electronic packages, routing forms and hard copies of proposals are due in ORAA six working days prior to the deadline to ensure a successful submission.

THE FEDERAL CORNER

The Office of Federal Relations is responsible for showcasing the university's research and educational activities to members of Congress, congressional staff and federal agencies. The office serves as a primary link on education-centric issues between the university and the federal government. This is vital for Maryland to maintain its momentum as a world-class public research university.

On Aug. 2, 2007, the America Competes Act was passed by Congress and subsequently signed by President Bush. The bill will provide billions of dollars during the three-year period from 2008 to 2010 for research and education programs in engineering, mathematics, science and technology, to ensure that the United States remains a leader in world-class innovation.

SELECTED KEY FEATURES OF THE ACT:

- Provides significant increases in funding for basic research programs in the physical sciences at NSF, NIST and DOE.
- Nearly \$300 million will be provided to create an independent agency to support and promote alternative energy projects (ARPA-E).
- Strengthens the Math Now project, aimed at improving elementary and middle school level mathematical skills of students.
- Authorizes the Adjunct Teacher Corps program, which will bring 30,000 math and science professionals into classrooms to teach over the next eight years.

Further information may be found at the Division of Research Web site, www.umresearch.umd.edu

Look to the Federal Corner for more information regarding higher education and the federal government. We will inform you about trends in federal research funding, legislation that affects higher education, and other relevant topics. If you have a specific matter you would like to see discussed, please contact **Rae Grad**, director of federal relations, at rgrad@umd.edu.

The university has hired almost 150 new faculty and research scientists in the past year. While space does not allow us to list all of them, we do plan to introduce you to some of your new research colleagues in the coming months. Please join us in welcoming all new faculty to the Maryland research community!



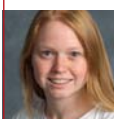
Kaustubh Agashe joins the Physics Department as an assistant professor. His research involves theoretical particle physics, going beyond the standard model of particle physics to research the existence of enormous mass hierarchies or the nature of dark matter of the universe.

Emel Filiz Ozbay joins the Department of Economics as an assistant professor. Her research specializes in microeconomics, contract theory, decision theory and experimental economics.



Joseph Richardson joins the Department of African American Studies as an assistant professor. His research focuses on the social context of juvenile reentry and the reintegration of young African American males into schools, the work force, communities and families following incarceration.

Wen-Hsing Cheng joins the Department of Nutrition and Food Science as an assistant professor. He is a nutrigenomicist whose research involves examining molecular events that lead to aging.



Kristine Rosfjord joins the Department of Electrical and Computer Engineering as the Clare Boothe Luce Assistant Professor. Her research interests include photodetectors, nanofabrication, X-rays and optical properties of materials.

FACULTY AWARDS & HONORS



This past July, Distinguished University Professor **RITA R. COLWELL** was named as one of seven recipients of the 2006 National Medal of Science, the nation's highest honor for science. A noted researcher at Maryland in microbiology and biotechnology, Colwell served as director of the National Science Foundation from 1998-2004. Colwell has studied cholera for more than 40 years, combining high tech instruments with molecular biology to make inroads in detecting outbreaks.

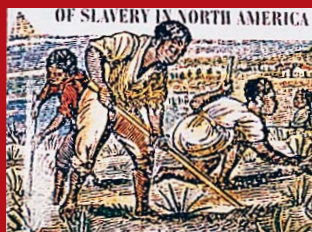


Distinguished University Professor Emeritus **DAVID C. DRISKELL** has been elected as an academician to the National Academy. Driskell is cited as one of the world's leading authorities on the subject of African American art, and he has contributed significantly to scholarship on the role of the black artist in American society. This fall, the David C. Driskell Center will premier its new location with *Evolution: Five Decades of Printmaking by David C. Driskell*. The center's new location at Cole Field House is accessible for study and research by scholars and students from the university community as well as others.



In July, associate professor **MIN WU** (electrical and computer engineering, UMIACS, and the Institute for Systems Research) was selected as one of *Computerworld* magazine's 40 innovative IT people under the age of 40. She was chosen for her innovative research in information security forensics. Wu and her colleagues have developed an invisible ID that can be embedded in digital content, such as films, music and pictures, to protect it from unauthorized use.

Important History Project Receives NEH Funding



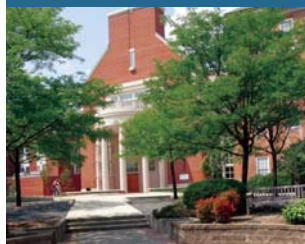
One of the longest-running research projects at the university recently received a boost to continue its work. The Freedmen and Southern Society Project, established in 1976, brings to life post-Civil War society as documented through the words of the people who experienced it: liberated slaves and defeated slaveholders; soldiers and civilians; common folk and the elite; and Northerners and Southerners.

This past May, the project—currently led by Department of History Professor **Leslie Rowland**—was awarded a \$170,000 grant from the National Endowment for the Humanities' Scholarly Editions program. The funds will be used to continue the work of transcribing, organizing, annotating and publishing primary source materials that detail post-Civil War life.

Drawing upon the vast resources of the National Archives and Records Administration (NARA), project editors over the last 30 years, including Distinguished University Professor **Ira Berlin**, have selected 50,000 historical items, including first-person narratives and other materials that document the difficult road from slavery to freedom to Radical Reconstruction in 1867.

UPCOMING EVENTS & CONFERENCES

Bioscience Research Building Grand Opening Celebration



Thursday, Sept. 18
at 10 a.m.
www.life.umd.edu

School of Public Health Official Launch Ceremony and Reception

Wednesday, Sept. 26
at 10 a.m.
www.sph.umd.edu



Climate Information: Responding to User Needs



Oct. 22-23
Inn and Conference Center
www.climateneeds.umd.edu



RESEARCH@MARYLAND

CONNECTING the UNIVERSITY of MARYLAND RESEARCH COMMUNITY

Office of the Vice President for Research

2133 Lee Building
University of Maryland
College Park MD 20742-5121
www.umresearch.umd.edu

The Division of Research publishes **RESEARCH@MARYLAND** several times per semester. Its goal is to better inform and connect the research community at the University of Maryland. Your comments and suggestions are welcome. Please email them to Anne Geronimo, Division of Research, at geronimo@umd.edu.

Produced by the Office of University Publications for the Division of Research, Mel Bernstein, Vice President for Research