The Federal Corner

New Congress Brings Uncertain Times

Now that they hold a majority in the House, congressional Republicans are expected to introduce new rules and changes that affect budgeting and appropriations for the next fiscal year. Their stated priority is to shift the focus from controlling the deficit to controlling spending.

The House Budget Committee can also determine enforceable spending limits for the remainder of FY2011, including a “cut as you go” policy, which replaces “pay as you go.” This means any new mandatory spending is offset by mandatory spending cuts. A direct result is the probability that directed funding requests, or earmarks, will face a moratorium.

Amid the uncertainty surrounding appropriations, President Obama recently signed a reauthorization of the American Competitiveness Act of 2010 (COMPETES Act), which mandates the federal government to invest in research and development that improves the competitiveness of the United States.

The bill substantially increases funding for the National Science Foundation, or NSF, the Department of Energy’s Office of Science and the National Institute of Standards and Technology. The NSF reauthorization includes grants to colleges and universities for high-tech manufacturing research, and offers loan guarantees for the use or production of innovative technologies.

More information on data management requirements and submitting plans specific to a certain directorate, office, division, program or other NSF unit is available on the NSF website at www.nsf.gov/pora.

The Maryland Neuroimaging Center will allow unique research in areas including:
1. combining multiple brain imaging measures to explore language and literacy in adults, children and individuals with autism (Ellen Lau, linguistics, and Donald Bolger, human development)
2. understanding brain development in children with autism, and the unfolding of memory systems in early childhood (Elizabeth Redcay and Tracy Riggins, psychology)
3. exploring brain mechanisms involved in social acceptance/rejection in children (Nathan Fox, human development) and emotional processes in adults (Luis Pessoa, psychology)
4. developing new mathematical methods for combining findings on the location and timing of brain activity (Jonathan Simon, electrical engineering, and José Contreras-Vidal, kinesiology)

The Maryland Neuroimaging Center

The Maryland Neuroimaging Center now under construction on campus is expected to exponentially advance the university’s already considerable capacity for research on the human brain.

Funded in part by a $2 million award from the National Science Foundation, or NSF, the facility will allow the university to expand its research on topics such as children’s cognitive, social and psychological development as well as the study of learning and language in adults.

“We’re currently seeing a revolution in how people are able to observe the brain, and a dramatic growth in the range of scientists from multiple disciplines who are using brain imaging to answer their scientific questions,” says Nathan Fox, distinguished university professor of human development and principal investigator of the NSF grant.

Functional magnetic resonance imaging, or fMRI—the centerpiece of the neuroimaging center—is ideal for determining what areas of the brain are involved in the processing of cognitive or social information, Fox says. The center will also have other scientific tools including magnetoencephalography, or MEG, and electroencephalography, or EEG, that are ideal for investigating when brain activity occurs in the stream of information processing.

“To have these multiple brain imaging methods under one roof will put this campus at the forefront of the revolution in cognitive and affective neuroscience,” Fox says.

The center will open this summer in an 8,000-square-foot renovated section of the Gudelsky Building, just north of the main campus off of Metzerott Road. In addition to the fMRI scanner, the facility will incorporate MEG laboratory equipment currently housed in Marie Mount Hall.

Linguistics Professor Colin Phillips, director of the MEG lab, is excited by the opportunities that the new center will create for “multi-modal” brain imaging—combining the millimeter-level location information from fMRI with the millisecond-level timing information from MEG.

The neuroimaging center will also include a strong teaching component, says Professor Robert Dooling, director of the university’s Neuroscience and Cognitive Science program, which led the initiative to create the center. “It will spark new interdisciplinary research on campus while also prompting the creation of courses to train faculty and graduate students in the use of fMRI technology,” he says.

Additional funding for the center came from the vice president for research and the provost, with the deans of arts and humanities, education, behavioral and social sciences and public health—as well as the university’s Center for Advanced Study of Language—also lending support. All of this represents a campuseswide commitment to investigate areas of human cognitive functioning and affective development, Fox says.

“This is research that can impact a multitude of scientific and societal challenges,” he says. “We urge faculty across campus, as well as outside investigators, to contact us if they have a project they want to discuss.”

UPDATE FROM THE OFFICE OF FEDERAL RELATIONS

News You Can Use

The National Science Foundation, or NSF, now requires data management plans for almost all funding proposals. Data management plans allow investigators to share primary data, samples, physical collections and other supporting materials created or gathered in the course of work under NSF grants.

Effective Jan. 18, 2011, proposals must describe plans for data management or show cause for their absence. The NSF’s FastLane software no longer permits submission of a proposal that is missing a data management plan, which is to be submitted as a supplementary document of no more than two pages.

More information on data management requirements and submitting plans specific to a certain directorate, office, division, program or other NSF unit is available on the NSF website at www.nsf.gov/bfa/dias/policy/dmp.jsp.

Look to the Federal Corner for more information regarding higher education and the federal government. If you have a specific matter you would like to see discussed in this column, please contact Rae Grad, director of federal relations, at rgrad@umd.edu.
New Center to Examine the New America

Nearly 250 years after this nation was founded as an immigrant society, the United States finds itself in a similar position, with the latest census showing that immigrants and their children made up three-fourths of the decade’s population growth.

A new university initiative, the Center for the History of the New America, will examine this phenomenon, offering research, scholarship and outreach to better understand how these “new Americans” have changed the nation’s politics, economy and culture.

Based in the College of Arts and Humanities, the center will greatly expand the scholarly and popular understanding of the nation’s immigrant past, which is directly related to the contemporary immigrant experience and America’s future as a nation of nations, says Ira Berlin, distinguished university professor of history.

“Understanding the United States as a nation of immigrants is critical to any appreciation of the new America,” he says.

Professor Julie Greene expects the center, which received seed funding from the Division of Research, to draw faculty and student input from across the university, including anthropology, public health, economics and more.

“History has always been a dialogue between the social sciences and humanities,” she says.

“But looking at how Americans relate to one another and how society should function in a way that treats everyone with respect and dignity is especially important today.”

A campuswide forum is planned for later this semester to gather input from the university community on projects that the new center might undertake.