

**WASHINGTON NEWS
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APPROPRIATIONS FOLLOW COMPETITIVENESS AGENDA

Ever since President Bush identified research and development and STEM education as cornerstones of his American Competitiveness Initiative (ACI), the question in Washington has been whether Congress would actually fund the increases in programs. Through the initial process, the answer appears to be yes. Authorization bills – which say what “ought” to happen, as in the bill passed in 2002 to double the budget for the National Science Foundation – often do not get translated into appropriations bills, which actually provide hard dollars. This year, however, the House has fully funded the ACI components of the Department of Energy, National Science Foundation, and the National Institute for Standards and Technology. The Senate Appropriations Committee bill reported out on July 13 was even more generous.

The Senate committee report, which in the legislative process is an important mandate to the agencies, supports the thrust of the President’s American Competitiveness Initiative but says the ACI is too narrowly defined. In addition to the increased research investments at NSF, NIST, and the Office of Science at the Department of Energy, the committee recommends that ACI should include educational programs at NSF and the technology outreach programs at NIST and NASA. “For the ACI to be a truly transformative endeavor, it must bring to bear the full resources available for promoting competitiveness,” according to the report.

The report singles out NSF programs, noting that the ACI “funding levels anticipated for NSF will certainly provide the vital funding that will broaden the Nation’s understanding in fundamental science disciplines. However, the Committee feels that the ACI neglects the education work NSF does in support of research across the country. Broadening participation to underrepresented groups, such as women and minorities, in the sciences will only further the goals of the ACI...”

In other programs, the report recommends the full funding level requested for the National Nanotechnology Initiative, and encourages NSF “to make sure that public misconceptions of this field are minimized.” It also notes that the NSF Office of International Science and Engineering (OISE) “has worked to ensure that U.S. researchers are involved with leading research across the globe. As research becomes more collaborative – with partnerships reaching across nations – the work of this office identifying research opportunities around the globe will grow.”

DOE SCIENCE FUNDING LOOKS GOOD

After years of flat or declining funding, the Department of Energy's Office of Science is faring very well so far in the budget process for Fiscal Year 2007. The committee report accompanying the Energy and Water Appropriations bill passed by the House "recognizes that funding a significant increase for the Office of Science required some difficult choices regarding other DOE programs." The report states that "the Committee supports the Secretary's judgment that robust funding for the basic research mission of the Department represents the best long-term use of the Department's constrained resources, and the best long-term investment for the economic future of the country." Noting that the appropriations bill significantly reduces the number of "earmarks" or special one-time projects, the Committee praises the Office of Science because it "took seriously the Congressional direction to prepare laboratory business plans and five-year budget plans, and these plans give added credibility and context to the FY 2007 budget request."

In other DOE action, Dr. Raymond L. Orbach was sworn in as the first Under Secretary for Science, a new position created by the Energy Policy Act of 2005. Dr. Orbach, a condensed matter physicist and former Chancellor of the University of California-Riverside, has been Director of the Office of Science since March 2002. Energy Secretary Samuel W. Bodman said after the swearing-in ceremony, "Today marks an important occasion...for this department, as we elevate our science mission. As the primary supporter of physical science research in the country and home to ten national laboratories, the Department of Energy's Office of Science provides the nation and the world untold promise for discovery. As Undersecretary for Science, (Dr. Orbach) will be tasked with the department's implementation of the President's bold new initiative...The American Competitiveness Initiative will help us expand the United States' leadership in math and science and will allow us to continue to grow our nation's economy."

NSF REORGANIZES ENGINEERING DIRECTORATE

Effective October 1, 2006, the Engineering Directorate (ENG) of the National Science Foundation will put in place a new organizational structure which will, according to a "Dear Colleague" letter from the Acting Assistant Director, "further enhance agility within disciplines, broaden multidisciplinary research, and enable discovery at the frontiers of engineering." The new structure consolidates ENG's five current disciplinary divisions into three, and establishes three crosscutting units:

- The division of Chemical and Transport Systems and the division of Bioengineering and Environmental Systems will merge to form the division of Chemical, Bioengineering, Environmental and Transport Systems. The new division will support research and education in chemical, environmental, and bioengineering, and in areas that involve the transformation and/or transport of matter and energy by chemical, thermal, or mechanical means.

- The divisions of Civil and Mechanical Systems and Design and Manufacturing Innovation will merge to form the division of Civil, Mechanical and Manufacturing Innovation.
- The division of Electrical and Communications Systems will add cyber systems to its portfolio to become the division of Electrical, Communications and Cyber Systems.
- The office of Engineering Education and Centers will provide more emphasis on its role as a crosscutting division, to “enable the continual evolution of the engineering education and research enterprise at U.S. universities.”
- The Office of Industrial Innovation, which houses SBIR/STTR, will broaden to include new partnerships, and become the division of Industrial Innovation and Partnerships.
- A crosscutting Office of Emerging Frontiers in Research and Innovation (EFRI) will be added, reporting directly to the Office of the Assistant Director for Engineering. According to the announcement letter, “EFRI will recommend, prioritize, and fund interdisciplinary initiatives... These investments will represent transformative opportunities, potentially leading to: new research areas for NSF, ENG, and other agencies; new industries or capabilities that result in a leadership position for the country; and/or significant progress on a recognized national need or grand challenge.”

Further information is available at <http://www.nsf.gov/dir/index.jsp?org=ENG>

NEW STUDENT GRANTS PROGRAM

Beginning July 1, students may apply for grants under two new programs at the Department of Education geared to math, science and foreign languages. Under the Academic Competitiveness program, grants will be awarded to rising college freshmen and sophomores who are eligible for Pell grants and who have completed a rigorous high school curriculum as defined by their states and recognized by the Secretary of Education. In addition, the National Science and Mathematics Access to Retain Talent (SMART) program provides Pell-grant eligible college juniors and seniors who are studying designated fields in math, science, technology or “critical” languages with up to \$4,000. Details are available at <http://www.ed.gov/news/pressreleases/2006/06/06292006a.html>