

Government Relations 1828 L Street NW, Suite 810 Washington, DC 20036-5104 U.S.A. tel 1.202.785.3756 fax 1.202.429.9417 www.asme.org

To: ASME ISCFRD Members

From: Roy Chrobocinski, Government Relations Representative

Subject: October 2012 Federal R&D Update

A summary on legislative activity relative to research and development for October, 2012 is provided below.

- Rep. Dicks Outlines Impacts on R&D from Funding Cuts
- White House Could Limit the Impact of Sequester for a Time
- Obama Administration Announces \$20 Million for 10 Public-Private Partnerships to Support American Manufacturing
- R&D Dashboard Beta Web Site Unveiled
- Many Nobel Laureates Have Benefited from NSF Support
- Study Finds Clear Vision Leads to Innovation

REP. DICKS OUTLINES IMPACTS ON R&D FROM FUNDING CUTS

Rep. Norman Dicks (D-WA), the ranking member of the House Appropriations Committee, has sent a 15-page "Dear Colleague" letter to Members of the House to illustrate the consequences of an automatic, across-the-board uniform percentage reduction as required by the Budget Control Act (BCA) of 2011 and to examine the impact of sequestration on a range of federal responsibilities. Rep. Dicks is not seeking re-election after his term expires in January 2013. In his letter, Rep. Dicks highlights the following effects that sequestration would have on major federal research and development (R&D) programs:

- The National Institutes of Health would lose about \$2.5 billion from sequestration. A large portion of NIH's budget provides research project grants. Under sequestration, about 2,400 fewer research project grants would be made to universities and institutes throughout the country for research into the causes and treatments of diseases like cancer, diabetes, Alzheimer's, and epilepsy.
- Sequestration would cut \$423 million from Science and ARPA-E at the Department of Energy. Federally supported basic research has been a reliable source of new knowledge and new products. This cut would significantly curtail fundamental research in areas of science and engineering that are a key to our nation's prosperity and to preserving America's place as the world leader in science and technology. Given the long time horizons necessary to make significant progress in the areas of science and engineering, federal support of fundamental research is necessary and an investment that the private sector, with its required attention to short term earnings, cannot support.
- Funding cuts would harm NASA's efforts to establish U.S. commercial capability to transport American astronauts to the International Space Station. These cuts would effectively extend the period of U.S. dependence on Russia and its Soyuz spacecraft for

- these flights, now that the space shuttle has been retired. Thus, the cut would not be a true savings, as the U.S. would need to pay Russia for additional Soyuz flights, at a cost of at least \$63 million per seat.
- Funding for the National Science Foundation would be cut by approximately \$580 million compared to FY 2012, including a cut of \$471 million from research grants and \$68 million from STEM education programs. At this level, NSF would fund 1,600 fewer research and education grants, supporting approximately 19,300 fewer researchers, students, and technical support personnel than in FY 2012.

To review the entire "Dear Colleague" letter, please visit: http://democrats.appropriations.house.gov/index.php?option=com_content&view=article&id=10 37:dear-colleague-consequences-of-sequestration&catid=247:press-releases&Itemid=4

As noted in the September 2012 edition of the Federal R&D Update, the American Association for the Advancement of Science (AAAS) recently released a report showing the impact of sequestration on the federal investment in research and development. The report provides a five year budget outlook based upon the sequestration cuts. As noted in the report, "Cuts of this magnitude would no doubt have significant impacts on federal funding of science, research, and innovation. They also come at a time when federal R&D has already declined by 10 percent in real dollars since FY 2010. Much of the attention has focused only on next year, when in reality, the challenge is long-term." The AAAS report can be found at: http://www.aaas.org/spp/rd/fy2013/SeqBrief.shtml

For additional information on the R&D budget and sequestration and how you can get involved, please visit http://www.asme.org/about-asme/advocacy-government-relations/programs,-public-policy,---society-policies/federal-funding-of-research-and-development-issues

WHITE HOUSE COULD LIMIT IMPACT OF SEQUESTER FOR A TIME

A new report released by OMB Watch, a research and advocacy organization, states that the White House has the authority to effectively delay the effects of the across-the-board budget cuts by several weeks to allow time for Congress to cut a deal with whoever wins the presidency.

"Folks in general are underestimating the chances that sequestration will happen and overestimating the immediate effects of it," said report author Patrick Lester, the group's director for federal fiscal policy. "Sequestration won't be an immediate disaster at all."

The impact of sequestration, coupled with the expiration of the Bush tax cuts at the end of the year could greatly increase the odds of a deficit-cutting grand bargain in January, but not December. Any deal reached in December would probably increase taxes above current rates. However, following the scheduled tax increase in January, any deal would likely reduce taxes for most Americans below the rates set to take effect at year's end.

"It could be the exact same package in January and December," Lester said. "But in January, it would be called avoiding sequestration and tax hikes. In December, it would be called a 'tax increase."

In his report, Lester offers several strategies for delaying the \$1.2 trillion cuts of sequestration past Jan. 2. First, he suggests, the White House Office of Management and Budget could schedule the brunt of the cuts for later in the fiscal year — in hopes that Congress will reach an alternative deficit-reduction agreement before then.

"OMB could decide to continue funding at current rates for the first few days or weeks of the new year, with offsetting reductions planned for later in the year, by which time sequestration may have been canceled," Lester said.

He also said the Pentagon and other federal agencies could shore up critical programs through reprogramming requests, which are often used by the Defense Department to move funds from one program to another. Most federal agencies would be able to avoid immediate layoffs or furloughs by freezing hiring and promotions.

"The administration has the ability to manage things and hold things together for a while," Lester said. "All the things that would happen in the defense world would still happen — if sequestration holds past January."

A full copy of the report can be found at http://www.ombwatch.org/mitigating-impact-of-automatic-spending-cuts.

OBAMA ADMINISTRATION ANNOUNCES \$20 MILLION FOR 10 PUBLIC-PRIVATE PARTNERSHIPS TO SUPPORT AMERICAN MANUFACTURING AND ENCOURAGE INVESTMENT IN THE US

On October 9th, the Obama administration announced that 10 public-private partnerships across America will receive \$20 million in total awards to help revitalize American manufacturing and encourage companies to invest in the United States.

The 10 partnerships were selected through the Advanced Manufacturing Jobs and Innovation Accelerator Challenge, which is a competitive multi-agency grant process announced in May 2012 to support initiatives that strengthen advanced manufacturing at the local level. These public-private partnerships consist of small and large businesses, colleges, nonprofits and other local stakeholders that "cluster" in a particular area. The funds will help the winning clusters support local efforts to spur job creation through a variety of projects, including initiatives that connect innovative small suppliers with large companies, link research with the start-ups that can commercialize new ideas, and train workers with skills that firms need to capitalize on business opportunities.

The Advanced Manufacturing Jobs and Innovation Accelerator Challenge is a partnership between the U.S. Department of Commerce's Economic Development Administration and the National Institute of Standards and Technology, the U.S. Department of Energy, the U.S. Department of Labor's Employment and Training Administration, the U.S. Small Business Administration, and the National Science Foundation.

To review the full news release, please visit: http://www.commerce.gov/news/press-releases/2012/10/09/obama-administration-announces-20-million-10-public-private-partnersh">http://www.commerce.gov/news/press-releases/2012/10/09/obama-administration-announces-20-million-10-public-private-partnersh

R&D DASHBOARD BETA WEB SITE UNVEILED

As a requirement of the eGov Act of 2002, a newly unveiled Research and Development (R&D) Dashboard beta web site provides an initial look at U.S. federal investments in scientific and engineering research from two agencies, the National Institutes of Health (NIH) and the National Science Foundation (NSF), from years 2000-2009. The R&D Dashboard will expand in a future version to include all federal research and development spending and expanded information on outputs.

The information presented reports data on the grants issued by the federal government to research institutions and the outputs - publications and patent activity produced by researchers - funded by those investments. The site reports where investments have been made at the state, congressional district and research institution. In addition, the site provides information on what investments have been made by providing the user the ability to select topic areas at the same geographic levels of detail.

The R&D Dashboard is a beta site for public review and feedback is welcome. Please direct comments or questions to: http://rd-dashboard.nitrd.gov/contact.html

For additional information on federal funding of R&D, including a table of enacted and proposed funding for federal research agencies, visit ASME's Federal Funding of R&D Issues page at: http://www.asme.org/about-asme/advocacy-government-relations/programs--public-policy----society-policies/federal-funding-of-research-and-development-issues

MANY NOBEL LAUREATES HAVE BENEFITED FROM NSF SUPPORT

The ten recently-announced Nobel Prize winners include five Nobel laureates whose work has been supported by the National Science Foundation (NSF) over the years. This shows the role of basic research in cultivating major contributions to the fields of science and engineering and Society at large. Serge Haroche, who received NSF funding in the 1980s, and David J. Wineland, an NSF Graduate Research Fellow in 1965, were jointly awarded the prize in Physics. Nobel Laureates in Economics Alvin E. Roth and Lloyd S. Shapley also received early and consistent

NSF support, as did Brian K. Kobilka, who was awarded the Prize in Chemistry (jointly with Robert J. Lefkowitz).

NSF surpasses an important milestone with the 2012 prizes: NSF has provided support to more than 200 Nobel laureates at some point in their careers. There have now been 204 NSF-funded Nobel Laureates since NSF's founding in 1950.

"NSF is proud to have supported this year's Nobel Prize winners," said NSF Director Subra Suresh. "One of NSF's strengths is that we identify and support scientific visionaries long before their research is formally recognized through such accolades as the Nobel Prize."

For additional information, please visit: http://www.nsf.gov/news/news_summ.jsp?cntn_id=125762

STUDY FINDS CLEAR VISION LEADS TO INNOVATION

Booz & Company's annual study of Research and Development (R&D) spending was published on October 30th. For the past eight years, this study has shown no long-term connection between the amount of money a company spends on innovation and the companies' overall financial performance. The study reports to show that "what matters is how companies use that money and other resources, as well as the quality of their talent, processes, and decision making."

The study found that companies increased their R&D spending by 9.6 percent in 2011, slightly more than the 9.3 percent increase in 2010. Out of the 700 companies surveyed, the study also found that only "43 percent of participants said their efforts to generate new ideas were highly effective, and only 36 percent felt the same way about their efforts to convert ideas to product development projects. Altogether, only a quarter of all respondents indicated their organizations were highly effective at both." The study also found that "the most successful innovators in all industries have developed a variety of consistent, manageable ideation practices that are well aligned with their innovation strategies. And when moving ideas into the development stage, they tend to depend on an equally consistent set of principles and processes."

In addition, the study found that while North American companies increased their R&D spending by about 9.7 percent, Europe increased its spending by 5.4 percent while China increased spending by 27.2 percent to a total of \$16.3 billion. The top-spending companies were found to be Toyota, Novartis, Roche Holding, Pfizer, and Microsoft.

The report, "The Global Innovation 1000: Making Ideas Work," may be reviewed at http://www.booz.com/media/uploads/BoozCo The-2012-Global-Innovation-1000-Study.pdf