

“There are some risks with the broader sharing of complex data,” she acknowledged, citing the possibility of privacy breaches, frivolous lawsuits, or benefits to competitors. But, the company has taken rigorous measures to de-identify the patient data, and ultimately, she said, the opportunity to optimize patient benefits, gain public trust, and align with industry trends will make this effort worthwhile.

Despite the forward momentum for big data, multiple speakers at the Forum also described how funding pressures would stifle other areas of science and technology. President Obama’s proposed R&D budget for 2015 is a modest \$136.5 billion, a 0.7% increase above 2014. But that does not match the 1.7% rate of inflation. The proposal falls within the spending caps set by the Murray-Ryan budget deal from last December. It also requests an additional \$5.3 billion in R&D spending for an “Opportunity, Growth and Security Initiative,” but this is unlikely to be approved, according to Hourihan. “It’s very much a treading water kind of budget,” he said.

Others noted that some countries have dramatically increased their R&D spending; for example China’s national R&D investment has roughly tripled in the 21st century. The resulting “innovation deficit” in the United States has serious implications for economic competitiveness and national security, said Hunter Rawlings, president of the Association of American Universities.

Plenary speaker John Holdren, who is President Obama’s top science adviser, maintained that even though the federal funding for R&D “is not what we’d like it to be,” science and technology are still high priorities in the White House. He also expressed concern over the Frontiers in Innovation, Research, Science, and Technology (FIRST) authorization bill proposed by Representative Lamar Smith (R-TX), which would reshape the National Science Foundation’s peer-reviewed grant-making system. Holdren noted that other countries are trying to replicate the NSF’s successful approach. “To try to fix what is not broken at NSF would risk eroding a cornerstone of American science and engineering excellence,” he said.

Screeners needed for journalism awards

Volunteer scientists in the Washington, D.C. area are needed to review the scientific accuracy of entries in the AAAS Kavli Science Journalism Awards competition. Please contact Katharine Zambon (kzambon@aaas.org).

New grants bring STEM volunteers to schools

By Kat Zambon

The AAAS National STEM Volunteer Program has awarded seven grants of approximately \$12,000 each to non-profit organizations working with AAAS members, to build collaborations between STEM professionals and K-12 students and teachers. The grantees will work in classrooms and after school, and many of the programs will focus on outreach to communities that have been historically underrepresented in the science fields.

The grant winners include: University of New England Center for Excellence in Neuroscience and Marine Science; Salk Institute for Biological Studies New Frontiers in Science Education Program; University of Georgia REFOCUS Program; University of Colorado-Denver Young Hands in Science Program; University of Washington Institute of Science and Math Education; University of Wisconsin Young Science Scholars; and Rochester Institute of Technology Insight Lab for Science Outreach and Learning Research.

The ambitious new program will help educators prepare their students for testing under the Next Generation Science Standards and the Common Core Standards, which emphasize problem-solving and research skills.

“Our diverse membership puts AAAS in a unique position to connect STEM professionals with middle and high school students,” said Alan I. Leshner, AAAS chief executive officer and executive publisher of the journal *Science*. “The National STEM Volunteer Program will also help us build a network of volunteers who can help students understand the practice of STEM in formal and informal settings.”

Volunteers for the program may include retired and current STEM professionals as well as STEM graduate students and post-docs. Potential partners include school districts, universities, federally funded research and development centers, science museums, federal labs, and STEM professional organizations. Learn more about the program and this year’s grantees at www.aaas.org/JzH.



Satellites show hospital damage in Syria

Satellite images analyzed in a new AAAS report have confirmed substantial war-related damage to several medical facilities in Syria. By 16 July 2012, Amal Hospital in Homs was completely destroyed (red box), as were many buildings in the surrounding neighborhood (arrows). The AAAS Geospatial Technologies and Human Rights Project report was requested by Physicians for Human Rights, which is documenting reports of attacks on medical care in Syria.

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