



Director's Matters

By H. Frederick Dylla, Executive Director & CEO

Support on the Hill for science and math education

Despite the heightened partisan language and concerns about deficit spending that have characterized this session of Congress, both sides of the congressional aisle in this and the previous (G. W. Bush) administration have shown strong support for science and science education. It is widely recognized that science and math training are essential underpinnings for our economic and general welfare. So what is the situation for science education funding for the 2011 fiscal year?

The National Science Foundation (NSF) budget for Education and Human Resources will likely grow from \$872.8 million in FY 2010 to somewhere between \$892 million to \$958.4 million in FY 2011. (See [FYI #80](#).) Although the deliberative budget process is not yet over, there are points of caution. If NSF's Education and Human Resources division receives only the lesser Senate recommended sum of \$892 million, a 2.2% increase over FY 2010, education will lag far behind other NSF divisions, such as Research and Related Activities, which is expected to see a 7–8% increase over FY 2010. Note also that some science education programs, like the Robert Noyce Teacher Scholarship program, are flat-funded.

There is a beacon of light, however, from the White House that suggests positive things may be coming for science education funding. The administration requested that the Department of Education's Math and Science Partnership (MSP) program receive the full authorized amount of \$450 million in FY 2011, more than doubling its current budget. Although the administration recommended fundamental changes to the way the MSP program's funding is authorized and disbursed, that level of funding shows an impressive commitment from the administration.

With the August recess approaching, the 111th Congress will more than likely adjourn without reforming the controversial Elementary and Secondary Education Act (ESEA). Commonly known as the No Child Left Behind Act, ESEA is the nation's most expansive education law. ESEA provides funding and direction for prekindergarten through 12th grade and affects every aspect in the classroom—from professional development and literacy, to teacher recruitment and testing. The most contentious aspect of ESEA is the accountability system that requires schools to test students in reading and math, and to show annual gains in those test scores. Schools are required to administer a science test, but schools are not required to give science scores any weight. Unfortunately, since this testing regime was put in place, classroom time for science has diminished. This phenomenon is not unique to science; music, art, history, and civics are similarly discouraged. Teachers, school boards, parents, and professional organizations have criticized ESEA's testing system for narrowing the curriculum. Members of Congress, the Department of Education, and the administration have pledged to revise ESEA to improve this situation.

In January, President Obama called for ESEA reauthorization in his State of the Union address and repeatedly emphasized the importance of science education. ([See FYI #9.](#)) In March, the Department of Education released a blueprint outlining the next ESEA. ([See FYI #38.](#)) The reaction on Capitol Hill was overwhelmingly positive, a brief reprieve from the partisanship that has characterized 2010. However, the development of legislation to address our lagging economy, the unprecedented use of the filibuster in the Senate, and the fact that 2010 is an election year have all but shut the window of opportunity for a bill as complex as ESEA. That means another temporary extension of a much maligned testing system, and that AIP and our partner societies who lobby in support of science education must start all over—re-educating members of the 112th Congress on the importance of a quality science education.

PUBLISHING MATTERS

AIP showcases enhanced eBooks features on new ASME site

From the July 28 [AIP press release](#): AIP announced the launch of a new eBooks site for ASME (formerly the American Society of Mechanical Engineers). AIP has made numerous new enhancements to its eBooks platform, all designed to lend support to the marketing of recent ASME Press titles and ASME Handbooks and Manuals. By year's end, ASME's catalog of eBooks hosted on AIP's Scitation C³ platform will reach nearly 100. Philip DiVietro, Managing Director, ASME Publishing and Unit Support, remarked, "With the addition of eBooks to the ASME Digital Library, which is also hosted on AIP's Scitation C³ platform, access to all of ASME's eBooks, Journals, and Conference Publications is now unified through a single search interface—a robust federated search that speeds and simplifies access to our online content.... We fully expect to enjoy an increase in the overall visibility of our book program."



PHYSICS RESOURCES CENTER MATTERS

Lasers and social media are hot in Portland

Unseasonably cool weather in Portland, OR, was a welcome relief from soaring temperatures on the East Coast for AIP Education Division staff and several [SPS interns](#), Shane Allison, Linda Henneberg, Jasdeep Maggo, and Foha Rafiq, who attended the AAPT 2010 Summer Meeting, July 17–21. So what was *hot* in Portland?

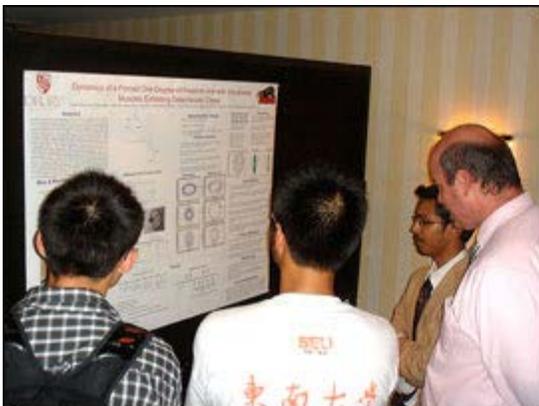
These interns joined a dozen other undergraduate SPS members from across the country to present their research at the SPS Poster Session and Reception on July 18. Education Communications Coordinator Tracy Schwab (shown right) was one of four invited speakers in "[What Is the Next Big Thing? Social Networking and Beyond.](#)" He gave an overview of SPS's social media strategies, success stories, and best practices, and spoke about presenting a



consistent identity and brand across multiple social media channels. The interns said that they valued the Young Physicist's Meet and Greet as an excellent opportunity to meet a vast variety of people with different approaches toward physics, and they thoroughly enjoyed the [Physics of Vaudeville](#), which showed people using physics concepts in fun ways. Maggo summed up her experience, "The AAPT meeting was very educational and at times very exciting. I'm proud to be a physicist."



The AAPT meeting closed with a spectacular laser-show, part of the Physics of Vaudeville picnic and demo event.



SPS Director Gary White (right) looks on while SPS member Anish Chakrabarti (second from right) of Drury University explains his research on "Dynamics of a Forced One-Degree-of-Freedom Arm with Viscoelastic Muscles Exhibiting Deterministic Chaos."



SPS intern Jasdeep Maggo explains to SPS Assistant Director Thomas Olsen how physics demonstrations are crafted for inclusion in the SPS SOCKs (Science Outreach Catalyst Kits).

MEMBER SOCIETY SPOTLIGHT

US team scoops 1 gold, 2 silver, and 2 bronze medals at the International Physics Competition



From the July 26 [AAPT press release](#): The US top physics students are bringing home 1 gold medal, 2 silver medals, and 2 bronze medals from the 41st International Physics Olympiad, held this year from July 17–25 in Zagreb, Croatia.

- The gold medal winner: Daniel Li, a senior at Thomas Jefferson High School for Science and Technology, Alexandria, VA.
- The silver medal winners: Eric Spieglan, a sophomore at Naperville North High School, Naperville, IL, and Anand Oza, a senior at Montgomery Blair High School, Silver Spring, MD.
- The bronze medal winners: Jenny Lu, a senior at Pomperaug High School, Southbury, CT, and David Field, a senior at the Phillips Andover Academy, Andover, MA.

The US Physics Team tied with Korea for 11th place. China, Taiwan, and Thailand tied

for 1st place with five gold medals each.

THIS WEEK AT AIP

Events at ACP (College Park, MD)

Tuesday, August 3

- SPS summer intern presentations, 9 am–1:30 pm

August 2–20

- ACP school supplies drive, benefitting Langley Park/McCormick Elementary School. Donations of new school supplies and uniforms can be placed in the lobby receptacle.

We invite your feedback to this newsletter via email to aipmatters@aip.org.

For past issues of this newsletter, visit the [AIP Matters archives](#).