



# American Association of Physics Teachers

## TFAI LETTER TO LEADERS REID AND MCCONNELL, CC REST OF SENATE

Dear Leaders Reid and McConnell:

On November 5, 2010, more than 250 industry, academic, and professional organizations wrote to you in support of the reauthorization of the America COMPETES Act. The undersigned organizations, most of which also signed that letter, applaud the Senate for engaging in the hard work that was necessary to achieve a bipartisan majority to enact that legislation in the previous Congress.

Today, we write to urge you to continue to support the goals of the COMPETES legislation. As the Senate considers legislation to complete Fiscal Year 2011 appropriations, we ask that you and your colleagues reject the cuts adopted by the House that would significantly reduce funding for the key research agencies, including the National Science Foundation (NSF), the Department of Energy (DOE) Office of Science, and the National Institute of Standards and Technology, as well as science, technology, engineering, and math (STEM) education programs contained in that law.

While we recognize that Congress faces a major challenge to reduce federal budget deficits and bring the national debt under control, it is critical that these cuts be implemented strategically, with an eye toward the future economic health of the U.S. As many of us wrote to you last year, continued strong funding of basic scientific research and STEM education programs would help ensure the economic growth needed to restore long-term fiscal strength and national prosperity. The National Commission on Fiscal Responsibility and Reform, headed by Erskine Bowles and Alan Simpson, said it well:

“Cut and invest to promote economic growth and keep America competitive. We should cut red tape and unproductive government spending that hinders job creation and growth. At the same time, we must invest in education, infrastructure, and high-value research and development to help our economy grow, keep us globally competitive, and make it easier for businesses to create jobs.”

Despite this recommendation, the House has passed a continuing resolution for FY2011 (H.R. 1) that takes the opposite approach to research and STEM education. It would make deep cuts to the NSF, DOE Office of Science, NIST core programs, and other science agencies which would have a devastating impact because they would be crowded into the less than seven months remaining in the fiscal year.

For example, reducing funding for the DOE Office of Science by \$886 million, or 18 percent below fiscal year 2010, during the last seven months of the fiscal year - an effective 31-percent reduction over the seven-month period - would adversely impact world-class scientific facilities,

basic research of national importance, and some of the nation's best scientific and engineering talent. Virtually all DOE national laboratory user facilities -- which the federal government built at tremendous expense -- would cease operations, affecting some 26,000 scientists and engineers from universities, industry, and government who rely on these unique, complex facilities to conduct their research. The DOE national laboratories would also be forced to furlough or layoff thousands of workers, including highly-skilled research staff and blue-collar workers. Finally, the H.R. 1 reduction would slow or bring to a halt the ongoing construction of a number of advanced research facilities aimed at keeping the United States at the technological forefront and American industry from moving research and development activities abroad, leading to the layoff of thousands of construction workers and ultimately increasing construction costs.

At NSF, the 5.2-percent overall cut (an effective 8.9 percent over the last 7 months) would mean that 10,000 fewer university researchers would receive support for critical research and education. The 16.4 percent cut to vital STEM education programs embedded in the 5.2 percent overall NSF cut would in reality amount to a 28.1 percent reduction during the last 7 months of the fiscal year. At a time when our nation desperately needs to enhance its technological workforce, the reduction is dangerously counterproductive.

The proposed cut to NIST would require the agency to cut support for contractors by 25% since savings from layoffs could not be achieved in the current year. Contractors at NIST play a critical role in many areas, including cybersecurity research efforts, development of standards for the Smart Grid, and the upgrade, maintenance, and construction of NIST facilities. The cut to the Technology Innovation Program would mean no new awards in the current fiscal year; these would have been concentrated in areas of national need such as advanced solutions to repairing, inspecting, and monitoring the nation's infrastructure system and efforts to remove critical bottlenecks in current manufacturing processes that impede U.S. competitiveness.

Congress took a very important step for our nation's future by reauthorizing the America COMPETES Act in 2010, reaffirming its commitment to the science and innovation essential to long-term economic growth. We urge you now to continue implementation of funding and to reject the cuts to research and STEM education adopted by the House in H.R. 1.

Sincerely,



Beth A. Cunningham  
Executive Officer