



March 3, 2011

The Honorable Harry M. Reid  
Majority Leader  
United States Senate  
Washington, DC 20510

The Honorable Mitch McConnell  
Minority Leader  
United States Senate  
Washington, DC 20510

Dear Leaders Reid and McConnell:

Most of the undersigned organizations signed a November 5, 2010 letter to you in support of the reauthorization of the America COMPETES Act. We 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, magnified by being 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. A reduction of 53.3% in funding for major construction projects focused on developing advanced sensor networks of ocean and terrestrial observatories would likely lead to schedule delays and cost increases in future years, and severely jeopardize the jobs of roughly 200-300 scientists, engineers, and technical personnel. At a time when our nation desperately needs to enhance its technological workforce, these reductions are seriously 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 be 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 funding and to reject the cuts to research and STEM education adopted by the House in H.R. 1.

Sincerely,

The Task Force on American Innovation

Acoustical Society of America  
American Anthropological Association  
American Association for the Advancement of Science  
American Association of Physics Teachers  
American Astronomical Society  
American Chemical Society  
American Geological Institute  
American Geophysical Union  
American Institute for Medical and Biological Engineering (AIMBE)  
American Institute of Physics  
American Mathematical Society  
American Physiological Society  
American Psychological Association  
American Society for Biochemistry and Molecular Biology  
American Society for Engineering Education  
American Society of Agricultural and Biological Engineers (ASABE)  
American Society of Agronomy  
American Society of Civil Engineers  
American Society of Mechanical Engineers  
American Society of Plant Biologists  
American Statistical Association  
American Vacuum Society  
Applied Materials, Inc.  
Arizona State University  
Associated Universities, Inc. (AUI)  
Association for Computing Machinery US Public Policy Council  
Association for Women in Mathematics  
Association for Women in Science (AWIS)  
Association of American Universities  
Association of Independent Research Institutes  
Association of Public and Land-grant Universities  
ASTRA, The Alliance for Science & Technology Research in America  
Battelle  
Binghamton University, State University of New York  
Brown University  
California Institute of Technology  
Carnegie Mellon University

Case Western Reserve University  
Center for Innovation in Engineering & Science Education at Stevens Institute of  
Technology  
Center for Inquiry  
Clemson University  
Columbia University  
Computing Research Association  
Cornell University  
Council for Chemical Research  
Council of Energy Research and Education Leaders  
Council of Environmental Deans and Directors  
Council of Graduate Schools  
Cray Inc.  
Crop Science Society of America  
CSTEM Teacher and Student Services, Inc.  
Duke University  
Ecological Society of America  
Emory University  
Federation of American Societies for Experimental Biology  
Geological Society of America (GSA)  
Georgia Institute of Technology  
Hands On Science Partnership  
Harvard University  
Human Factors and Ergonomics Society  
IEEE-USA  
Incorporated Research Institutions for Seismology  
Indiana University  
Intel Corporation  
Jefferson Science Associates, LLC  
Johns Hopkins University Center for Educational Outreach  
KDSL - Know.Do.Serve.Learn  
Krell Institute  
Maryland Academy of Sciences at the Maryland Science Center  
Maryland MESA  
Massachusetts Institute of Technology  
Michigan State University  
Michigan Technological University  
Muses3, LLC  
National Center for Women and Information Technology (NCWIT)  
National Council for Science and the Environment  
National Ecological Observatory Network (NEON), Inc.  
National Girls Collaborative Project  
National Postdoctoral Association  
National Science Center  
National Science Education Leadership Association (NSELA)  
National Science Teachers Association

National Society of Professional Engineers  
New Mexico State University  
New York University  
North Carolina State University  
Northeastern University  
Oregon State University  
PBS  
Princeton University  
Purdue University  
Rensselaer Polytechnic Institute  
Research!America  
Rutgers, The State University of New Jersey  
SACNAS  
School Science and Mathematics Association  
Semiconductor Industry Association  
Semiconductor Research Corporation  
Sigma Xi, The Scientific Research Society  
Society for Industrial and Applied Mathematics  
Soil Science Society of America  
Southeastern Universities Research Association  
Southern Illinois University System  
SPIE, the International Society for Optics & Photonics  
Stanford University  
STEM Education Center University of Minnesota  
Stony Brook University, State University of New York  
Syracuse University  
TechAmerica  
Texas A&M University  
Texas Tech University  
The Association of American Medical Colleges  
The Business-Higher Education Forum  
The Campaign for Environmental Literacy  
The Florida State University  
The Johns Hopkins University  
The Materials Research Society  
The National Center for Manufacturing Sciences  
The Ohio State University  
The Optical Society  
The Science Coalition  
The University of Arizona  
The University of Georgia  
The University of North Carolina at Chapel Hill  
The University of North Carolina at Greensboro  
Tulane University  
Universities Research Association, Inc.  
University Corporation for Atmospheric Research (UCAR)

University of California System  
University of California Berkeley  
University of California Davis  
University of California Irvine  
University of California Los Angeles  
University of California Riverside  
University of California San Diego  
University of California San Francisco  
University of California Santa Barbara  
University of California Santa Cruz  
University of California Merced  
University of Central Florida  
University of Chicago  
University of Cincinnati  
University of Hawaii System  
University of Illinois  
University of Kansas  
University of Maryland  
University of Massachusetts System  
University of Michigan  
University of Minnesota  
University of Nebraska  
University of New Hampshire  
University of New Mexico  
University of Oregon  
University of Pennsylvania  
University of Pittsburgh  
University of Rochester  
University of Tennessee  
University of the District of Columbia  
University of Virginia  
University of Washington  
University of Wisconsin-Madison  
Vanderbilt University  
Vernier Software & Technology  
Washington University in St. Louis  
Wayne State University  
West Virginia University  
Yale University