

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

cc: United States Senate

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 American Medical Colleges

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

U.S. Chamber of Commerce

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