December 7, 2012

President Barack Obama
The White House
United States of America

The Honorable Harry Reid
Senate Majority Leader
United States Senate

The Honorable Mitch McConnell
Senate Minority Leader
United States Senate

The Honorable John Boehner
Speaker of the House
U.S. House of Representatives

The Honorable Nancy Pelosi
Minority Leader
U.S. House of Representatives

To the President and Leadership of the U.S. Congress:

As representatives of the major U.S. science, engineering, and higher education organizations, we write to you today on behalf of the hundreds of thousands of researchers and innovators that we represent to ask both branches of government to work together to achieve a bipartisan compromise that avoids the fiscal cliff and moves the country on to sound fiscal footing without sacrificing our nation's crucial investments in science and technology. It is important to recognize that federal research and development (R&D) investments are *not* driving our national deficits. These investments account for less than one-fifth of the current discretionary budget, but discretionary spending is the only place where deep cuts will be made. Placing a significant burden on these crucial areas, as sequestration would do, is nothing less than a threat to national competitiveness. We recognize that the United States faces severe fiscal challenges, and we urge you to begin to address them through a balanced approach that includes tax and entitlement reform.

Economists know that more than half of all economic growth in the industrialized world since World War II has been driven by innovation and technological progress. Public research funding has helped plant the seeds that have spawned the Global Positioning System, the laser, Google, and countless other beneficial technologies in addition to medical advances that have helped save the lives of millions of heart disease, cancer and diabetes patients among others.

The United States today remains a world leader in science, technology and innovation. But certain long-term trends should give us pause. A common measure for comparing international competitiveness is research intensity, or research investment as a percentage of GDP. In recent years, countries such as South Korea, Taiwan, and China, along with select European economies like Germany and Finland, have all increased their research intensities substantially and at a far faster pace than the United States. The nation's long-term leadership position in science, technology and innovation is now threatened and allowing blunt cuts to R&D to go forward will only accelerate these trends.

Almost every national priority—from health and defense, agriculture and conservation, to hazards and natural disasters—relies on science and engineering. Sequestration threatens all these priorities, by requiring up to $12 billion in R&D funding cuts annually across defense and nondefense programs over the next decade. The need for a technologically superior military remains clear in a dangerous world, but DARPA would lose over $1 billion for cutting-edge innovation in the next five years alone. Over the same time period, NIH would lose $11.3 billion for research on some of the nation's most critical medical challenges including those related to cancer, obesity, aging, and emerging diseases. The Department of Energy would lose $4.6 billion through 2017 for next-generation energy research and nonproliferation R&D. The National Science Foundation would lose $2.1 billion over five years for research across a broad spectrum of disciplines, most of which is cutting-edge research conducted at universities throughout our nation.

What is needed is a balanced approach to deficit reduction that does not simply take an axe to discretionary federal programs without also considering the contributions of tax revenue solutions and entitlement reform in addressing the federal deficit. There have been many bipartisan commission proposals that have recommended such strategies, and we urge you to come together on just such a balanced solution. Federal nondefense R&D funding has already declined by 5% in the past two years, after remaining flat for the past decade, and continued cuts significantly threaten U.S. leadership in these areas. Our message is that a balanced plan must be one of shared contributions to a sound fiscal future, including strong support for our nation's science and technology enterprise.

We collectively and individually stand ready to help in any way we can as you tackle these vital issues.

Sincerely,

AIMBE
American Association for the Advancement of Science (AAAS)
American Association of Petroleum Geologists (AAPG)
American Astronomical Society
American Chemical Society
American College of Sports Medicine
American Educational Research Association
American Geosciences Institute
American Institute of Biological Sciences
American Mathematical Society
American Peptide Society
American Society of Agronomy
American Society of Civil Engineers
American Society for Microbiology
American Society for Pharmacology & Experimental Therapeutics
American Society of Plant Biologists
American Sociological Association
American Statistical Association
Analog Devices, Inc.
ASME

Association of American Geographers
Association of American Universities
Association for Behavior Analysis International (ABAI)
Association of Environmental & Engineering Geologists (AEG)
Association of Population Centers
Association for Psychological Science
Association of Public and Land-grant Universities (APLU)
Association of Research Libraries
Association for the Sciences of Limnology and Oceanography (ASLO)
Association of Universities for Research in Astronomy
Association for Women in Mathematics
Association for Women in Science (AWIS)
BASIC- Bay Area Science and Innovation Consortium
Behavior Genetics Association
Biophysical Society
Clemson University
Coalition for Academic Scientific Computation (CASC)
Computing Research Association
Consortium of Universities for the Advancement of Hydrologic Science, Inc.
Council of Energy Research and Education Leaders (CEREL)
Council of Environmental Deans and Directors (CEDD)
Council on Undergraduate Research
Crop Science Society of America
Duke University
Ecological Society of America
Engineering Deans Council of the American Society for Engineering Education
Environmental Mutagen Society (EMS)
Federation of Associations in Behavioral & Brain Sciences (FABBS)
Federation of Materials Sciences
Florida State University
Freescale Semiconductor
Fusion Power Associates
Genetics Society of America (GSA)
Geological Society of America
Georgia Institute of Technology
IBM Research
Human Factors and Ergonomics Society
IEEE-USA
Indiana University
International Society for Developmental Psychobiology
Materials Research Society
Mathematical Association of America
Massachusetts Institute of Technology
MRIGlobal
Museum of Science, Boston
National Academy of Neuropsychology
National Association of Marine Laboratories
National Council for Science and the Environment (NCSE)

National Ecological Observatory Network (NEON), Inc.
National Ground Water Association (NGWA)
National Postdoctoral Association
National User Facility Organization (NUFO)
Natural Science Collections Alliance
New York University
Oakland University William Beaumont School of Medicine
Oak Ridge Associated Universities
Population Association of America
Purdue University
Rensselaer Polytechnic Institute
Research!America
Rutgers, The State University of New Jersey
SAMCEDA—San Mateo County Economic Development Association
Semiconductor Industry Association (SIA)
Semiconductor Research Corporation (SRC)
Social and Affective Neuroscience Society
Society for Behavioral Neuroendocrinology
Society for Computers in Psychology
Society for Developmental Biology
Society of Experimental Social Psychology (SESP)
Society for Industrial and Applied Mathematics (SIAM)
Society for Multivariate Experimental Psychology
Society for Neuroscience
Society for Industrial and Organizational Psychology
Society of Personality and Social Psychology
Society for Psychophysiological Research
Society for Research in Child Development
Society for Research in Psychopathology
Society for Text and Discourse
Soil Science Society of America
Southeastern Universities Research Association
SPIE, the international society for optics and photonics
Stanford University
Stony Brook University
Task Force on American Innovation
Teratology Society
The American Society of Bone and Mineral Research
The Protein Society
UNAVCO
University Corporation for Atmospheric Research
University of Central Florida
University of Colorado Boulder
University of Florida
University of Idaho
University of Maryland
UNM—University of New Mexico
University of North Carolina at Chapel Hill

University of Oregon
University of Rhode Island
University of Washington
University of Wisconsin-Madison
Vanderbilt University
Van Fleet & Associates
Washington University in St. Louis
West Virginia University
Woods Hole Oceanographic Institution
Yale University