May 24, 2017

Senator Mitch McConnell
Senate Majority Leader
U.S. Senate

Senator Charles Schumer
Senate Minority Leader
U.S. Senate

The Honorable Paul Ryan
Speaker of the House
U.S. House of Representatives

Minority Leader Nancy Pelosi
Democratic Leader
U.S. House of Representatives

Dear Congressional Leaders:

The undersigned U.S. science and engineering, medical and health, and higher education organizations urge you to reject the Administration-proposed cuts to science as you begin to craft the fiscal year (FY) 2018 appropriations. We urge you once again to prioritize these investments and provide sustainable and robust investments in scientific research.

The drastic cuts to NIH, NSF, DOE, USDA, EPA, NOAA, NIST, USGS, portions of DOD and NASA, and other agencies would cripple the science and technology enterprise, severely harming discovery science programs and critical mission agencies alike.

As you are aware and have acted on before, our nation's research enterprise is among the most powerful engines for American prosperity. One of the consistent areas of bipartisan agreement over the past 70 years has been the importance of the federal government's role in supporting research and innovation. One example of this bipartisan support is the final FY 2017 omnibus bill that provided critical funding for federal R&D, and we applaud your support.

As you work to craft appropriations for FY 2018, we ask you to consider the following in your deliberations:

America's research and development (R&D) enterprise has made our nation the world's preeminent, most effective, and sought-after partner for innovation. It is among the most powerful engines of American prosperity, producing value far beyond the sum of its individual agencies. History confirms that a secure, prosperous, and competitive future is found in research across all fields of science and engineering:

- American physical and life sciences leadership has helped us better understand ourselves and our world, enabling us to improve and lengthen Americans' lives, enhance public health, advance food safety and security, and enhance quality of life.
- Environmental, agricultural and Earth sciences research has allowed state leaders and managers, business owners, and farmers to have access to the best available science for critical decision-making that impacts our energy and transportation infrastructure, agriculture sector, and water resources management.
- Defense research has improved the effectiveness of our armed forces and our awareness of growing threats around the world, and saved lives on the battlefield and once soldiers are home.

- Social and behavioral science research has been critical to respond effectively to disasters; enhance intelligence analysis; understand decision-making and its impact on public health and business investments; improve international relations, and effectively educate the STEM workforce.
- Math and computer science research has made the Internet economy possible and improved cybersecurity.
- Material and engineering sciences have improved energy sources, space exploration, bridges and roads, and enabled countless technologies and products now essential to modern lives.

U.S. investments in science R&D have created millions of jobs in public and private sectors, enhanced state economies, and generated commercial growth. According to a leading report conducted by the National Academies of Sciences, Engineering, and Medicine, although scientists and engineers only account for over four percent of the nation's workforce, they help create many jobs in other parts of the economy. Scientists' discoveries and insights extend beyond the research laboratory, impacting and employing people in many other sectors, from designers to builders to salespeople to consumers.

Decreased investment would have significant impacts on our country's long-term competitiveness and lead to an American innovation deficit. Many countries are increasing their investments in scientific research, recognizing that it will be a key foundation for 21st century economic growth and global competitiveness. For the period 2000-2013, China's average annual R&D investment growth shot up 17%; South Korea grew 8.3%; Russia 8.2%; Singapore 6.8%; and Germany 3.2%. This compares to 2% growth in the U.S. over that period. Without sustained commitment, this high-functioning engine is at real risk of stalling, harming the well-being of future generations. Once stalled, that process cannot be easily reversed. Attempting to rebuild our world-leading science and engineering enterprise would be expensive and slow, and face new competition from other rising leaders.

We urge America to support its research and innovation infrastructure. This will enable institutions to continue investing in skilled workers and high-technology tools; focus today's scientists on creating tomorrow's discoveries; support and prepare the world's finest future scientists through quality STEM education from K-12 through graduate school; and communicate a clear, hopeful path for today's emerging, diverse young scientists and engineers who will realize tomorrow's breakthroughs and applications.

For many decades, the American people and our economy have reaped the enormous benefits of federally-supported research. It is time again for the bipartisan foresight of U.S. policymakers to prevail in support of research. For FY 2018, we urge you to reject the Administration's proposed cuts to research investments and negotiate increased discretionary spending caps for next year and beyond that will permit sufficient federal research investments and sustain our nation's status as the world's innovation leader.

Thank you for considering our views.

Sincerely,

Acoustical Society of America
Alabama Academy of Science
American Academy of Forensic Sciences
American Anthropological Association
American Association for Dental Research
American Association for the Advancement of Science

American Association of Anatomists
American Association of Colleges of Pharmacy
American Association of Geographers
American Association of Immunologists
American Association of Mycobacterial Diseases
American Association of Physicists in Medicine
American Association of Physics Teachers
American Chemical Society
American College of Physicians
American Dairy Science Association
American Educational Research Association
American Forests
American Geophysical Union
American Geosciences Institute
American Institute for Medical and Biological Engineering
American Institute of Aeronautics and Astronautics
American Institute of Chemical Engineers (AIChE)
American Institute of Physics
American Mathematical Society
American Meteorological Society
American Nuclear Society
American Physical Society
American Physiological Society
American Political Science Association
American Psychological Association
American Seed Trade Association
American Society for Microbiology
American Society for Nutrition
American Society of Agronomy
American Society of Animal Science
American Society of Civil Engineers
American Society of Hematology
American Society of Nephrology
American Society of Plant Biologists
American Sociological Association
American Statistical Association
Animal Behavior Society
Association for Computing Machinery
Association for Psychological Science
Association for Research in Vision and Ophthalmology
Association for Women Geoscientists (AWG)
Association of Academic Health Sciences Libraries
Association of American Universities
Association of American Veterinary Medical Colleges
Association of Departments of Family Medicine
Association of Family Medicine Residency Directors
Association of Public and Land-grant Universities

Association of Schools and Programs of Public Health
AVS Science and Technology of Materials, Interfaces, & Processing
Behavior Genetics Association
Biophysical Society
Boston University
Botanical Society of America
Carnegie Mellon University
Coalition for National Security Research (CNSR)
Coastal and Estuarine Research Federation
Cognitive Science Society
Columbia University
Computing Research Association
Consortium of Social Science Associations
Council on Undergraduate Research
Crop Science Society of America
Cystic Fibrosis Foundation
Duke University
Ecological Society of America
FASS
Federation of Associations in Behavioral and Brain Sciences
Foundation for Science and Disability
Geological Society of America
Georgia Institute of Technology
HIV Medicine Association
Idaho Academy of Science and Engineering
Incorporated Research Institutions for Seismology
Institute of Food Technologists (IFT)
Institute of Mathematical Statistics
Kansas Academy of Science
Kentucky Academy of Science
Linguistic Society of America
Medical Library Association
Michigan State University
Michigan Technological University
Microscopy Society of America
Mycobacterial Diseases of Animals MI
National Association for the Advancement of Animal Science
National Association of Geoscience Teachers
National Association of Marine Laboratories
National Conference for Science and the Environment
New York University
North American Primary Care Research Group
North Central Weed Science Society
Oklahoma Academy of Science
OSA (The Optical Society)
Pasadena Chamber of Commerce (CA)

Penn State University
Professional & Scholarly Publishing Division/Association of American Publishers
Psychonomic Society
Research!America
Rochester Academy of Science, Rochester, NY
Rocky Mountain Biological Laboratory
Sigma Xi, The Scientific Research Honor Society
Sjogren's Syndrome Foundation
SoAR Foundation
Society for Behavioral Neuroendocrinology
Society For Biomaterials
Society for Computers in Psychology
Society for Experimental Biology and Medicine
Society for Industrial and Applied Mathematics
Society for Neuroscience
Society for Psychophysiological Research
Society for Research in Psychopathology
Society for Text and Discourse
Society for the Study of Evolution
Society of Behavioral Medicine
Society of Multivariate Experimental Psychology
Society of Teachers of Family Medicine
Society of Toxicology
Soil Science Society of America
SPIE, the international society for optics and photonics
Stony Brook University
The Ohio State University
The Science Coalition
The State University of New York
The Wildlife Society
University Corporation for Atmospheric Research
University of California San Diego
University of Colorado Boulder
University of Delaware
University of Illinois System
University of Iowa
University of Michigan
University of Minnesota, College of Biological Sciences
University of New Hampshire
University of Oregon
University of Pittsburgh
University of Rochester
University of Southern California
University of Virginia
University of Washington

US Dairy Forage Research Center Research and Industry Committee
Vanderbilt University
Washington University in St. Louis
Woods Hole Oceanographic Institution
Yale University

CC: Appropriations Chairs/Ranking Members, Appropriations Subcommittee Chairs