

April 6, 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. business, science and engineering, medical and health, and higher education organizations urge you to swiftly complete the FY 2017 appropriations process with robust investments in scientific research.

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. We urge you to prioritize these investments and reject the Administration-proposed cuts to science as you work to complete FY 2017 appropriations and as you begin to craft the FY 2018 funding bills. 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 four percent of the nation's workforce, they help create jobs for the other 96 percent of the population. 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 21<sup>st</sup> 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 2017, we urge you to avoid a year-long continuing resolution and complete the appropriations process, declining the recently proposed cuts from the Administration. 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,

Academy of Nutrition and Dietetics  
AcademyHealth  
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 Clinical Endocrinologists  
American Association of Colleges of Nursing

American Association of Colleges of Pharmacy  
American Association of Geographers  
American Association of Immunologists  
American Association of Neuromuscular & Electrodiagnostic Medicine  
American Association of Physicists in Medicine  
American Association of Physics Teachers  
American Astronomical Society  
American Chemical Society  
American College of Physicians  
American College of Rheumatology  
American College of Sports Medicine  
American Dairy Science Association  
American Dental Association  
American Dental Education Association  
American Educational Research Association  
American Forests  
American Geophysical Union  
American Geosciences Institute  
American Heart Association  
American Institute for Medical and Biological Engineering  
American Institute of Aeronautics and Astronautics  
American Institute of Biological Sciences  
American Institute of Chemical Engineers  
American Institute of Physics  
American Lung Association  
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 Cell Biology  
American Society for Engineering Education  
American Society for Horticultural Science  
American Society for Microbiology  
American Society for Nutrition  
American Society for Pharmacology & Experimental Therapeutics  
American Society for Reproductive Medicine  
American Society of Agricultural and Biological Engineers  
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  
American Thoracic Society  
American Veterinary Medical Association  
American Water Resources Association  
Animal Behavior Society  
Aquatic Plant Management Society  
Arctic Research Consortium of the United States  
Association for Clinical and Translational Science  
Association for Computing Machinery  
Association for Psychological Science  
Association for Research in Vision and Ophthalmology  
Association for Women Geoscientists  
Association for Women in Mathematics  
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 Independent Research Institutes  
Association of Minority Health Professions Schools  
Association of Public and Land-grant Universities  
Association of Schools and Programs of Public Health  
AVAC  
AVS Science and Technology of Materials, Interfaces, & Processing  
Behavior Genetics Association  
Binghamton University, State University of New York  
Biophysical Society  
Biotechnology Innovation Organization (BIO)  
Boston University  
Botanical Society of America  
Brandeis University  
California Institute of Technology  
Case Western Reserve University  
Clinical Immunology Society  
Coalition for Clinical and Translational Science  
Coalition for National Security Research (CNSR)  
Coalition for the Life Sciences  
Coastal and Estuarine Research Federation  
Cognitive Science Society  
College of Biological Sciences  
College of the Atlantic  
Colon Cancer Alliance

Columbia University in the City of New York  
Computing Research Association  
Consortium for Ocean Leadership  
Consortium of Social Science Associations  
Consortium of Universities for the Advancement of Hydrologic Science, Inc.  
(CUAHSI)  
Council of Professional Associations on Federal Statistics  
Council on Undergraduate Research  
Crohn's & Colitis Foundation  
Crop Science Society of America  
CropLife America  
Cystic Fibrosis Foundation  
Digestive Disease National Coalition  
Duke University  
Dystonia Medical Research Foundation  
Ecological Society of America  
Entomological Society of America  
FASS  
Federation of American Societies for Experimental Biology  
Federation of Associations in Behavioral and Brain Sciences  
Florida International University  
Florida State University  
Foundation for Science and Disability  
Friends of National Institute of Dental and Craniofacial Research  
GBS|CIDP Foundation International  
Geological Society of America  
Georgia Institute of Technology  
Graduate Women in Science  
Harvard University  
Hepatitis Foundation International  
History of Science Society  
HIV Medicine Association  
Houston Wilderness  
Idaho Academy of Science and Engineering  
Incorporated Research Institutions for Seismology  
Indiana University  
Infectious Diseases Society of America  
INFORMS, The Institute for Operations Research and the Management Sciences  
Institute of Electrical and Electronics Engineers (IEEE-USA)  
Institute of Food Technologists (IFT)  
Institute of Mathematical Statistics  
International Association of STM Publishers (STM)  
International Foundation for Functional Gastrointestinal Disorders  
International Society for Developmental Psychobiology  
International Society for Educational Planning

International Society for Stem Cell Research  
Interstitial Cystitis Association  
John Wiley & Sons  
Kansas Academy of Science  
Kent State University  
Kentucky Academy of Science  
Law and Society Association  
Linguistic Society of America  
LORD Corporation  
Lymphoma Research Foundation  
Mathematical Association of America  
Medical Library Association  
Meharry Medical College  
METAvivor  
Michigan State University  
Michigan Technological University  
Microscopy Society of America  
Morehouse School of Medicine  
Mycobacterial Diseases of Animals - Multistate Initiative  
National Alliance for Eye and Vision Research  
National Alliance on Mental Illness  
National Alopecia Areata Foundation  
National Association for the Advancement of Animal Science  
National Association of Biology Teachers  
National Association of Federal Veterinarians  
National Association of Geoscience Teachers  
National Association of Marine Laboratories  
National Association of Plant Breeders  
National Center for Women & Information Technology  
National Coalition for Food and Agricultural Research  
National Council for Science and the Environment  
National Ground Water Association  
National Organization of Gay and Lesbian Scientists and Technical Professionals  
National Pancreas Foundation  
National Postdoctoral Association  
NephCure Kidney International  
New York University  
NorCal CarciNET Community  
North American Primary Care Research Group  
North Central Regional Association of Agricultural Experiment Station Directors  
North Central Weed Science Society  
Northeastern Weed Science Society  
Northern Illinois University  
Northwestern University  
Ohio University

Oklahoma Academy of Science  
Oregon State University  
Paleontological Society  
Pasadena Chamber of Commerce and Civic Association  
Penn State University  
Phycological Society of America  
Pollinator Partnership  
Professional and Scholarly Publishing Division/Association of American Publishers  
Prostate Cancer Foundation  
Psychonomic Society  
PsySiP: Psychology of Science in Policy  
Pulmonary Hypertension Association  
Purdue University  
Rensselaer Polytechnic Institute  
Research!America  
Rochester Academy of Science, Rochester, New York  
Rocky Mountain Biological Laboratory  
Rural & Agriculture Council of America  
SACNAS - Society for Advancement of Chicanos/Hispanics & Native Americans in Science  
Scleroderma Foundation  
Seismological Society of America  
Sigma Xi, The Scientific Research Honor Society  
Sjogren's Syndrome Foundation  
Sleep Research Society  
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 Mathematical Psychology  
Society for Neuroscience  
Society for Psychophysiological Research  
Society for Range Management  
Society for Text and Discourse  
Society for the Study of Evolution  
Society of Behavioral Medicine  
Society of Nuclear Medicine and Molecular Imaging  
Society of Teachers of Family Medicine  
Society of Toxicology  
Soil Science Society of America  
Southern Weed Science Society  
SPIE, the international society for optics and photonics  
Stanford University  
Stony Brook University

Taskforce on American Innovation  
The Clinical Research Forum  
The Industrial Research Institute  
The Land Improvement Contractors of America (LICA)  
The Marfan Foundation  
The Michael J. Fox Foundation for Parkinson's Research  
The Oceanography Society  
The Ohio State University  
The Optical Society (OSA)  
The Science Coalition  
The University of Toledo  
The Wildlife Society  
Tuskegee University College of Veterinary Medicine  
U.S. Council on Competitiveness  
U.S. Hereditary Angioedema Association  
University Corporation for Atmospheric Research  
University of California San Diego  
University of California Santa Cruz  
University of California System  
University of California, Berkeley  
University of California, Riverside  
University of California, Santa Barbara  
University of Cincinnati  
University of Colorado Boulder  
University of Delaware  
University of Kansas  
University of Maine  
University of Maryland, Baltimore County  
University of Minnesota Extension  
University of Missouri System  
University of Nebraska  
University of New Hampshire  
University of New Mexico  
University of North Carolina at Chapel Hill  
University of Pennsylvania  
University of Pittsburgh  
University of Rochester  
University of Southern California  
University of Tennessee  
University of Virginia  
University of Wisconsin-Madison  
US Dairy Forage Research Center Research and Industry Committee  
Vanderbilt University  
Virginia Tech  
Washington University in St. Louis



Water Environment Federation  
Wayne State University  
Weed Science Society of America  
West Virginia University  
Western Society of Weed Science  
Wisconsin Academy of Sciences, Arts & Letters  
Woods Hole Oceanographic Institution

CC: Appropriations Chairs/Ranking Members, Appropriations Subcommittee Chairs