



March 21, 2016

Dear Members of the U.S. Congress:

You've no doubt seen the recent headlines: Scientists have discovered the first direct evidence of gravitational waves, validating a century-old prediction by Albert Einstein. This is a breakthrough – one that would not have been possible without the longstanding support of our nation's premier fundamental research agency, the National Science Foundation. For Fiscal Year 2017, the Coalition for National Science Funding (CNSF) – comprising 142 professional organizations, universities and businesses – recommends a mark of \$8 billion for NSF and asks Congress to maintain its longstanding commitment to the only federal research agency that supports all disciplines of science. Especially in tight times, the nation must invest in scientific research to grow our economy for years to come.

Simply put, NSF is vital to our country's economy, security, and innovation. But since 2010, the agency has lost ground in real dollars. As other nations invest heavily in research and development, the United States must do the same if we want to remain at the forefront of scientific and technological progress.

Last year CNSF joined leaders of major U.S. corporations and more than 300 organizations from American industry, higher education, science and engineering to sign *Innovation: An American Imperative* (attached), a call to action urging Congress to enact policies and make investments to ensure that the United States remains the global innovation leader. The Imperative highlights the need for steady and sustained real growth for NSF and other research agencies.

NSF funds research in important fields – including the physical sciences, biology, mathematics, computer science, geoscience, social and behavioral science, and engineering. Among the many recent examples of NSF-supported successes are a [collaborative effort to secure cloud systems](#); [new sensing technology](#) that could improve the detection of diseases, chemical weapons and even fraudulent art; and successful startups including [Emotient](#), recently purchased by Apple, which uses artificial intelligence to analyze facial expressions, and [Neon Labs](#), which tests the visual appeal of images and was started by an I-Corps awardee.

From pre-K through high school, the innovative teaching strategies developed through NSF prepare students for success in advanced science, technology, engineering and math (STEM) studies. Through original research, undergraduates as well as graduate students work with leading scientists to develop the knowledge and skills to attain STEM degrees, transition effectively to the workplace, and make the discoveries that fuel job creation.

To foster potentially transformative research, NSF should continue to support research across all science and engineering disciplines, use its world-renowned peer review system to identify the best science, and maintain flexibility to take advantage of unanticipated discoveries and insights. We ask Congress to support NSF's existing practice of setting priorities for research investments through engagement with the scientific community, The National Academies, National Science Board, and other advisory bodies.

Today, it's gravitational waves. What will be our next leap forward? We thank you for your support and urge Congress to continue this progress by supporting NSF in FY17. We stand ready to work with you.

*The Coalition for National Science Funding (CNSF) is an alliance of over 140 professional organizations, universities, and businesses advocating support for the National Science Foundation.*

## Coalition For National Science Funding

American Anthropological Association  
American Association for Dental Research  
American Association of Geographers  
American Association of Physics Teachers  
American Astronomical Society  
American Chemical Society  
American Educational Research Association  
American Geosciences Institute  
American Geophysical Union  
American Institute for Medical and Biological Engineering  
American Institute of Biological Sciences  
American Mathematical Society  
American Physiological Society  
American Political Science Association  
American Psychological Association  
American Society for Biochemistry & Molecular Biology  
American Society for Engineering Education  
American Society for Microbiology  
American Society of Agronomy  
American Society of Civil Engineers  
American Society of Mechanical Engineers  
American Society of Plant Biologists  
American Sociological Association  
American Statistical Association  
Arafune Government Relations Group  
Archaeological Institute of America  
Arctic Research Consortium of the U.S. (ARCUS)  
Associated Universities, Inc.  
Association for Psychological Science  
Association for the Sciences of Limnology & Oceanography  
Association for Women in Mathematics  
Association for Women in Science  
Association of American Medical Colleges  
Association of American Universities  
Association of Public and Land-grant Universities  
Association of Research Libraries  
Association of Science-Technology Centers  
Association of Universities for Research in  
Astronomy, Inc. (AURA)  
The Bagley Group, LLC  
Biophysical Society  
Boise State University  
Boston University  
Brandeis University  
Brown University  
California Institute of Technology  
Cavarocchi Ruscio Dennis Associates, LLC  
Coalition for Academic Scientific Computation  
Coastal and Estuarine Research Federation  
Computing Research Association  
Consortium for Ocean Leadership  
Consortium of Social Science Associations  
Consortium of Universities for the Advancement  
of Hydrologic Science  
Cornell University  
Council of Graduate Schools  
Council of Scientific Society Presidents  
Council on Food, Agricultural and Resource Economics  
Council on Undergraduate Research  
Crop Science Society of America  
Duke University  
Earthquake Engineering Research Institute  
Eastman Chemical Company  
Ecological Society of America  
Entomological Society of America  
Federation of American Societies for Experimental Biology  
Federation of Associations in Behavioral & Brain Sciences  
Florida State University  
Genetics Society of America  
Geological Society of America  
Georgia Institute of Technology  
Harvard University  
Human Factors and Ergonomics Society  
IRIS Consortium  
Indiana University  
Institute of Electrical and Electronics Engineers (IEEE-USA)  
Lewis-Burke Associates LLC  
Linguistic Society of America  
Madison Associates LLC  
George Mason University  
Massachusetts Institute of Technology  
Materials Research Society  
Mathematical Association of America  
Michigan State University  
Museum of Science, Boston  
National Association of Marine Laboratories (NAML)  
National Communication Association  
National Council for Science and the Environment  
National Ground Water Association  
National Postdoctoral Association  
National Science Teachers Association  
New Mexico Optics Industry Association  
North Carolina State University  
Northern Illinois University  
Northwestern University  
The Ohio State University  
The Optical Society  
Oregon State University  
Ornithological Council  
Pennsylvania State University  
Population Association of America/Association of  
Population Centers  
Princeton University  
Rensselaer Polytechnic Institute  
Research!America  
Rutgers, The State University of New Jersey  
SAGE Publications Inc.  
Seismological Society of America  
Semiconductor Industry Association  
Society for American Archaeology  
Society for Historical Archaeology  
Society for Industrial and Applied Mathematics  
Society for Industrial and Organizational Psychology  
Society for Neuroscience  
Society for Research in Child Development  
Society for the Psychological Study of Social Issues (SPSSI)  
Soil Science Society of America  
SPIE  
State University of New York System (SUNY)  
State University of New York at Stony Brook  
Stevens Institute of Technology  
Texas Tech University  
Tufts University  
UNAVCO  
University Corporation for Atmospheric Research  
University of California  
University of Cincinnati  
University of Colorado, Boulder  
University of Florida  
University of Illinois  
University of Michigan  
University of Missouri System  
University of New Mexico  
University of New Orleans  
University of Pennsylvania  
University of South Carolina  
University of Wisconsin  
Vanderbilt University  
The George Washington University  
Washington Partners, LLC  
Washington State University  
Washington University in St. Louis  
Wells Consulting  
West Virginia University  
Woods Hole Oceanographic Institution