



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
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Vanderbilt University
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Wells Consulting
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