



December 2016

Dear President-elect Trump and Vice President-elect Pence:

The Coalition for National Science Funding ([CNSF](#)) is an alliance of 130 professional organizations, scientific societies, universities and businesses united in our advocacy for the National Science Foundation (NSF). CNSF supports the goal of increasing the national investment in NSF-funded research and education programs in response to the scientific, technological, and economic challenges facing the United States. We would like to take this opportunity to encourage you and your administration to make robust federal investment in fundamental scientific research, such as the research supported by NSF, a national priority.

For the last 60 years, NSF has been an integral part of America's scientific research enterprise. It is the mission of the agency "to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense." Given its mission, NSF-funded research has led to the development of ground-breaking technologies, such as the Internet, Doppler radar, Magnetic Resonance Imaging, DNA finger printing, barcodes, sensing technologies that can help detect diseases, and so much more. Moreover, the research supported by NSF has led to the development of key components found in the smart phones we all use every day. Simply put, NSF-funded research continues to improve the lives of Americans through the advancement in science, engineering, and innovation.

The success of the United States in these areas has not gone unnoticed by other nations. In fact, many competitor nations are trying to replicate our success. Unfortunately, over the course of the last decade, the United States has been effectively holding our federal research funding flat, while competitors such as China and South Korea have been boosting their investment in research and technology development. Moreover, our competitors are trying to replicate the very successful NSF merit review process, which is viewed as the international gold-standard for evaluating scientific research proposals. If we are to remain at the forefront of scientific progress and technological innovation, we must make federal funding for scientific research a national priority and provide robust and sustainable funding for the nation's scientific research enterprise.

During the campaign, you responded to a series of [questions](#) posed by representatives of the scientific community. When asked about long-term investment in federally funded scientific research, you responded by saying that "scientific advances do require long-term investment" and "that we must have programs such as a viable space program and institutional research that serves as incubators to innovation and the advancement of science and engineering in a number

of fields.” CNSF agrees with you. Indeed, long-term investment in all fields of study are essential to the nation’s continued advancement in science, engineering, and innovation.

In the following document, we would like to submit recommendations to you and your transition team. We certainly appreciate your consideration of these suggested actions and welcome the opportunity to work with the administration to realize the recommendations included in this transition document. Your transition team may contact Amy Scott at amy_scott@au.edu or Erin Heath at eh Heath@aaas.org.

Sincerely,

Amy M. Scott
Co-Chair, CNSF
Association of American Universities

Erin Heath
Co-Chair, CNSF
American Association for the Advancement
of Science



December 2016

The Coalition for National Science Funding (CNSF) is an alliance of 130 professional organizations, scientific societies, universities, and businesses united in our advocacy for the National Science Foundation (NSF). CNSF supports the goal of increasing the national investment in NSF’s research and educational programs in response to the scientific, technological, and economic challenges facing the United States. CNSF appreciates the opportunity to submit the following process and policy recommendations to President-elect Trump and the transition team.

Process Recommendations

Early Appointment of the Science Advisor and Assistant to the President for S&T.

The Baker Institute for Public Policy at Rice University recently released the report, [“The Vital Role of the White House Office of Science and Technology Policy in the New Administration.”](#) The report recommends the early selection of a notable scientist or engineer to serve as Science Advisor and Assistant to the President for Science and Technology. Once in office, the report recommends that the president nominate that person to serve as the Director of the Office of Science and Technology Policy (OSTP).

Since its establishment in 1976, OSTP has been tasked with providing the President and senior executive branch staff with “accurate, relevant, and timely scientific advice on all matters.” It has also “ensured that executive branch policies are based on sound science” and that the “scientific and technical work of the executive branch is coordinated to provide the greatest benefit to society.” ***CNSF agrees with this recommendation and encourages President-elect Trump to appoint a science advisor by early January 2017 and nominate that person to serve as Director of OSTP.***

Establish a Solid and Collegial Working Relationship with the 115th Congress.

It is essential for the incoming presidential administration to have a strong working relationship with the Members of the 115th Congress. Specifically, it would be helpful for the new Science Advisor and Assistant to the President for S&T to establish a solid working relationship with the relevant appropriations and authorization committees, including: the House Science, Space, and Technology Committee; the Senate Commerce, Science, and Transportation Committee; and the House and Senate Commerce, Justice, Science, and Related Agencies Appropriations

Subcommittees. A new presidential administration and new Congress offers the opportunity to reset the working relationship between the administration and these relevant committees. *CNSF encourages the new administration to swiftly appoint a Science Advisor who can work in concert with the Director of the NSF to build solid working relationships with the 115th Congress.*

Policy Recommendations

Robust and Sustainable Federal Funding of Scientific Research

For the United States to remain globally competitive in the areas of science, innovation, and advanced technology development, the nation needs to continue to make robust investments in our federal research enterprise. This means predictable, sustainable increases in the budgets of federal research agencies such as NSF. In the last year, over 500 leading organizations from American industry, higher education, and science and engineering organizations endorsed [Innovation: An American Imperative](#). *CNSF reaffirms our support for the Innovation Imperative and its call for at least four percent real growth annually in funding for basic scientific research supported by federal research agencies such as NSF.*

Repeal of the Budget Control Act

The 2015 Bipartisan Budget Act (commonly known as the Murray-Ryan Budget Deal) provided some relief from the BCA caps for fiscal years 2016 and 2017. Without immediate action from President-elect Trump and 115th Congress, the BCA caps will result in cuts to the discretionary budget for fiscal year 2018 and subsequent years, threatening support to vital research programs at NSF and other federal research agencies. *Since key components of NSF have still not fully recovered from the damaging cuts of sequestration, including fields as diverse as the biological sciences, mathematical sciences, physical sciences, geosciences, and social and behavioral sciences, it is especially important for the incoming-Administration and 115th Congress to work in a bipartisan fashion to eliminate the Budget Control Act caps for fiscal year 2018 and beyond.*

A Balanced Approach Between NSF's Core Programs and New Innovative Ideas

NSF should continue its support for fundamental research through a balanced portfolio that provides opportunities in all fields of science and engineering. At the same time, the CNSF membership is excited about the recent NSF drive to invest in the proposed "Ten Big Ideas." **Thus, CNSF encourages the new administration to support NSF's pursuit of exciting new areas of research and to establish processes that enable new priorities to emerge with community input.**

NSF Facilities Enable New Discoveries

Whether through the construction of groundbreaking telescopes, delivering the future of high performance computing infrastructure, or pioneering fundamental physics experiments, NSF's facilities are the bedrock of many scientific disciplines. ***CNSF encourages the new administration to reaffirm its commitment to the health of existing facilities and enable a vision for future capabilities.***

STEM Education and the Next Generation Workforce

A critical aspect of NSF's mission is "to achieve excellence in STEM education at all levels and in all settings (both formal and informal) to support the development of a diverse and well prepared workforce of scientists, technicians, engineers, mathematicians, and educators and a well-informed citizenry." ***CNSF encourages the new administration to continue to prioritize this critical piece of NSF's mission through support for programs that foster improvement in STEM learning and teaching, help prepare the next generation of STEM professionals, and increase the participation of women and underrepresented minorities in the STEM fields.***

Communicate the Value of NSF-funded Research to 115th Congress

Under the leadership of NSF Director France Córdova, the agency has embarked upon a communications campaign that explains the essential role NSF-funded research plays in bolstering our national security, strengthening our economy, and broadening our scientific knowledge so that we may remain globally competitive. ***CNSF encourages the new administration and NSF to continue to communicate the importance of NSF-funded research for our economy, national security, and global competitiveness.***