



CNSF Message Points

NSF and its Mission are Vital to America's Research Enterprise

- As the cornerstone of America's research enterprise, continued Federal investment in the National Science Foundation (NSF) and the science it supports is absolutely critical if this nation is to remain at the forefront of scientific progress, innovation, and knowledge creation in the fields of science, engineering, and education.
- Research and education programs supported by NSF help develop the knowledge base needed to push the frontiers of science, mathematics, and engineering disciplines; contribute to the development of the future science and technology workforce; underpin new fields of inquiry; and promote interdisciplinary research and education.
- NSF is one of our nation's greatest tools for the promotion and advancement of scientific, mathematical, and engineering research and education. Although NSF accounts for only 4% of federal R&D spending, it supports nearly 50% of the non-medical basic research at our colleges and universities. It funds research in new frontiers of scientific inquiry and contributes to creating a highly skilled, competitive workforce in science and engineering.
- NSF is the only federal agency with the unique and important mission of ***"promoting the progress of basic research in all fields of science and engineering."*** Given its important mission, NSF invests 94% percent of its budget directly to support research at colleges and universities in all 50 states. This significant level of support reached 1,922 institutions of higher education and nearly 299,000 researchers, postdoctoral fellows, trainees, teachers, and students in 2014.
- Data for FY 2014 indicate that NSF received around 50,000 grant proposals and made 10,800 awards, mostly to individual investigators at colleges and universities, and other public and private institutions. NSF identifies the best ideas and the people to develop these ideas through a world-renowned merit-review process.
- NSF is tasked with keeping the nation at the forefront of discovery in all fields of fundamental science and engineering. Through seven directorates, the agency funds research in traditional academic areas, as well as "high-risk, high pay-off" ideas – all of which are integrated with educating future scientists and engineers.

- NSF is the principle federal agency charged with promoting STEM education at all levels and in all settings, from pre-kindergarten through career development. Understanding how people learn will ensure that the United States continues to develop and produce world-class scientists, mathematicians, engineers, and scientifically-literate citizens.

Investing in NSF is an Investment in America's Research and Technology Enterprise

- The ***Innovation Deficit*** is jeopardizing America's role as the world's innovation leader and thereby undermining our economic strength and national security. A combination of declining federal investments in research, additional cuts due to sequestration, and other nations pouring vast resources into their innovation ecosystem, have led to an innovation deficit in the United States.
- Many of our global competitors are increasing their financial support for scientific and engineering research, while the rate of growth for funding research in the U.S. is slowing. The U.S. must maintain its leadership position in scientific research and education, and NSF is critical to this endeavor.
- Even under tight budget constraints, it is imperative to have robust annual budget levels for NSF. The federal government plays a crucial role in supporting the fundamental research necessary to build knowledge that improves lives, contributes to new technologies, and sparks the development of new products.

Merit Review

- All NSF grant proposals are reviewed utilizing two merit review criteria: Intellectual Merit and Broader Impacts. Grant proposals must advance knowledge (intellectual merit) and benefit society (broader impacts).
- For the last 60 years, NSF has used the merit review process to review and ultimately award the best scientific, engineering, and education research. NSF grant proposals are reviewed and evaluated by knowledgeable and accomplished scientists and engineers.
- In response to Congressional concerns, NSF has recently taken the step to enhance its accountability and transparency procedures for NSF ***awarded*** grants. The enhanced accountability and transparency procedures for awarded grants require grant abstracts to explain the significance of the grant and explain how the research grant serves the national interest. NSF has taken a positive step in addressing Congressional concerns about the abstracts for NSF funded grants.