



A MESSAGE FROM THE DIRECTOR



Photo: NSF/Stephen Voss

The National Science Foundation (NSF) is pleased to present its *Fiscal Year (FY) 2019 Agency Financial Report*. In addition to providing the annual financial performance and accountability results, this report highlights NSF's accomplishments this fiscal year as we pursue our mission to "promote the progress of science, to advance the national health, prosperity and welfare; and to secure the national defense..."

For almost seven decades, NSF has invested in discovery and education that has sparked new ways of thinking about scientific, economic, and sociotechnical challenges facing the Nation and the world. Among the exciting and transformational results we witnessed in 2019 was the first-ever image of a black hole some 55 million light-years away, captured by the NSF-supported Event Horizon Telescope. Also, this year, the agency invested strategically to accelerate research and spur innovation in quantum technology. NSF-supported research will advance quantum information science and engineering, taking it from theory to practice, in order to lay the foundations for a new century of discovery in the quantum realm. As the Nation's leader in polar policy, research and logistics, NSF is charting a new course in the once remote, yet still challenging Arctic. In 2019, NSF joined an international coalition to study Arctic changes by supporting the MOSAiC (Multidisciplinary drifting Observatory for the Study of Arctic Climate) project.

These accomplishments all reflect NSF's commitment to partnerships that reach academia, government and industry, both domestic and international. I am proud of NSF's long history of partnerships that leverage federal resources to advance science and engineering research, education, and training—often accelerating innovation and strengthening outcomes. One prominent example from this year has been the update to the National Artificial Intelligence (AI) Research and Development Strategic Plan, which was released in September. Because of the inherently cross-disciplinary nature of the field, AI research relies on partnerships and collaborations. The flow of people, ideas, and innovations across government, academia, and industry not only enhances domestic economic benefit, but also positions the country as a global leader. In tandem with these partnerships, we are also seeing the power of convergence—the integration of scientific disciplines to foster the robust collaborations needed to address complex problems. The NSF Convergence Accelerator, one of NSF's Big Ideas, pursues a singular vision: identify areas of research where investment in convergent approaches (those bringing together people from across disciplines, united to solve problems) has the potential to translate research into high-value results and advance ideas from concepts to deliverables. In FY 2019, the first set of awards made through the Convergence Accelerator will leverage multidisciplinary research to find new ways to apply Big Data to science and engineering and create technologies that can enhance the lives of American workers.

NSF investments support and enable science & engineering talent. In FY 2019, the agency directly supported approximately 303,000 researchers, graduate and undergraduate students, postdoctoral fellows, trainees, as well as K-12 teachers and students. Collectively, NSF-funded researchers have won 242 Nobel Prizes in physics, chemistry, physiology and medicine, and economics, including six Nobel laureates in 2019. In addition, among the 2019 MacArthur Fellows, five were supported by NSF funding at some point in their careers.

NSF strives to ensure that students from all sectors of our society have access to exemplary learning experiences. Our education and training portfolio funds programs that enrich educational experiences for all students and enhance science, technology, engineering, and mathematics (STEM) talent needed for the 21st

century. Students must be prepared for a world increasingly dependent on technology, and educators are developing learning platforms and training programs to pique scientific curiosity and strengthen analytical skills. This year, NSF enhanced its support for the re-entry of women, particularly women veterans, to the STEM workforce through NSF INCLUDES. NSF also seeks to support the aspirations of girls and women who are inspired to careers in science and education through programs like ADVANCE: Organizational Change for Gender Equity in STEM Academic Professions, the national PBS multimedia project “SciGirls,” and Broadening Participation in Computing. These opportunities challenge students to exceed expectations, help guide future career choices, and foster an inclusive environment of scientific exploration that is welcoming to all.

With the publication of the FY 2019 Agency Financial Report, I am pleased to report that NSF received its 22nd consecutive unmodified opinion from an independent audit of its financial statements. The Independent Auditors’ Report identified no material weaknesses or significant deficiencies. In addition, NSF provides reasonable assurance that the agency is in compliance with the Federal Managers’ Financial Integrity Act, and that internal control over financial reporting is operating effectively to produce reliable financial reporting.

For more information on NSF’s performance management process and the complete results of our FY 2019 annual goals under the Government Performance and Results (GPRA) Modernization Act of 2010, I invite you to read NSF’s Annual Performance Report, which will be released with NSF’s FY 2021 Budget Request to Congress. In keeping with government-wide requirements, NSF’s GPRA data are subject to rigorous verification and validation by an independent, external management consultant, based on guidance from the U.S. Government Accountability Office.

It is NSF’s commitment to efficient and effective management practices and sound financial oversight that allows NSF to pursue critical investments in science and engineering research and education. The discoveries and advances of this past year remind us of how NSF’s investments take us beyond what we previously imagined. NSF carries our Nation forward, and it provides the ideas and the inspiration needed to keep us at the frontiers of learning, discovery, and innovation.

/s/
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