The U.S. National Science Foundation is an independent federal agency created by Congress in 1950 to promote the progress of science; advance the national health, prosperity, and welfare; and secure national defense. NSF is the only federal agency whose mission supports all fields of fundamental science and engineering disciplines, from mathematics, engineering and geosciences to biological, behavioral and computer sciences.

WHO WE ARE

The NSF Director, who is appointed by the President and confirmed by the Senate, leads a workforce driven to improve the world through research, discovery, and innovation. The workforce consists of approximately 200 rotating scientists and engineers, 1,400 career employees, and 450 contract employees.

In addition, the 24-member National Science Board, also presidentially appointed, establishes the overall policies of NSF. Board members and the NSF director serve six-year terms.

WHAT WE DO

Discovery

NSF supports research and people that explore the unknown, seek to demystify nature and advance the frontiers of science and engineering. NSF funds researchers who generate new knowledge and discoveries that provide a greater understanding of the world around us. Situated at the intersection of all science and engineering disciplines, NSF is uniquely positioned to identify and guide investments toward new, cutting-edge research areas.

Research Infrastructure

NSF funds supercomputers, ground-based telescopes and observatories, U.S. research stations in the Arctic and Antarctic, the world’s largest and highest-powered magnet lab, long-term ecological sites, engineering centers and other infrastructure and state-of-the-art tools to sustain the nation’s scientific enterprise. Many of the research facilities NSF supports not only drive discoveries, but also serve as training grounds for the next generation of scientists and engineers.

Learning

NSF programs support STEM education and training that encompass not only formal academic pathways within K-12 and college environments, but also informal pathways extending from the nation’s science museums to children’s educational television. Programs such as NSF’s Eddie Bernice Johnson INCLUDES Initiative attract individuals from every sector and group in society, increasing the diversity of the STEM workforce, developing the next generation of innovators and skilled technical workers, and ensuring a pipeline of people and ideas are ready to solve pressing global challenges.
Sustaining global leadership
NSF's support for cutting-edge research has positioned the U.S. as a global leader in science and technology. We advance the frontiers of knowledge across the smallest and grandest of scales, from atoms and black holes to tissue engineering, artificial intelligence and quantum mechanics. NSF's long-term support for research conducted at U.S. colleges and universities has helped transform these institutions into global centers of discovery and innovation, fueling the Industries of the Future and creating world-leading technologies.

Fueling the U.S. economy
NSF's commitment to fund high-risk, high-reward ideas strengthens the U.S. economy by producing discoveries that lead to emerging industries and jobs. NSF's new Directorate for Technology, Innovation and Partnerships and programs such as Innovation Corps, or I-Corps™, and SBIR expand and sustain the nation's innovation ecosystem by translating cutting-edge technologies from the laboratory to the marketplace and training innovation and entrepreneurial leaders. NSF also upholds America's competitive edge by training and preparing a 21st century STEM workforce and funding research that leads to new technologies, from Google's page-ranking algorithm and the internet to Qualcomm and magnetic resonance imaging.

Catalyzing Regional Innovation
NSF is dedicated to expanding our nation's innovation capacity across every region through programs like Regional Innovation Engines, or NSF Engines. The NSF Engines program translates research results into practical applications through partnerships that link academia, industry, government, philanthropy, investors, and civil society. These partnerships foster innovation ecosystems in communities across the country, catalyzing new technologies that address societal and economic challenges. NSF is empowering all Americans to participate in the U.S. research and innovation enterprise — spurring job growth, advancing global competitiveness, and improving everyday lives.

Enhancing the nation's security
NSF's investments in scientific innovation play a vital role in securing a strong national defense — exploring everything from improved body armor to cutting-edge medical and communications equipment. NSF funds research that supports resilient critical systems aimed at protecting national infrastructure and personal data. NSF continues to foster a collaborative research environment that enables breakthroughs across scientific fields, including those that protect communities, support veterans and warfighters, and enhance U.S. leadership from outer space to cyberspace.

NSF Research Areas

Decades of NSF investments in genetics, cyberinfrastructure and fundamental biology enabled the rapid sequencing and identification of the novel coronavirus weeks after its discovery in late 2019.