



U.S. National Science Foundation

NSF 75 YEARS OF INNOVATION

2025 marks the 75th anniversary of NSF. Throughout the year, the agency will host in-person and virtual activities to commemorate this significant milestone. For more information, visit: [nsf.gov/75years](https://www.nsf.gov/75years)



ARIZONA

● FAST FACTS



\$287,703,000

Total NSF Awards to Arizona



\$224,018,000

Invested in Fundamental Research in Arizona



\$32,804,000

Invested in STEM Education in Arizona



\$6,208,000

Invested in Arizona Businesses

● TOP NSF-FUNDED ACADEMIC INSTITUTIONS

Arizona State University
\$108,960,000

University of Arizona
\$54,114,000

Northern Arizona University
\$15,044,000

● NSF BY THE NUMBERS

The U.S. National Science Foundation (NSF) is an independent federal agency created by Congress in 1950 to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense. To fulfill this vital role, NSF supports basic research and researchers who create knowledge that transforms the future.

DID YOU KNOW? NSF has funded the work of **268** Nobel Prize winners over 75 years.



\$9.06B
FY 2024
Total Enacted

92%
Funds research, education and related activities



11K
Awards



1.9K
Institutions



358K
People

"Data represents FY 2024 Actuals unless otherwise indicated"



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INNOVATION | *Generating new knowledge that provides a greater understanding of the world around us*

Emerging quantum technologies are poised to enable powerful new forms of computation, communications and sensing. However, the development and deployment of these technologies will require the mastery of complex physical systems and the birth of a robust quantum smart workforce. To meet these needs, an NSF-funded project at **Northern Arizona University** cultivates and explores new approaches, systems and training programs for quantum information science. The central research goals of this project are to prepare, control and measure quantum states that involve electronic, mechanical, microwave and optical degrees of freedom, enabling new “spin-optomechanical” systems that may augment the limited lifetime and distribution of quantum information. The project’s education and workforce development efforts are organized according to a multitiered plan, providing training opportunities spanning from the doctoral-level researcher to K-12 community engagement. Deliberate interconnections between the tiers are designed to increase recruitment and retention by allowing multiple entry points, supporting different career destinations, providing opportunities to build STEM identity and enhancing a sense of belonging.

EXPANDING FRONTIERS | *Generating institutional capacity, new technologies and societal impact*

The NSF Regional Innovation Engines (NSF Engines) program was established to advance transdisciplinary, collaborative, use-inspired and translational research and technology development in critical and emerging technology focus areas. The NSF Futures Engine in the Southwest, led by **Arizona State University**, aims to transform the Southwest region (Utah, Nevada and Arizona) into a national innovation hub, leading to positive climate impacts, high-wage jobs, economic growth and technology-based startups, and venture capital investments. This NSF Engine will serve as a catalyst to connect and institutionalize a distributed regional sustainability innovation ecosystem industry, researchers, innovators, investors, decision-makers and community leaders; incentivize co-innovations in technology and governance to overcome limitations to community and economic development; expand infrastructure and capacity for knowledge translation through startups and intellectual property licensing, enabling continued and sustainable economic and population growth; and prepare a highly skilled workforce that creates new businesses, meets the needs of existing employers, and provides access to high-wage STEM jobs by leveraging innovations in education and training at scale.

EDUCATION AND WORKFORCE | *Supporting our STEM talent of today and tomorrow*

The Climate change Adaptation and Mitigation through Biodiversity Informatics edUcation and Mentoring (CAMBIUM) program at the **University of Arizona**, funded through the NSF Research Traineeship program, is training a new generation of scientists in biodiversity informatics to tackle issues related to climate change and the loss of biodiversity. CAMBIUM aims to develop innovative solutions to grand challenges — including predicting the impacts of extreme climate events, identifying changing infectious disease risks and improving policymaker guidance with biodiversity-based model outputs — while preparing students for future careers. To accomplish this goal, this innovative program fills existing gaps in graduate education by combining biodiversity data science, policy training and transdisciplinary team science, equipping students with the skills to analyze, integrate and utilize large-scale biodiversity data. Over five years, CAMBIUM will engage 268 students, awarding fellowships to 18 and involving an additional 250 students, including 150 doctoral and 100 master’s candidates.

ON THE CUTTING EDGE

NSF is pushing the boundaries of what is possible in today’s most important technology areas, including [artificial intelligence](#), [quantum information science](#), and [biotechnology](#). The Foundation also maintains industry-leading, [state-of-the-art facilities](#) around the world.

NCSES

The [National Center for Science and Engineering Statistics \(NCSES\)](#) within the U.S. National Science Foundation is the nation’s leading provider of statistical data on the U.S. science and engineering enterprise. As a principal federal statistical agency, NCSES conducts nationally representative surveys and publishes objective data and reports on topics related to research and development, the science and engineering workforce, and STEM education. For example, in FY 2024, **Arizona** invested **\$11,337,000,000** on research and development.

For more information on NSF’s impact in your state, please contact NSF Office of Legislative and Public Affairs at congressionalteam@nsf.gov.

LEARN MORE

- **BROUGHT TO YOU BY NSF** – NSF has invested in discoveries, inventions, and innovations that have shaped the modern world, including the internet, 3D printing, American Sign Language, Magnetic Resonance Imaging (MRI), deep sea exploration, Doppler radar and more. For more information on NSF impacts, please visit: nsf.gov/impacts.
- **RESEARCH SECURITY** – NSF is committed to safeguarding the integrity and security of science and engineering while also keeping fundamental research open and collaborative. NSF seeks to address an age of new threats and challenges through close work with our partners in academia, law enforcement, intelligence and other federal agencies. By fostering transparency, disclosure and other practices that reflect the values of research integrity, NSF is helping to lead the way in ensuring taxpayer-funded research remains secure. To learn more, please visit [NSF’s Research Security website](#).
- **FOSTERING INNOVATION** – Every year, NSF funds around 400 companies across nearly all technology areas to create prototypes and commercialize technologies. Learn more at seedfund.nsf.gov.