



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)

NORTH CAROLINA

● FAST FACTS



\$244,703,000

Total NSF Awards to North Carolina



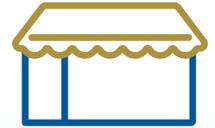
\$192,476,000

Invested in Fundamental Research in North Carolina



\$52,226,000

Invested in STEM Education in North Carolina



\$6,554,000

Invested in North Carolina Businesses

● TOP NSF-FUNDED ACADEMIC INSTITUTIONS

North Carolina State University
\$65,792,000

Duke University
\$55,896,000

University of North Carolina at Chapel Hill
\$27,509,000

● 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"



www.nsf.gov



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

NSF Regional Innovation Engines (NSF Engines) represent one of the single largest broad investments in place-based research and development in the nation's history, uniquely placing science and technology leadership as the central driver for regional economic competitiveness. North Carolina is home to two of the inaugural NSF Engines. The NSF Textile Innovation Engine in North Carolina, led by **The Industrial Commons**, aims to advance smart textiles and wearable technology. The NSF Engine is centered in the "textile belt" of North Carolina, which boasts the largest concentration of textile workers in the U.S. Additionally, the NSF Regenerative Medicine Engine in North Carolina, led by the **Wake Forest University School of Medicine** – home to the Wake Forest Institute for Regenerative Medicine, the world's largest regenerative medicine research facility – aims to provide the resources necessary to accelerate the transition of use-inspired regenerative medicine technologies into commercial products.



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

Mitigating the impact of a changing climate on sustainable agriculture and food production depends on the ability to cultivate plants that tolerate increasing heat, drought and extreme weather events while requiring fewer resources for growth. Advances in both fundamental and applied research have driven key innovations in plant science; however, fundamental discoveries in the lab rarely hold up under dynamic field conditions, falling short of meeting the escalating demand for effective translatable solutions. The application of artificial intelligence, machine learning and other data-driven approaches to the wealth of data generated by fundamental and applied plant scientists offers potential solutions to this problem. To address the grand challenge of sustainable agriculture and global food security, an NSF Research Traineeship award to **North Carolina State University**, in partnership with **Fayetteville State University**, is creating an interdisciplinary workforce at the convergence of plant science and AI, ready to accelerate the translation of knowledge from lab to field to market.



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

The United States faces the critical need to prepare students and the future workforce for advances in artificial intelligence. An NSF Discovery Research PreK-12 project at **North Carolina State University** is addressing this need by developing a curriculum to engage middle-school students in learning science and basic AI concepts and in developing related career interests. Using block-based visual programming, in which users "drag and drop" blocks representing coding concepts to form program sequences, the curriculum first introduces students to the most fundamental approaches in AI-based problem solving. Next, students learn how to use this knowledge to solve real world problems within an innovative learning environment, adapted to facilitate integrated science and AI problem solving. Over 900 middle-grade students will participate in the research.

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, **North Carolina** invested **\$20,281,000,000** 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.