



U.S. National
Science Foundation

TENNESSEE

FY 2023 Fast Facts



\$91,248,000

Total NSF Awards
to Tennessee



\$61,660,000

Invested in Fundamental
Research in Tennessee



\$29,488,000

Invested in STEM
Education in Tennessee



\$3,505,000

Invested in Tennessee
Businesses

Top NSF-funded Academic Institutions for FY 2023

Vanderbilt University
\$28,991,000

University of Tennessee,
Knoxville
\$24,695,000

Middle Tennessee State
University
\$7,135,000

NSF By The Numbers

The U. S. National Science Foundation (NSF) is an [\\$9.06 billion](#) independent federal agency created by Congress in 1950 to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense. NSF's vital role is to support basic research and researchers who create knowledge that transforms the future.

DID YOU KNOW?

NSF has funded the work of **261** Nobel Prize winners over 75 years.



\$9.06B
FY 2024
Total Enacted

93%
Funds research,
education and
related activities



11K
Awards



1.9K
Institutions



353K
People

**Data represents FY 2023 Actuals unless otherwise indicated*



www.nsf.gov

2415 Eisenhower Avenue | Alexandria, VA 22314



Expanding the Frontiers of Science

An NSF Expanding Capacity in Quantum Information Science and Engineering Track-1 award to **Middle Tennessee State University (MTSU)** is being used to establish a comprehensive Quantum Information Science and Engineering (QISE) program focused on research, education and broadening participation in quantum technologies. Partnering with the University at Buffalo, the project aims to optimize qubit-photon interactions crucial for efficient quantum information processing. The primary objective of the research being performed is to provide theoretical modeling and analysis on controlling quantum emitters using external field protocols. The goal of the project will be to integrate these control protocols into quantum network simulators, demonstrating tangible improvements in network performance. The project offers a wide range of learning opportunities, providing access to the undergraduate QISE curriculum, early research training, specialized workshops for underrepresented groups and mentoring opportunities. The project team will also conduct teacher training in QISE and engaging summer camps for high school students, igniting early awareness and interest in quantum science. The diverse program aims to establish MTSU as a thriving QISE research and education center in the region.



STEM Education and Broadening Participation

With support from the NSF Centers of Research Excellence in Science and Technology Historically Black Colleges and Universities Research Infrastructure for Science and Engineering program, a project at **Meharry Medical College (MMC)** aims to increase MMC's data science research capacity by creating a Center for Artificial Intelligence/ Machine Learning Research and Education and a doctoral program in data science. The project has four objectives: (1) enhance research infrastructure by upgrading the MMC data center with high-performance computing and networking capabilities; (2) establish a new doctorate program in Data Science at MMC; (3) recruit high-caliber faculty and scientists with expertise in AI/ML and data science research; and (4) increase the number of students from underrepresented minorities and women who attain a doctorate in data science. The project will enroll 12 students into the new doctoral program in data science in two cohorts of six students each. These efforts significantly contribute to increasing the diversity of individuals with a doctoral degree in data science and AI/ML prepared for both industry and academic careers.



Regional Innovation Engines

NSF Regional Innovation Engines (NSF Engines) Development Awards help organizations create connections and develop their local innovation ecosystem within two years to prepare a strong proposal for becoming a future NSF Engine. The Tennessee Technology-Enabled Advanced Mobility Engine, led by **The University of Tennessee**, is focused on advancing transportation electrification and digitization, reducing reliance on carbon-intensive energy sources, mitigating greenhouse gas emissions and creating a more equitable transportation system. With four automotive original equipment manufacturers producing electric vehicles and \$12 billion in investment in EV projects since 2017, this Development Award seeks to make Tennessee a leading state in the country for the EV supply chain.

NCSES

According to the [NSF National Center for Science and Engineering Statistics \(NCSES\)](#), which is housed in NSF, 35% of science, engineering and health doctorates conferred in Tennessee are made in life sciences. Visit Tennessee's science and engineering state profile to learn more!

- 26.15%** of Tennessee's [higher education degrees are concentrated in S&E fields.](#)
- 3.60%** of Tennessee's [workforce is employed in S&E occupations.](#)
- 7.55%** of Tennessee's [total employment is attributable to knowledge - and technology - intensive industries.](#)

Learn More

CHIPS & SCIENCE – The CHIPS and Science Act's investments in the U.S. National Science Foundation will help the United States remain a global leader in innovation. Implementation of this legislation will be key to ensuring that ideas, talent and prosperity are unleashed across all corners of the nation. [For more information, please visit the NSF CHIPS and Science website.](#)

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 the NSF Research Security website.](#)

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