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

TENNESSEE

FAST FACTS

$103,137,000
Total NSF Awards to Tennessee

$73,865,000
Invested in Fundamental Research in Tennessee

$24,941,000
Invested in STEM Education in Tennessee

$2,638,000
Invested in Tennessee Businesses

TOP NSF-FUNDED ACADEMIC INSTITUTIONS

University of Tennessee, Knoxville
$32,640,000

Vanderbilt University
$29,910,000

University of Tennessee at Chattanooga
$4,732,000

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*

Funded by the NSF Global Centers program, the NSF Global Center for Sustainable Bioproducts (NSF GCSB) at **The University of Tennessee** is an innovative partnership with funding agencies in Canada, Finland, Japan, Republic of Korea and the United Kingdom to jointly support use-inspired research addressing global challenges through the bioeconomy. Specifically, the NSF GCSB tackles the pressing challenge of converting and utilizing waste biomass for environmentally and economically sustainable bioplastics. The research focuses on four thrusts: sustainable bio-utilization of high-volume bioresources; intrinsic carbon negativity of the conversion process; economic sustainability and development of products compatible with the environment; and fundamental science and engineering of biorefining. The center also promotes an innovative educational program that reaches out to a large body of students across borders. Educational efforts include hybrid STEM outreach programs with international experts for K-12 students, research opportunities in biomanufacturing and related fields, and an interdisciplinary bioeconomy course.

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

The NSF Center for Advanced Materials & Manufacturing (NSF CAMM), an NSF Materials Research Science and Engineering Center at **The University of Tennessee**, focuses on the exploration, discovery and design of new materials with properties of critical societal importance for energy, transport and security advancements. NSF CAMM brings together experts from diverse fields to make groundbreaking discoveries in two areas: materials for future quantum technologies and advanced materials for extreme conditions. To tackle these challenges, CAMM utilizes the latest advances in artificial intelligence together with neutron scattering, materials synthesis and modeling. CAMM's first interdisciplinary research group (IRG) is dedicated to accelerating the understanding, design and control of quantum materials and systems through the use of AI, with advances expected in the design of materials for energy harvesting, low-power electronics, quantum computing and novel sensing applications. CAMM's second IRG focuses on developing materials that can withstand extreme temperatures and pressure needed for nuclear fusion and hypersonic defense systems.

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

Through the NSF Scholarships in Science, Technology, Engineering, and Mathematics Program, **Tennessee Technological University (TTU)** will fund scholarships over six years to 45 full-time undergraduate students pursuing degrees in STEM. Pulling from the Upper Cumberland region of Tennessee, TTU hopes to increase STEM degree completion for low-income, high-achieving undergraduates with demonstrated financial need from economically distressed rural communities. The project promotes student entrance, retention and success in STEM majors and careers by providing early, targeted and continuing academic support, including redesigned first-year math classes, multi-layered mentoring, regular cohort-building, undergraduate research and career-based projects. Graduating students will contribute to the national need for well-educated scientists, mathematicians, engineers and technicians.

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, **Tennessee** invested **$7,922,000,000** 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.