U.S. National Science Foundation

CONNECTICUT

FY 2023 Fast Facts

$77,527,000
Total NSF Awards to Connecticut

$53,491,000
Invested in Fundamental Research in Connecticut

$18,187,000
Invested in STEM Education in Connecticut

$550,000
Invested in Connecticut Businesses

Top NSF-funded Academic Institutions for FY 2023

Yale University	University of Connecticut	University of Connecticut Health Center
$35,283,000	**$29,586,000**	**$6,538,000**

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*

Expanding the Frontiers of Science

An NSF Research Traineeship (NRT) award to **Yale University** is being used to create an interdisciplinary doctoral program on quantum materials and to prepare trainees for impactful professional careers in the field of quantum materials science and engineering. This program will train 30 doctoral students, including 17 funded trainees, from the disciplines of applied physics, chemistry, computer science, mechanical engineering and materials science and physics. The research plan of this NRT program focuses on three related themes: (1) understanding the growth processes of topological crystalline nanowires at the atomic scale, (2) the creation and engineering of nanowire-based topological interconnects and understanding their properties and (3) topological superconducting nanowires for quantum bit storage. Trainees become experts in creating, using and understanding quantum materials, while gaining firsthand knowledge of developing skills in team science, science communication, outreach, teaching and mentoring. A key feature of the traineeship is a new flagship course containing hands-on modules allowing trainees to analyze data from various NRT program-related research laboratories, which introduces quantum materials science and engineering.

STEM Education and Broadening Participation

Through an NSF Advanced Technological Education award, **Tunxis Community College** will work with partners from industry, business associations, professional organizations, government agencies and educators to develop the National Center for Next Generation Manufacturing (NCNGM), which will help the nation meet its advanced manufacturing workforce needs. The NCNGM has four goals: (1) enhance and solidify relationships and communication among educators, businesses, industry, government, military, trade associations and economic development agencies to broaden and strengthen efforts to prepare qualified advanced manufacturing technicians; (2) implement a repository of educational materials that integrate industry-driven competencies needed to support Industry 4.0 and emerging learning technologies including the use of open educational resources and online methodologies; (3) support professional development opportunities for educators to implement promising practices that ensures students are competent in current and future manufacturing technology; and (4) support a diverse technician workforce through regional outreach, recruitment, mentoring and dissemination initiatives.

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. An award led by the **University of Connecticut** and **Yale University** is focused on making Connecticut America's accelerator for quantum technologies. The team develops strategies for use-inspired research and development in two broad, interrelated topics: 1) quantum materials, hardware, computers and devices; and 2) quantum software and algorithms, involving world-class research infrastructure and faculty in applied sciences, engineering and business/entrepreneurship. The region's industries will contribute to the effort as adopters and end users and will leverage their R&D capabilities to support the Development Award.

NCSES

According to the NSF National Center for Science and Engineering Statistics (NCSES), which is housed in NSF, 40% of science, engineering and health doctorates conferred in Connecticut are made in life sciences. Visit Connecticut's science and engineering state profile to learn more!

35.78% of **Connecticut's** higher education degrees are concentrated in S&E fields.

5.61% of **Connecticut's** workforce is employed in S&E occupations.

7.99% of **Connecticut'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.