National Science Foundation

CONNECTICUT

FY 2021 Fast Facts

$97,262,000
Total NSF
Awards to
Connecticut

$54,396,000
Invested in
Fundamental Research
in Connecticut

$22,817,000
Invested in
STEM Education
in Connecticut

$2,112,000
Invested in
Connecticut startups

Top NSF-funded Academic Institutions for FY 2021

$35,948,000
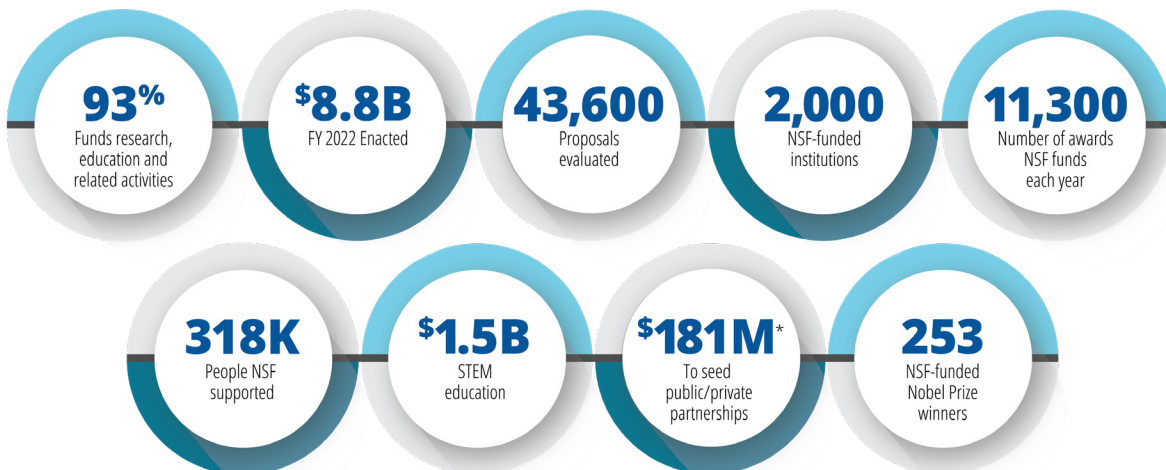Yale University

$22,727,000
University of Connecticut

$20,259,000
University of Connecticut
Health Center

NSF By The Numbers

The National Science Foundation (NSF) is an $8.8 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.

93%
Funds research,
education and
related activities

$8.8B
FY 2022 Enacted

43,600
Proposals
evaluated

2,000
NSF-funded
institutions

11,300
Number of awards
NSF funds
each year

318K
People NSF
supported

$1.5B
STEM
education

$181M*
To seed
public/private
partnerships

253
NSF-funded
Nobel Prize
winners

Data represents FY 2021 Actuals unless otherwise indicated.
*Corresponds to NSF investments initiated in FY 2021 and spanning multiple years.

NSF-funded COVID-19 Research and Recovery

NSF-funded researchers at **Yale University** will test the hypothesis that bats with nasal anatomy similar to humans have a specific composition to the lining of their respiratory tract that's evolved to prevent viruses, such as SARS-CoV-2, from infecting them. To understand how the lining, or epithelium, is modified in bats compared to humans, this project will compare the proteins, DNA and histology of bats to those of humans and mice. This project proposes a new approach to understand how bats are resistant to respiratory viruses such as those related to SARS-CoV-2. By generating a multidimensional study of the anatomy and physiology of the upper respiratory tract of bats, the proposed work will enable researchers to better understand how viruses enter the body and infect or fail to infect their hosts. This project will also allow health agencies around the world to better survey bat populations and prevent future pandemics similar to COVID-19. In addition, this project supports a graduate student and postdoctoral fellow to increase training in STEM fields.

STEM Education

With support from NSF, and led by **Northwestern Connecticut Community College**, the Engaging Students project brings 7th-12th grade teachers, community college faculty, students and industry members together to develop a strong technical workforce. The project aims to increase STEM interest and skills of underrepresented and socioeconomically disadvantaged students in the Torrington School District. Students participate in college visits and summer camps to help them understand career opportunities for technicians. Community college students learn about careers as technicians by participating in industry externships and refine their skills by serving as teaching assistants and mentors in camps and classrooms.

Research Driving Innovation

Tunxis Community-Technical College is home to the Regional Center for Next Generation Manufacturing (RCNGM) and Next Generation Manufacturing Resource Center, supported by NSF's Advanced Technological Education program. With an emphasis on two-year institutions of higher education, the ATE program focuses on the education of technicians for the high-technology fields that drive the nation's economy. The development of a diverse, globally competitive advanced manufacturing workforce is critical to U.S. stability and growth. Major areas of focus for RCNGM have been to change negative perceptions of manufacturing careers and to increase the participation and success of historically underrepresented minorities, women and veterans in the technical workforce. RCNGM has created nationally recognized materials for educators, career counselors, students and parents that focus on choosing community colleges as a next step to high-paying careers in manufacturing. As an ATE Resource Center, RCNGM will broaden its partnerships by expanding community college/industry partnerships.

Infrastructure

Yale University is a core partner institution of the Engineering Research Center for Quantum Networks, which seeks to lay the technical and social foundations of the quantum internet.

NCSES

According to the National Center for Science and Engineering Statistics (NCSES), which is housed in NSF, Connecticut ranks **15th** in the nation for Business R&D performance. Visit Connecticut's science and engineering state profile to learn more!

- **5.61%** of Connecticut's workforce are employed in S&E occupations.
- **34.64%** of Connecticut's higher education degrees are concentrated in S&E fields.

Learn More

COVID RELIEF - Congress provided NSF with funding to prevent, prepare for, and respond to COVID-19 in the CARES Act of 2020 and the American Rescue Plan (ARP) Act of 2021. For more information on NSF-funded COVID-19 research and recovery, visit NSF's award database for CARES Act and ARP awards, and NSF's Toolkit for COVID funding updates.

NSF FACT SHEETS – NSF provides fact sheets about the agency and its bold investments in basic research. These fact sheets profile NSF investments in research across all fields of science and engineering, including quantum, artificial intelligence, and advanced manufacturing, and the NSF-supported research and computing infrastructure powering the U.S. response to COVID-19.

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