FY 2022 Fast Facts

- **$90,964,000** 
  Total NSF Awards to Connecticut

- **$61,111,000** 
  Invested in Fundamental Research in Connecticut

- **$18,722,000** 
  Invested in STEM Education in Connecticut

- **$1,831,000** 
  Invested in Connecticut Businesses

Top NSF-funded Academic Institutions for FY 2022

- University of Connecticut: $34,042,873
- Yale University: $30,687,273
- University of Connecticut Health Center: $11,564,873

NSF By The Numbers

The National Science Foundation (NSF) is a **$9.5 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.

- **11K** 
  Number of awards NSF funds each year

- **$9.9B** 
  FY 2023 Enacted

- **39K** 
  Proposals evaluated

- **$1.6B** 
  STEM education

- **1.8K** 
  NSF-funded institutions

- **93%** 
  Funds research, education and related activities

- **352K** 
  People NSF supported

- **258** 
  NSF-funded Nobel Prize winners

Data represents FY 2022 Actuals unless otherwise indicated.
Expanding the Frontiers of Science

Driven by the movement toward the decentralized internet, or Web 3.0, recent cryptocurrency systems build decentralized and transparent markets for trading digital resources. Yet, there is a big gap between the promise of these markets and their practical viability. Through an NSF Secure and Trustworthy Cyberspace award, the University of Connecticut is introducing secure frameworks that are specifically for promoting scalability and efficiency of blockchain-based resource markets, but generic enough to be used with any service type. The project’s novelties include developing a secure architecture and protocols for sidechains (secondary chains tied to a main blockchain) that have a dependence relation with the mainchain and permit exchanging arbitrary data. The project also develops a provable security paradigm for formalizing and analyzing security of resource markets and sidechains. Impacts include achieving secure and efficient schemes that permit utilizing the advantages of blockchains in real-world applications, developing foundational understanding of sidechain covering new dependency models and previously unexplored use cases, and promoting provable security of large-scale distributed systems.

STEM Education

NSF's CyberCorps® Scholarship for Service (SFS) program is designed to recruit and train the next generation of information technology professionals to meet the needs of the cybersecurity mission for federal, state, local and tribal governments. All scholarship recipients must work after graduation for a government organization in a position related to cybersecurity. The University of New Haven was recently awarded a CyberCorps® SFS grant to establish Connecticut's first CyberCorps SFS program that produces the next generation of Super Cyber Operatives that will be ready to enter the government's cybersecurity workforce. By leveraging existing infrastructure and initiatives, the program focuses on selecting undergraduate seniors in their first semester from the Cyber Operations paths to become undergraduate SFS Scholars. These students then complete their Master of Science degrees as graduate SFS scholars in cybersecurity & networks.

Regional Innovation Engines

The NSF Engines program envisions fostering flourishing regional innovation ecosystems across the country, providing a unique opportunity to spur economic growth in regions that have not fully participated in the technology boom of the past few decades. The NSF Engines program uniquely harnesses the nation's science and technology research and development enterprise and regional-level resources. NSF Engines can catalyze robust partnerships rooted in scientific and technological innovation to positively impact the economy within a geographic region, address societal challenges, and advance national competitiveness. Find potential NSF engines in your state.

Infrastructure

Through a Major Research Instrumentation award, Yale University will design and implement PARAGON, an instrument of control systems for superconducting circuit-based quantum computers. PARAGON will advance the nation's research capabilities in quantum computing, enabling operational tests of error-corrected algorithms and accelerating the arrival of fault-tolerant quantum computing.

NCSES

According to the 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 are employed in S&E occupations.
- 7.99% of Connecticut's total employment is attributable to knowledge- and technology-intensive industries.