ILLINOIS

FY 2021 Fast Facts

- **$315,807,000**
  - Total NSF Awards to Illinois

- **$276,196,000**
  - Invested in Fundamental Research in Illinois

- **$39,611,000**
  - Invested in STEM Education in Illinois

- **$7,555,000**
  - Invested in Illinois startups

Top NSF-funded Academic Institutions for FY 2021

- **$107,577,000**
  - University of Illinois Urbana-Champaign

- **$76,492,000**
  - University of Chicago

- **$53,670,000**
  - Northwestern University

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
**NSF-funded COVID-19 Research and Recovery**

The Illinois Institute of Technology and Rush-Presbyterian-St. Luke’s Medical Center in Chicago are conducting a collaborative research project seeking to determine the cause of and, using analytical devices, measure the molecular composition of volatile organic compounds (VOCs) released by infected bronchial epithelial cells in individuals with COVID-19. Fundamental knowledge of the biological mechanisms that generate VOC signals in viral infected lung cells and engineering tools and instrumentation that can capture and analyze the VOCs could provide guidance for design of rapid, non-invasive, point-of-care tests that can detect SARS-CoV-2 infection in the U.S. population.

**STEM Education**

An NSF-funded Advanced Technological Education, or ATE, project at Lewis & Clark Community College will develop a diesel/biodiesel certificate track to address regional needs for diesel technicians with the technical skills to support current and emerging agricultural and urban applications. With an emphasis on two-year colleges, the ATE program focuses on the education of technicians for the high technology fields that drive the nation’s economy. The program involves partnerships between academic institutions and industry to promote improvement in the education of science and engineering technicians at the undergraduate and secondary school levels.

**Research Driving Innovation**

The University of Chicago leads the Institute for Quantum Sensing in Biophysics and Bioengineering, one of two NSF Quantum Leap Challenge Institutes launched in 2021, building on the three announced in 2020. The institute will identify novel biological quantum sensing systems and develop next-generation tools for observation and discovery. It will also partner with Chicago Public Schools to establish a Quantum Academy program to provide K-12 students with opportunities to learn the foundations of quantum science from the institute’s lead researchers. With science currently undergoing a quantum revolution, NSF is making large-scale investments into centers that further the understanding of basic quantum phenomena — fundamental discoveries that will translate into transformative technologies.

**Infrastructure**

The University of Illinois at Urbana-Champaign’s National Center for Supercomputing Applications, through the NSF-supported Blue Waters supercomputer and XSEDE virtual organization, has played a key role in fighting the pandemic through the COVID-19 High-Performance Computing Consortium, which was spearheaded by the White House, NSF, IBM, and DOE.

**NCSES**

According to the National Center for Science and Engineering Statistics (NCSES), which is housed in NSF, Illinois ranks 7th in the nation for Utility patents issued to state residents. Visit Illinois’ science and engineering state profile to learn more!

- 4.71% of Illinois’ workforce are employed in S&E occupations.
- 30.25% of Illinois’ 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.