



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](https://www.nsf.gov/75years)

IOWA

● FAST FACTS



\$66,670,000

Total NSF Awards
to Iowa



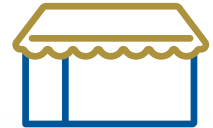
\$64,267,000

Invested in Fundamental
Research in Iowa



\$2,403,000

Invested in STEM
Education in Iowa



\$443,000

Invested in Iowa
Businesses

● TOP NSF-FUNDED ACADEMIC INSTITUTIONS

Iowa State University

\$42,774,000

University of Iowa

\$17,612,000

Morningside University

\$3,162,000

● 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 through the NSF EPSCoR Research Infrastructure Improvement Program Track-1, **Iowa State University of Science and Technology** leads a project to position Iowa as an advanced biomanufacturing leader by adapting and modernizing the concept of “chemurgy,” i.e., applied chemistry with a focus on producing industrial products from agricultural material. The Chemurgy 2.0 project — administered by Iowa State University in collaboration with the University of Iowa, the University of Northern Iowa, Dordt University and Central College — is advancing this vision by building and integrating research capacity in biosciences and advanced manufacturing. Specifically, the project focuses on the manufacturing of proteins, vaccines therapeutics, biochemicals and biofibers; 3D printing and composite fabrication processes that utilize biochemicals and biofibers; and applications of data science and artificial intelligence. The development of plastics for additive manufacturing, fibers for flexible and rigid materials and proteins for diagnostics and therapeutics will benefit society by providing bio-based and sustainable materials for health and consumer applications.



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

Recent climate patterns have caused more frequent and more extreme weather events, which incur more damage to electric power utilities than ever before. These changes have led to prolonged outages with severe social and economic consequences, especially for rural utilities and communities. A new project at **Iowa State University**, funded through the NSF Responsible Design, Development, and Deployment of Technologies program, is introducing a new digital infrastructure to help utilities address the challenges associated with maintaining the operation and service of electric power utilities. The high-fidelity simulation platforms and infrastructure enable rural utilities to take informed preventive and corrective actions that assess the power system performance and possible risks during natural hazards. The project team works directly with a wide spectrum of stakeholders through workshops, focus group meetings and surveys. In addition, educational modules and dissemination activities assist in enhancing public knowledge and preparing students for future careers that involve responsible design, development and deployment of technologies.



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

Science inherently involves a level of uncertainty: New information and data can change theories, predictions often come up short and measurements can be imprecise. To help undergraduate students develop a more complex understanding of scientific uncertainty, **Morningside University** is participating in the NSF Improving Undergraduate STEM Education initiative to develop methodologies for introducing students to scientific uncertainty in science classes. The project begins with a workshop offered to current faculty members at Morningside University which trains them in methods in teaching scientific uncertainty. Participating faculty members then design an uncertainty module to integrate into their courses. Enhanced understanding of scientific uncertainty will not only help students to better understand the nature of science but also help them communicate scientific findings more effectively with the broader public. The project will culminate in a guide designed to help faculty members at institutions across the country implement similar concepts in their own courses.

COMPETITIVE RESEARCH

IOWA is one of 28 U.S. states or territories under the NSF Established Program to Stimulate Competitive Research (EPSCoR). For more information, visit [IOWA'S EPSCoR state web page](#).

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, **Iowa** invested **\$4,106,000,000** 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.