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.

NEBRASKA

• FY 2021 Fast Facts

$39,216,000  Total NSF Awards to Nebraska

$29,016,000  Invested in Fundamental Research in Nebraska

$10,200,000  Invested in STEM Education in Nebraska

• Top NSF-funded Academic Institutions for FY 2021

$36,334,000  University of Nebraska-All Campuses

• NSF By The Numbers

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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.

www.nsf.gov

2415 Eisenhower Avenue | Alexandria, VA 22314
NSF-funded COVID-19 Research and Recovery

Researchers at the University of Nebraska Medical Center are developing an understanding of how COVID-19 can be transmitted by infected persons into their environment throughout the course of their disease. Because COVID-19 can manifest as severe or mild (even asymptomatic) respiratory disease and can progress to severe acute respiratory distress syndrome throughout infection, the ways in which the disease is transmitted may vary from person to person and change throughout the course of illness. Measurements will be made using a suite of aerosol instrumentation to measure the size of aerosol particles in the patient environment, size fractionated viral aerosol concentration, and aggregated viral aerosol load. The relationships between clinical symptoms, patient viral load, the function of body systems, and aerosol shedding of virus will be examined across all individuals. The combined data set will increase knowledge for COVID-19 transmission and provide knowledge for use in the public health care system to improve safe working conditions for health care workers.

STEM Education & Broadening Participation

Through an NSF Scholarships in Science, Technology, Engineering, and Mathematics program award, the College of Saint Mary, an all-women's college, is supporting retention and graduation by providing scholarships to high-achieving students with demonstrated financial need who are pursuing bachelor's degrees in biology, chemistry or mathematics. The project provides intentional four-year plans for each cohort that will help prepare students for success in STEM courses, inspire them to explore different careers in STEM fields, provide research and/or work experience with faculty and industry partners, and aid students with job and/or graduate school placement.

Research Driving Innovation

In the “second quantum revolution,” quantum mechanics is applied to information theory and information technology. The state of Nebraska is participating in the second quantum revolution by launching an interdisciplinary, interdepartmental and multi-campus research and education cluster on Emergent Quantum Materials and Technologies, or EQUATE, to increase jurisdictional competitiveness in quantum science and technologies. The NSF-supported project, led by the University of Nebraska-Lincoln, focuses on research and workforce development to advance knowledge on topics related to quantum materials, technologies and computation. EQUATE converges for the first-time the complementary quantum science and technology expertise of faculty researchers across the four Nebraska research institutions, the University of Nebraska-Lincoln, the University of Nebraska-Omaha, the University of Nebraska-Kearney and Creighton University, establishing collaboration and feedback between theory and experiment to guide discoveries and expedite the findings of new emergent quantum materials and phenomena. The project also introduces quantum science topics and concepts to various levels of participants, from K-12 students and their teachers to university faculty, to train the next generation of quantum scientists and engineers across participating institutions and throughout Nebraska.

EPSCoR

COMPETITIVE RESEARCH | Nebraska is one of 28 U.S. states or territories under NSF’s Established Program to Stimulate Competitive Research (EPSCoR). Over $9,460,000 in awards have been made to Nebraska academic institutions through EPSCoR in FY 2021. For more information, visit Nebraska’s EPSCoR state web page.

NCSES

According to the National Center for Science and Engineering Statistics (NCSES), which is housed in NSF, 47% of Science, Engineering and Health doctorates conferred in Nebraska are made in Life sciences.

- 4.59% of Nebraska’s workforce are employed in S&E occupations.
- 27.96% of Nebraska’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.

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