



U.S. National
Science Foundation

CALIFORNIA

FY 2023 Fast Facts



\$1,076,116,000

Total NSF Awards
to California



\$870,536,000

Invested in Fundamental
Research in California



\$178,801,000

Invested in STEM
Education in California



\$58,787,000

Invested in California
Businesses

Top NSF-funded Academic Institutions for FY 2023

University of California,
Berkeley

\$94,902,000

California Institute
of Technology

\$80,203,000

University of California,
San Diego

\$78,175,000

NSF By The Numbers

The U. S. National Science Foundation (NSF) is an [\\$9.06 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.

**DID YOU
KNOW?**

NSF has funded the
work of **261** Nobel Prize
winners over 75 years.



\$9.06B

FY 2024
Total Enacted

93%
Funds research,
education and
related activities



11K
Awards



1.9K
Institutions



353K
People

**Data represents FY 2023 Actuals unless otherwise indicated*



www.nsf.gov

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Expanding the Frontiers of Science

The NSF Artificial Intelligence Research Institutes (AI Institutes) advance foundational AI research that promotes ethical and trustworthy AI systems and technologies, develop novel approaches to cybersecurity, contribute to innovative solutions to climate change, expand our understanding of the brain and leverage AI capabilities to enhance education and public health. The **AI Institute for Agent-based Cyber Threat Intelligence and Operation (ACTION Institute) at the University of California, Santa Barbara** is developing a novel approach that leverages AI — informed by and working with experts in security operations — to perform security tasks rapidly and at scale, anticipate the moves of an adversary and take corrective actions to protect the security of computer networks. In this approach, AI-enabled intelligent security agents cooperate with humans across the cyber-defense life cycle. Over time, these intelligent security agents can improve their domain knowledge; become increasingly robust and effective in the face of changes in the adversaries' modes of operation; compose defense strategies and tactical plans in the presence of uncertainty; collaborate with other AI and with humans for mutually complementary teaming; and adapt to unfamiliar and novel attacks.



STEM Education and Broadening Participation

The global demand for workers in the semiconductor industry is projected to grow to 100,000 per year until 2030 to meet production needs. The Workforce Innovation and Inclusion in Semiconductors and Emerging Research Areas (WIISER) project at the **University of California** campuses at **Berkeley, Davis, Merced and Santa Cruz**, funded through the NSF Experiential Learning for Emerging and Novel Technologies program, seeks to engage undergraduate students in industry internships near the beginning of their secondary education. WIISER is expanding and diversifying the available workforce for the semiconductor industry by offering two tracks of experiential learning and professional development programs. One group of students works in the Berkeley Marvell Nanofabrication Lab over an academic year and through the summer (NanoLab Fellows); another group is placed in eight-week paid summer internships with semiconductor companies (Summer Fellows). All fellows participate in weekly workshops during the summer to boost their job-readiness skills and overcome latent challenges, such as imposter syndrome. Students are assigned a mentor who provides expertise and guidance as the students navigate their internship and career pathways in the semiconductor industry.



Regional Innovation Engines

NSF Regional Innovation Engines (NSF Engines) Development Awards help organizations create connections and develop their local innovation ecosystem within two years to prepare a strong proposal for becoming a future NSF Engine. Spanning the lands of 25 **Southern California Tribal Chairman's Association (SCTCA)** member tribes, the Tribal Energy Innovation Accelerator project addresses critical gaps affecting tribes' access to innovative clean energy technologies and development opportunities by providing dedicated central resources, including staff and partners with full skills and knowledge to support research and development across the SCTCA region. Tangible translational outcomes include innovative clean energy equipment products, tribal entrepreneurial businesses and workforce development and job training services.

NCSES

According to the [NSF National Center for Science and Engineering Statistics \(NCSES\)](#), which is housed in NSF, California ranks 1st in the nation for science, engineering and health doctorate recipients. Visit California's science and engineering state profile to learn more!

- 42.22%** of **California's higher education degrees are concentrated in S&E fields.**
- 6.17%** of **California's workforce is employed in S&E occupations.**
- 9.13%** of **California's total employment is attributable to knowledge - and technology - intensive industries.**

Learn More

CHIPS & SCIENCE – The CHIPS and Science Act's investments in the U.S. National Science Foundation will help the United States remain a global leader in innovation. Implementation of this legislation will be key to ensuring that ideas, talent and prosperity are unleashed across all corners of the nation. [For more information, please visit the NSF CHIPS and Science website.](#)

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 the NSF Research Security website.](#)

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