



U.S. National
Science Foundation



MASSACHUSETTS

FY 2023 Fast Facts



\$572,305,000

Total NSF Awards
to Massachusetts



\$468,194,000

Invested in Fundamental
Research in Massachusetts



\$102,865,000

Invested in STEM Education
in Massachusetts



\$39,122,000

Invested in Massachusetts
Businesses

Top NSF-funded Academic Institutions for FY 2023

Woods Hole Oceanographic
Institute

\$137,825,000

Massachusetts Institute of
Technology

\$78,522,000

Harvard University

\$58,056,000

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

An NSF Expanding Capacity in Quantum Information Science and Engineering Track-2 award to the **University of Massachusetts at Boston (UMass Boston)** aims to expand UMass Boston's existing academic and research activities in QISE and make UMass Boston a leading public research institution in this field. Research activities include the exploration of quantum correlated and entangled states and the development of methodologies to manipulate and mitigate errors in quantum bits, the foundational components of quantum computers, while incorporating machine learning-assisted technologies. Results deriving from this project will inform the design of future large-scale quantum processors. The project expands UMass Boston's efforts in academics and workforce development and promotes a symbiotic relationship with Boston area companies and academic institutions by providing experimental capacity for the growing local quantum computing ecosystem and creating training opportunities for UMass Boston undergraduate and graduate students. The research team is engaged in several education and workforce activities, ranging from the quantum information certificate and future QISE graduate courses to outreach activities to internships and training with industry partners in Greater Boston.



STEM Education and Broadening Participation

The Urban Massachusetts Louis Stokes Alliance for Minority Participation (UM-LSAMP) Alliance, funded through the NSF LSAMP program, aims to examine the impact of a geographically distributed, digitally connected mentoring network on the retention of underrepresented and racially minoritized (URM) students in STEM disciplines at seven public institutions in Eastern Massachusetts: three **University of Massachusetts four-year universities (Boston, Dartmouth and Lowell)** and four **regional community colleges (Bristol, Bunker Hill, Middlesex and Roxbury)**. Through its inclusive multigenerational mentoring framework, the UM-LSAMP Alliance provides URM students with robust: (1) research mentorship experiences that advance social change through science, technology, engineering and mathematics, (2) career enrichment mentorship through STEM internship opportunities and virtual mentorship with LSAMP alumni STEM professionals, as well as (3) transitional mentorship and student success support to strengthen persistence into and through STEM degree programs and careers. The project's research will probe how multigenerational mentorship influences STEM belonging, identity development and persistence among UM-LSAMP community college students and clarify how mentored research experiences, steeped in an equity ethic frame, promote URM students' principled commitment to addressing racial inequities through STEM.



Regional Innovation Engines

U.S. National Science Foundation 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. The program seeks regional teams rooted within industry, academia, government, nonprofits, civil society and communities of practice to catalyze and foster innovation ecosystems across the U.S. to advance critical technologies, address national and societal challenges, promote economic growth and job creation, spur sustainable regional innovation and nurture diverse talent.

To stay in the loop about future funding calls and opportunities to engage, [sign up for the NSF Engines newsletter](#).

NCSES

According to the [NSF National Center for Science and Engineering Statistics \(NCSES\)](#), which is housed in NSF, Massachusetts ranks 2nd in the nation for SBIR awards. Visit Massachusetts's science and engineering state profile to learn more!

40.69% of Massachusetts' [higher education degrees are concentrated in S&E fields](#).

7.51% of Massachusetts' [workforce is employed in S&E occupations](#).

11.02% of Massachusetts' [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.