



National
Science
Foundation



BROADENING PARTICIPATION IN SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

“World-class science is shaped by a wide range of perspectives. Our nation needs every person who is interested in pursuing a STEM career to be able to do so.”

— Dr. Sethuraman Panchanathan, Director of the U.S. National Science Foundation.

The U.S. National Science Foundation has long championed efforts that expand opportunities in science, technology, engineering and mathematics to people of all racial, ethnic and gender identities, across geographic and socioeconomic backgrounds, and to people with disabilities. NSF’s [Broadening Participation Portfolio](#) includes strategic partnerships and investments across NSF, which together address five focus areas.

EMPOWERING A DIVERSE STEM WORKFORCE



NSF supports targeted investments in education to broaden participation in STEM and expand the effectiveness and sustainability of existing diversity and inclusion programs. [Inclusion across the Nation of Communities of Learners of Underrepresented Discoveries in Engineering and Science](#), or **NSF INCLUDES**, is a national network of public and private partnerships designed to scale diversity efforts that expand education pathways into the STEM community. The [Louis Stokes Alliances for Minority Participation](#), or **LSAMP**, is an alliance-based initiative designed to increase the number of STEM graduates from underrepresented communities and help students successfully transition into the STEM workforce. The [Disability and Rehabilitation Engineering](#), or **DARE**, program supports research that will improve the quality of life of persons with disabilities through the development of new technologies, devices or software. The [Mathematical and Physical Sciences Ascending Postdoctoral Research Fellowship](#), or **MPS-Ascend**, program supports postdoctoral fellows who will broaden the participation of groups that are underrepresented in MPS fields. NSF’s [Hispanic-Serving Institutions](#), or **HSI**, program works to increase the recruitment, retention and graduation rates of students pursuing degrees in STEM. The [International Research Experiences for Students](#), or **IRES**, program contributes to development of a diverse, globally engaged workforce with world-class skills.

BUILDING RESEARCH INFRASTRUCTURE AND CAPACITY ACROSS THE NATION



NSF provides students and scientists across the United States with the tools and infrastructure they need to drive innovation and discovery. The [Established Program to Stimulate Competitive Research](#), or **EPSCoR**, invests in research and capacity building in U.S. states and territories that have historically received smaller amounts of federal research and development funds. The [Major Research Instrumentation](#), or **MRI**, program trains a diverse workforce in the design and implementation of science and engineering infrastructure, which provides mid-level research capabilities that are vital to U.S. global competitiveness. The [Tribal Colleges and Universities Program](#), or **TCUP**, provides awards to promote high-quality science education as well

as transformative capacity-building or community engagement projects. [Historically Black Colleges and Universities – Excellence in Research](#), or **HBCU-EiR**, strengthens research capacity at HBCUs and expands opportunities for HBCU researchers across all STEM disciplines.

ADVANCING THE SCIENCE OF BROADENING PARTICIPATION



NSF invests in cutting-edge research to inform successful broadening participation strategies. The [Broadening Participation in Engineering](#), or **BPE**, program seeks to support the science of broadening participation and equity in engineering, including collaborative endeavors that foster the professional development of a diverse and well-prepared engineering workforce. The [Geoscience Opportunities for Leadership in Diversity](#), or **GOLD**, program supports the mission of achieving greater and more systemic diversity by creating a network of champions who can implement evidence-based best practices and resources. [SBE Science of Broadening Participation](#), or **SBE SBP**, helps inform educators, employers and policymakers on factors that enhance or hinder broadening participation efforts across every sector,

including STEM. [Broadening Participation in Computing](#), or **BPC**, encourages meaningful actions that address the long-standing underrepresentation of various populations in computing and closely related disciplines.

PROMOTING INCLUSIVE OUTREACH AND ENGAGEMENT



NSF supports community-led workshops that bring together diverse stakeholders to discuss barriers affecting underrepresented groups in STEM and strategies for removing them. [Leading Culture Change through Professional Societies of Biology](#), or **BIO-LEAPS**, aims to advance diversity, equity and inclusion in the biological sciences broadly by leveraging the leadership, broad reach and unique ability of professional societies to create culture change in the life sciences. NSF conducts workshops and studies with the National Academies of Sciences, Engineering and Mathematics, which have resulted in [reports](#) that support women in STEM careers.

DEVELOPING POLICY AND SUPPORT STRUCTURES



Through its policies and practices, NSF works to ensure STEM workplaces are free of discrimination. The [Committee on Equal Opportunities in Science and Education](#) advises NSF on how to advance its policies and activities to encourage full participation of underrepresented groups in the STEM enterprise. NSF's [Office of Equity and Civil Rights](#), or **OECR**, helps to ensure that all NSF-funded research and learning environments and the NSF agency are free from sexual harassment, harassment based on ethnicity, race, gender, or disability, and other forms of harassment.

Learn more about NSF's broadening participation work at <http://www.NSF.gov/BroadeningParticipation>