Program Summary by Sponsor

Please use the hyperlinks to identify opportunities by sponsor

Department of Defense

Science, Technology, Engineering and Mathematics (STEM) Program
DOD - AFOSR
Target audience: K-12, undergraduates, graduate students, veterans
Goals: Training, outreach, program development in STEM
https://www.grants.gov/search-results-detail/351854
Deadline: 4/12/2024
Amount Upper: $450,000 USD
Amount Note: Proposals may not exceed three (3) years in duration; that is, one (1) Base Year with two (2) Option Years. Proposals may not exceed $150,000 in funding per year; that is, the sum of $450,000 for all three years.
The Air Force Office of Scientific Research (AFOSR) seeks a broad range of applications for augmenting existing and/or developing innovative solutions that directly maintain and/or cultivate a diverse, world-class Science, Technology, Engineering and Mathematics (STEM) workforce to maintain the U.S. Air Force and Space Force's technological superiority. The goal of proposed efforts must provide solutions that establish, build, and/or maintain STEM educational pathways and workforce opportunities for diverse U.S. citizens directly relevant to AFOSR science and technology areas.

As the capacity of the Department of the Air Force (DAF) Science and Technology (S&T) workforce is interconnected with STEM education and outreach, AFOSR recognizes the need to support efforts that can jointly improve STEM student outcomes and align education and outreach efforts with DAF S&T current and future workforce needs. This announcement explicitly encourages projects that improve the capacity of education systems and communities to create impactful STEM educational experiences for students of all ages and the air and space related workforce. Projects must aim to increase engagement in STEM, from students to the current workforce, and enhance people with needed DAF STEM skills, knowledge and abilities. AFOSR encourages applications to utilize current STEM education research for informing project design and advancing STEM careers and opportunities of DAF relevance.

This FOA is specifically seeking STEM education and outreach projects that address scientific and technical areas identified in the following thrust areas. Project scope may range in size and complexity. While not a formal requirement or program focus of this FOA, applicants are strongly encouraged to consider under-represented and under-served populations including women and minorities in project plans. Special audience priority areas may include, but not be limited to, military connected students, veteran initiatives, and education systems integral to DAF science and technology.

AFOSR STEM topic areas include:

Engineering and Complex Systems
Information and Networks
Physical Sciences
Chemistry
Biological Sciences

STEM interests include a broad range of STEM educational and training opportunities for career and workforce development, including but not limited to:

- Internships for veterans and underrepresented groups in STEM
- Professional development opportunities
- Programs to stimulate analytical/thinking skills
- Development of educational resources
- STEM education outreach activities
- Education and community engagement workshops
- Target age groups may require different levels of educational tools
- Coordinating and partnering with activities and organizations that support DAF research areas

DoD Research and Education Program for Historically Black Colleges and Universities and Minority-Serving Institutions (HBCU/MI)
DOD - Army
Target audience: undergraduates
Goal: Training, research
https://www.grants.gov/web/grants/view-opportunity.html?oppId=316548
Deadline: 4/30/2024
30 Apr 2024 - Confirmed / sponsor 4:00 PM ET
Amount Upper: $100,000,000 USD
The CCDC ARL invites applications/proposals from covered educational institutions for research and education programs that will meet the following objectives:

a. Enhance research and engineering capabilities in areas important to national defense;
b. Increase the number of graduates in STEM disciplines; and
c. Encourage research and education collaborations with other institutions of higher education and with defense organizations.

Support for research, development, testing, evaluation, or educational enhancements will be through the competitive awarding of grants or cooperative agreements.

Department of Navy (DoN) Science, Technology, Engineering & Mathematics (STEM), Education and Workforce Program
DOD - ONR
Target audience: undergraduates, graduate students
Goal: Training, research
https://www.grants.gov/search-results-detail/351554
Deadlines: 4/12/2024; 08/30/24
Amount Upper: $600,000 USD
Amount Note: Anticipated Number of Awards: 8
This FOA is for STEM education programs and activities, which is formal or informal education that is primarily focused on physical and natural sciences, technology, engineering, social sciences, and mathematics disciplines, topics, or issues (including environmental science education or stewardship).

STEM education programs and activities that could be supported by this FOA include one or more of the following as the primary objective:

- Develop learners's knowledge, skill, or interest in STEM
- Attract students to pursue certifications, licenses, or degrees (two-year degrees through postdoctoral degrees) or careers in STEM fields.
- Provide growth and research opportunities for post-secondary, college and graduate students in STEM fields, such as working with researchers or conducting research that is primarily intended to further education.
- Improve mentor/educator (K-12 pre-service or in-service, post-secondary, and informal) quality in STEM areas.
- Improve or expand the capacity of institutions to promote or foster STEM fields.

Office of Naval Research (ONR) Science, Technology, Engineering and Mathematic (STEM) Program
DOD - ONR
Target audience: undergraduates, graduate students
Goal: Training, research
https://www.grants.gov/web/grants/view-opportunity.html?oppId=347274
Deadline: 4/2/2024
02 Apr 2024 - Confirmed / sponsor 11:59 PM ET
Note: White Papers are NOT being solicited but ARE OPTIONAL if you wish to submit before submitting a proposal. Offerors should consult the cognizant ONR STEM Point of Contact for each technology area regard
This FOA is for STEM education programs and activities, which is formal or informal education that is primarily focused on physical and natural sciences, technology, engineering, social sciences, and mathematics disciplines, topics, or issues (including environmental science education or stewardship). STEM education programs and activities that could be supported by this FOA include one or more of the following as the primary objective:

- Develop learners's knowledge, skill, or interest in STEM.
- Attract students to pursue certifications, licenses, or degrees (two-year degrees through postdoctoral degrees) or careers in STEM fields.
- Provide growth and research opportunities for post-secondary, college and graduate students in STEM fields, such as working with researchers or conducting research that is primarily intended to further education.
- Improve mentor/educator (K-12 pre-service or in-service, post-secondary, and informal) quality in STEM areas.
- Improve or expand the capacity of institutions to promote or foster STEM fields.

This FOA will not consider applications for research, with the exception of those whose primary purpose is intended to further education (as described in third bullet above) and that are not expected to generate intellectual property.

Multidisciplinary Research Program of the University Research Initiative (MURI)
DOD - ONR
Target audience: undergraduates, graduate students
Goal: Research
https://grants.gov/search-results-detail/352583
Deadline: White papers are due May 17, 2024; Full applications are due September 6, 2024
CONTACT_NAME: Anastasia Lenfest
CONTACT EMAIL: anastasia.e.lenfest.civ@us.navy.mil
Amount Upper: $1,500,000 USD
Amount Note: The total amount of funding for the five years available for grants resulting from this MURI FOA is estimated to be approximately $276 million dollars pending out-year appropriations. MURI awards are contingent on availability of funds, the specific topic, and the scope of the proposed work. Typical annual funding per grant is in the $1.25M to $1.5M range.

The MURI program supports basic research in science and engineering at U.S. institutions of higher education (hereafter referred to as "universities") that is of potential interest to DoD. The program is focused on multidisciplinary research efforts where more than one traditional discipline interacts to provide rapid advances in scientific areas of interest to the DoD. As defined in the DoD Financial Management Regulation, Basic research is systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind. It includes all scientific study and experimentation directed toward increasing fundamental knowledge and understanding in those fields of the physical, engineering, environmental, and life sciences related to long-term national security needs. It is farsighted high payoff research that provides the basis for technological progress.

Office of Naval Research areas of interest
Topic 17: Fundamental Limits of Distributed Entangled Quantum Sensing
Topic 18: Conceptual and Computational Methods for Exploiting Foundation Models for Perception
Topic 19: Ionosphere Impacts from Tropospheric Gravity Wave Generation
Topic 20: Coastal Processes & Permafrost Erosion in the New Arctic
Topic 21: Turbulent Flow over Soft Fouling & Compliant Surfaces
Topic 22: Piezoceramics with Organized Macro-Symmetry (POMS) via Templated Grain Growth
Topic 23: Measuring, Modeling, and Manipulating Variability in Judgments and Decision Making
Topic 24: Smooth, Agile, and Economical: Toward an Integrated Biomechanics of Movement
Topic 25: Non-Equilibrium Energy Propagation/Transfer in Condensed-Phase Exothermic Reactions
Topic 26: Safety of Intelligent Autonomous Systems under Dynamic Conditions

Multidisciplinary Research Program of the University Research Initiative (MURI)
DOD - Army
Target audience: undergraduates, graduate students
Goal: Research
https://grants.gov/search-results-detail/352613
Deadline: White papers are due May 17, 2024; Full applications are due September 6, 2024
CONTACT_NAME: Dr. Sue Kase
CONTACT EMAIL: usarmy.rtp.devcom-arl.mbx.aro-muri@army.mil
Amount Upper: $1,500,000 USD
Amount Note: The total amount of funding for the five years available for grants resulting from this MURI FOA is estimated to be approximately $276 million dollars pending out-year appropriations. MURI awards are contingent on availability of funds, the specific topic, and the scope of the proposed work. Typical annual funding per grant is in the $1.25M to $1.5M range.

The MURI program supports basic research in science and engineering at U.S. institutions of higher education (hereafter referred to as "universities") that is of potential interest to DoD. The program is focused on multidisciplinary research efforts where more than one traditional discipline interacts to provide rapid advances in scientific areas of interest to the DoD. As defined in the DoD Financial Management Regulation, Basic research is systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind. It includes all scientific study and experimentation directed toward increasing fundamental knowledge and understanding in those fields of the physical, engineering, environmental, and life sciences related to long-term national security needs. It is farsighted high payoff research that provides the basis for technological progress.

Army Research Office areas of interest:
Topic 9: Quantum Machine Learning Foundations for Quantum Data Processing
Topic 10: In Living Color: Structural Color in Engineered Living Systems
Topic 11: Large-scale Bi-directional Control for Hybrid Adaptive Networks
Topic 12: Electro-momentum Coupled Piezoelectric Metamaterials for Tunable Acoustic Detection
Topic 13: Actuation of Polymeric Degradation via Biotoxin Recognition in Complex Environments
Topic 14: Defect Phase Dynamics: A New Paradigm for Designing, Predicting, and Manipulating Material Properties
Topic 15: Inferring Solid-Gas Interphase Responses in Transient Flows
Topic 16: Quantum Simulators for Materials Design

Multidisciplinary Research Program of the University Research Initiative (MURI)
DOD - AFOSR
Target audience: undergraduates, graduate students
Goal: Research
https://grants.gov/search-results-detail/352609
Deadline: White papers are due May 17, 2024; Full applications are due September 6, 2024
Amount Upper: $1,500,000 USD
Amount Note: The total amount of funding for the five years available for grants resulting from this MURI FOA is estimated to be approximately $276 million dollars pending out-year appropriations. MURI awards are contingent on availability of funds, the specific topic, and the scope of the proposed work. Typical annual funding per grant is in the $1.25M to $1.5M range.
CONTACT_NAME: Ms. Katie Wisecarver
CONTACT EMAIL: afosr.rtb.muri@us.af.mil

The MURI program supports basic research in science and engineering at U.S. institutions of higher education (hereafter referred to as "universities") that is of potential interest to DoD. The program is focused on multidisciplinary research efforts where more than one traditional discipline interacts to provide rapid advances in scientific areas of interest to the DoD. As defined in the DoD Financial Management Regulation, Basic research is systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind. It includes all scientific study and experimentation directed toward increasing fundamental knowledge and understanding in those fields of the physical, engineering, environmental, and life sciences related to long-term national security needs. It is farsighted high payoff research that provides the basis for technological progress.

Air Force Office of Scientific Research areas of interest:

- Topic 1: Novel Transport Properties in Superatom-based Materials
- Topic 2: Moiré-Engineered Oxide Bicrystals
- Topic 3: Energy and Information Processing in Biological Organisms
- Topic 4: Biology the Builder: Understanding the Evolution of Structural Material Synthesis Across Species
- Topic 5: Mathematical Control and Systems Theory for Soft Robotics
- Topic 6: Principles of Non-reciprocal Quantum Materials and Tunable Superconducting Diodes
- Topic 7: N-qubit Gates
- Topic 8: Hot Solid-State Qubits

U.S Department of Education

Fulbright-Hays Doctoral Dissertation Research Abroad (DDRA) Program CFDA Number 84.022A

International Foreign Language Education (OPE/IFLE)
Office of Postsecondary Education (OPE)
United States Department of Education (ED)
Target audience: graduate students
Goal: Research
https://www.grants.gov/search-results-detail/352005
Deadline: 3/29/2024
The Fulbright-Hays DDRA Fellowship Program provides opportunities for doctoral students to engage in dissertation research abroad in modern foreign languages and area studies. The program is designed to contribute to the development and improvement of the study of modern foreign languages and area studies in the United States.

Fulbright-Hays Group Projects Abroad (GPA) Program - Long-Term Projects, Assistance Listing Number 84.021B

ED

International Foreign Language Education (OPE/IFLE)

Office of Postsecondary Education (OPE)

United States Department of Education (ED)

Target audience: faculty, undergraduates, graduate students

Goal: Research

https://www.grants.gov/search-results-detail/351705

Deadline: 3/18/2024

Amount Upper: $300,000 USD

Amount Note: Expected Number of Awards: 10

The purpose of the Fulbright-Hays GPA Program is to promote, improve, and develop the study of modern foreign languages and area studies in the United States. The program provides opportunities for faculty, teachers, and undergraduate and graduate students to conduct group projects overseas. Projects may include either (1) short-term seminars, curriculum development, or group research or study, or (2) long-term advanced intensive language programs.

GPA long-term projects are advanced overseas intensive language programs designed by the applicant that may be carried out during a full year, an academic year, a semester, a trimester, a quarter, or a summer. GPA long-term projects provide participants an opportunity to use and strengthen their advanced language training while experiencing the culture in the foreign country. Participants should have successfully completed at least 2 academic years of training in the language to be studied to be eligible to participate in a GPA intensive advanced language training program. In addition, the language to be studied must be indigenous to the host country and maximum use must be made of local institutions and personnel (34 CFR 664.14).

Fulbright-Hays Group Projects Abroad (GPA) Program - Short-Term Projects, Assistance Listing Number 84.021A

International Foreign Language Education (OPE/IFLE)
Office of Postsecondary Education (OPE)
United States Department of Education (ED)

Target audience: faculty, undergraduate students, graduate students
Goal: Research
https://www.grants.gov/search-results-detail/351704
Deadline: 3/18/2024
Amount Upper: $180,000 USD
Amount Note: Expected Number of Awards: 20
The purpose of the Fulbright-Hays GPA Program is to promote, improve, and develop the study of modern foreign languages and area studies in the United States. The program provides opportunities for faculty, teachers, and undergraduate and graduate students to conduct group projects overseas. Projects may include either (1) short-term seminars, curriculum development, or group research or study, or (2) long-term advanced intensive language programs.

There are three types of GPA short-term projects: (1) short-term seminar projects of 4 to 6 weeks in length designed by the applicant to help participants integrate international studies into the curriculum at an institution of higher education (IHE) or a school system when they return to the United States, by focusing on a particular aspect of area studies, such as the culture of an area or country of study (34 CFR 664.11); (2) curriculum development projects of 4 to 8 weeks in length that provide participants the opportunity to acquire resource materials for curriculum development in modern foreign language and area studies for use and dissemination in the United States (34 CFR 664.12); and (3) group research or study projects of 3 to 12 months in duration designed to give participants the opportunity to undertake research or study in a foreign country (34 CFR 664.13).

International Foreign Language Education (IFLE): American Overseas Research Centers (AORC) Program, Assistance Listing Number 84.274A
ED
Office of Postsecondary Education (OPE)
United States Department of Education (ED)
Target audience: faculty
Goal: Research
https://www.grants.gov/search-results-detail/351922
Deadline: 3/26/2024
Amount Upper: $82,000 USD
Amount Note: Expected Number of Awards: 17
The AORC program provides grants to consortia of institutions of higher education (IHEs) in the United States to establish or operate an overseas research center (Center) to promote postgraduate research, exchanges, and area studies. AORC grants may be used for all or a portion of the costs to operate and maintain the overseas Center; organize and manage conferences; develop or acquire teaching and research materials; acquire or preserve library collections; bring scholars and faculty to the Center to teach or conduct research; support the salaries for Center staff and visiting faculty and professional development stipends and fellowships; pay the travel costs for Center staff and project participants; and to publish and disseminate materials for the academic community and the public.

Unsolicited Grant Opportunities
Institute of Education Sciences (IES)
United States Department of Education (ED)
Target audience: faculty
Goal: Research
https://ies.ed.gov/funding/unsolicited.asp
Deadline: 3/7/2024
Amount Note: Award amounts depend on the scope of the proposed work. Over the last 5 years, the average total award was approximately $380,000, with a typical performance period lasting 1 to 3 years. Larger awards will be considered if the scope of the proposed work requires additional funds
The Institute of Education Sciences (IES) will consider unsolicited applications for research, evaluation, and statistics projects that would make significant contributions to the mission of the organization. Our mission is to expand fundamental knowledge and understanding of education and to provide parents, education leaders and practitioners, researchers, and the general public with unbiased, reliable, and useful information about the condition and progress of education in the United States; about education policies, programs, and practices that support learning, improve academic achievement, and increase access to education opportunities for all students; and about the effectiveness of Federal and other education programs. In addition, as appropriate to the type of project proposed and the status of our Standards for Excellence in Education Research (SEER) development at the time of application submission, we expect applicants to address as many SEER domains and questions as possible. Information about SEER is found here: https://ies.ed.gov/seer.asp

Under this announcement, we will consider applications for projects that are not eligible under our FY2022 grant competitions, both open and closed, described at https://ies.ed.gov/funding/. The applicant must demonstrate that the project was not eligible under one of our FY2022 grant competitions.

National Institutes of Health

Undergraduate Scholarship Program (UGSP)
National Institutes of Health (NIH)
Office of the Director (OD)
Office of Intramural Training and Education
Target audience: undergraduate students
Goal: Research
https://www.training.nih.gov/programs/ugsp
Deadline: 3/29/2024
$20,000 USD
Amount Upper: $80,000 USD
Amount Note: The NIH UGSP will pay up to $20,000 per academic year in tuition, educational expenses, and reasonable living expenses to scholarship recipients. Scholarships are awarded for 1 year, and can be renewed up to 4 years.
The National Institutes of Health (NIH) Undergraduate Scholarship Program (UGSP) offers competitive scholarships to students from disadvantaged backgrounds who are committed to careers in biomedical, behavioral, and social science health-related research. The program offers:

- Scholarship support,
- Paid research training at the NIH during the summer,
- Paid employment and training at the NIH after graduation.

High-End Instrumentation (HEI) Grant Program (S10 Clinical Trial Not Allowed)
NIH
Office of Research Infrastructure Programs
Target audience: faculty, graduate students, undergraduates
Goal: Instrumentation
https://grants.nih.gov/grants/guide/pa-files/PAR-22-079.html
Deadline: 6/3/2024
The High-End Instrumentation (HEI) Grant Program encourages applications from groups of NIH-supported investigators to purchase or upgrade a single item of high-end, specialized, commercially available instruments or integrated systems. The minimum award is $750,001. There is no maximum price limit for the instrument; however, the maximum award is $2,000,000. Instruments supported include, but are not limited to, X-ray diffractometers, high throughput robotic screening systems, mass spectrometers, nuclear magnetic resonance spectrometers, DNA and protein sequencers, biosensors, electron and light microscopes, flow cytometers, and biomedical imagers.

Limited Competition: Basic Instrumentation Grant (BIG) Program (S10 Clinical Trial Not Allowed)

Limited submission: The BIG Program is limited to institutions that have not received S10 instrumentation funding of $250,001 or greater in any of the preceding 3 Federal fiscal years (FY)

NIH

Office of Research Infrastructure Programs

Target audience: faculty, graduate students, undergraduates

Goal: Instrumentation

https://grants.nih.gov/grants/guide/pa-files/PAR-22-081.html

Deadline: 6/3/2024

The Basic Instrumentation Grant (BIG) Program encourages applications from groups of NIH-supported investigators to purchase a single high-priced, specialized, commercially available instrument or an integrated instrumentation system.

The BIG Program is limited to institutions that have not received S10 instrumentation funding of $250,001 or greater in any of the preceding 3 Federal fiscal years (FY).

The minimum award is $25,000. There is no maximum price limit for the instrument; however, the maximum award is $250,000. Instruments supported include, but are not limited to, basic cell sorters, confocal microscopes, ultramicrotomes, gel imagers, or computer systems.

Shared Instrumentation Grant (SIG) Program (S10 Clinical Trial Not Allowed)
NIH
Office of Research Infrastructure Programs
Target audience: faculty, graduate students, undergraduates
Goal: Instrumentation
https://grants.nih.gov/grants/guide/pa-files/PAR-22-080.html
Deadline: 6/3/2024
The Shared Instrument Grant (SIG) Program encourages applications from groups of NIH-supported investigators to purchase or upgrade a single item of high-priced, specialized, commercially available instruments or integrated instrumentation system. The minimum award is $50,000. There is no maximum price limit for the instrument; however, the maximum award is $600,000. Instruments supported include, but are not limited to: X-ray diffractometers, mass spectrometers, nuclear magnetic resonance spectrometers, DNA and protein sequencers, biosensors, electron and light microscopes, flow cytometers, and biomedical imagers.

National Institute of General Medical Sciences (NIGMS) Bridges to the Baccalaureate Research Training Program (T34)
NIH
NIGMS
Target audience: undergraduate students
Goal: training
https://grants.nih.gov/grants/guide/pa-files/PAR-22-125.html
Deadline: 9/25/2025

The goal of the Bridges to the Baccalaureate Research Training Program is to provide structured activities to prepare a diverse cohort of research-oriented students to transfer from associate degree-granting institutions to baccalaureate degree-granting institutions and complete a baccalaureate degree in disciplines related to the biomedical sciences. This funding opportunity announcement (FOA) provides support to eligible, domestic institutions to develop and implement effective, evidence-informed approaches to biomedical training and mentoring that will keep pace with the rapid evolution of the research enterprise.

NIGMS expects that the proposed research training programs will incorporate didactic, research, mentoring, and career development elements. This program requires strong partnerships between at least two post-secondary educational institutions offering science, technology, engineering, or mathematics (STEM) degrees. At least one partner must be an institution that offers the associate degree as the highest STEM degree and the other partner(s) must offer baccalaureate degrees in biomedically relevant STEM fields. Upon completion of the Bridges to the Baccalaureate Research Training program, trainees are expected to be well-positioned to pursue research-oriented biomedical higher degree programs or enter careers in the biomedical research workforce.

Awards may be for project periods up to five years in duration and are renewable.

Training related expenses are limited to a maximum of $10,000/trainee/year. The maximum cap for the TRE portion of the proposed budget is $100,000/year.

Allowable costs include those associated with the following:

- Skills development training activities (e.g., focusing on quantitative and computational, problem-solving, critical thinking, scientific writing, effective communication, and project management);
- Seminar speakers, who will serve as role models to the trainees
- Training or mentoring interventions designed to increase persistence in research (e.g., those designed to increase science identity, self-efficacy and a sense of belonging in the scientific community);
- Salary support for the PD(s)/PI(s). Typically, salary support does not exceed 1.8 person months (i.e., 15% effort on a 12-month basis) in total for all PD(s)/PI(s) depending on the size and scope of the program;
- Salary support for administrative personnel. Typically, the total combined salary support for the program administrator/program coordinator and/or program assistant/clerical support does not exceed 3.0 person months (i.e., 25% effort on a 12-month basis) depending on the size and scope of the program;
- Limited program evaluation costs (typically, up to $3,000 for the 5-year training grant period) and other program-related expenses may be included within the budget for training-related expenses.

Indirect/(Facilities & Administrative) costs are reimbursed at 8% of modified total direct costs.

Enhancing Science, Technology, EnginEering, and Math Educational Diversity (ESTEEMED) Research Education Experiences (R25 Clinical Trial Not Allowed)

Limited Submission Opportunity: Limit of one as application per institution.

National Institutes of Health (NIH)

Target audience: undergraduates

Goal: training

https://grants.nih.gov/grants/guide/pa-files/PAR-23-114.html

Letter of intent is due: 12/17/2024

Full proposal deadline: 1/17/2025

Note: All applications are due by 5:00 PM local time of applicant organization.

Amount Note: An applicant may request direct costs of up to $325,000 per year. Because the nature and scope of the proposed research education program will vary from application to application, it is anticipated that the size of each award will vary. The total project period for an application submitted in response to this funding opportunity may not exceed 4 years.

The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The overarching goal of this R25 program is to support educational activities that encourage individuals from diverse backgrounds, including those from groups underrepresented in the biomedical and behavioral sciences, to pursue further studies or careers in research.

To accomplish the stated over-arching goal, this FOA will support educational activities with a primary focus on: **Courses for Skills Development** and **Research Experiences.** The ESTEEMED program is designed to foster the development of undergraduate freshmen and sophomores from diverse backgrounds to pursue further studies and careers in bioengineering or STEM fields relevant to NIBIB's scientific mission. Applications are encouraged to propose integrated educational activities that include 3 elements: **a summer bridge program for incoming freshmen**, **and in the freshman and sophomore years, academic year activities and summer research experiences**. The ESTEEMED program is intended to expose students to bioengineering research early in their college careers while also providing students didactic, mentoring and career development opportunities. This will prepare students to join, in their junior and senior years, an honors program that promotes STEM and entrance into a Ph.D. program. The ultimate goal is for the participants to pursue a doctoral degree and a subsequent research career in bioengineering or NIBIB-relevant field.

NIH Neuroscience Development for Advancing the Careers of a Diverse Research Workforce (R25 Clinical Trial Not Allowed)

National Institutes of Health (NIH)

National Institute of Neurological Disorders and Stroke (NINDS)
National Institute on Alcohol Abuse and Alcoholism (NIAAA)
National Institute on Drug Abuse (NIDA)
National Institute of Mental Health (NIMH)

Target audience: graduate students, postdocs, junior faculty

Goal: Training, research

https://grants.nih.gov/grants/guide/pa-files/PAR-23-178.html

Deadlines: 9/26/2024; 9/26/2025

The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The overarching goal of this R25 program is to support educational activities that encourage individuals from diverse backgrounds, including those from groups underrepresented in the biomedical and behavioral sciences, to pursue further studies or careers in research.

Mentoring Activities: Within the context of a mentoring network, activities may include, but are not limited to, dedicated efforts at providing not only technical expertise, but advice, insight, and professional career skills that advance the broad career goals of graduate students, postdoctorates and/or early-career faculty from diverse backgrounds; facilitating scholarly writing and grantsmanship; promoting successful transitions from one career stage to another; providing leadership development; helping to identify potential collaborators; and helping to establish interdisciplinary collaborations in order to foster a career trajectory towards independent neuroscience research.

Research Experiences: Provide hands-on authentic research experiences that reflect intellectual contribution to the project and for postbaccalaureate and graduate students to provide research experiences and related training not available through formal NIH training mechanisms; for postdoctorates and junior faculty to extend their skills, experiences, and knowledge base. The research experience should enhance competitiveness and innovative research exposure for the R25 participants. In addition to hands-on research experiences, programs are expected to include complementary activities that support the participants' scientific development, such as scientific writing and presentation skills, and training in rigor and reproducibility.

Courses for Skills Development: For example, advanced courses in a neuroscience research area relevant to participating IC missions, or specialized research techniques to enhance the research skills of postbaccalaureate, graduate students, postdoctorates, and junior faculty from diverse backgrounds. Additionally, career development seminars and workshops such as grant-writing, manuscript preparation, enhancing laboratory management for early stage faculty, building a successful career and other core competencies--like experimental rigor and quantitative skills, are highly encouraged.

Application budgets are limited to a maximum of $250,000 direct cost per year and must reflect the actual needs of the proposed project. The maximum project period is 5 years.

Indirect/(Facilities & Administrative) costs are reimbursed at 8% of modified total direct costs.

NIH Blueprint and BRAIN Initiative Program for Enhancing Neuroscience Diversity through Undergraduate Research Education Experiences (BP BRAIN-ENDURE) (R25 Clinical Trial Not Allowed)
NIH
Target audience: Undergraduates
Goal: Training, research
https://grants.nih.gov/grants/guide/rfa-files/RFA-NS-24-014.html
Deadline: 2/10/2025

The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The overarching goal of this R25 program is to support educational activities that encourage individuals from diverse backgrounds, including those from groups underrepresented in the biomedical and behavioral sciences, to pursue further studies or careers in research.
To accomplish the stated over-arching goal, this NOFO will support educational activities with a primary focus on:

Courses for Skills Development
Research Experiences
Mentoring Activities

The fully integrated educational activities should prepare undergraduate students from diverse backgrounds, including those from groups underrepresented in biomedical and behavioral sciences, to enter Ph.D. degree programs in neurosciences. To accomplish this goal, this initiative will provide institutional awards to develop neuroscience research education programs comprised of collaborative partnerships integrated across different educational institution types.
Each partnership must include:

a) one or more institutions that either: 1) have a historical and current mission to educate students from any of the populations that have been identified as underrepresented in biomedical research as defined by the National Science Foundation (NSF), see http://www.nsf.gov/statistics/wmpd/) (i.e., African Americans or Blacks, Hispanic or Latino Americans, American Indians, Alaska Natives, Native Hawaiians, U.S. Pacific Islanders, and persons with disabilities) or 2) have a documented track record of recruiting, training and/or educating, and graduating underrepresented students as defined by NSF (see above), which has resulted in a historically documented contribution by the institution to the national pool of graduates from underrepresented backgrounds who pursue biomedical research careers;
b) a research-intensive institution that has an established neuroscience or neuroscience-related program;
c) integrated curriculum/academic enhancement and research experience activities designed to increase participants' preparation to enter doctoral programs in the neurosciences; and
d) well-described plans to provide early communication and interaction between participating students and graduate neuroscience programs across the country.

The requested direct costs must be reasonable, well documented, fully justified and commensurate with the scope of the proposed program. The average cost per program is estimated between $300K - $400K direct costs per year.

NIH Science Education Partnership Award (SEPA)
NIH
Target audience: K-12 students and teachers, informal science education
Goal: Training
https://grants.nih.gov/grants/guide/pa-files/PAR-23-137.html
Deadlines: 6/7/2024; 6/6/2025
The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The overarching goal of this R25 program is to support educational activities that encourage individuals from diverse backgrounds, including those from groups underrepresented in the biomedical and behavioral sciences, to pursue further studies or careers in research.

SEPA supports two types of projects: (1) classroom-based projects for pre-kindergarten to grade 12 (pre-college) students and teachers and (2) informal science education (ISE) projects conducted in outside-the-classroom venues such as science centers, museums and libraries. Projects that support quantitative and computational skills development are strongly encouraged.

A SEPA project may focus on one or more of the following activities centered on any discipline of health research within NIH's mission:
Courses for Skills Development: Courses in a specific discipline or research area that extend the STEM content normally taught in schools.
Research Experiences: Hands-on exposure to research for pre-college students and teachers.
Mentoring Activities: Provide participants with a perspective on the biomedical research training pathways and tools for overcoming challenges, navigating career transition points, and successfully transitioning into careers in the biomedical research workforce.
Curriculum or Methods Development: STEM education resources to improve biomedical, behavioral or clinical science education, or develop novel instructional approaches or computer-based educational tools.
Outreach: Dissemination of STEM education resources or biomedical, behavioral and clinical research findings to students, teachers and the general public.

Direct costs are limited to $250,000, excluding consortium F&A costs, annually. The scope of the proposed project should determine the project period. The maximum project period is 5 years

NIAID Research Education Program Advancing the Careers of a Diverse Research Workforce (R25 Clinical Trial Not Allowed)
NIH
National Institute of Allergy and Infectious Diseases (NIAID)
National Institutes of Health (NIH)
Target audience: faculty, graduate students, undergraduates
Goal: research, training
https://grants.nih.gov/grants/guide/pa-files/PAR-23-282.html
Deadlines: 5/25/24; 1/25/2025; 5/25/2025; 1/25/2026; 5/25/26
Amount Note: The number of awards is contingent upon NIH appropriations and the submission of a sufficient number of meritorious applications.

Application budgets are not expected to exceed $351,000 in direct costs per year and should reflect the actual needs of the project.

The scope of the proposed project should determine the project period. The maximum project period is five years.

The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The overarching goal of this R25 program is to support educational activities that encourage individuals from diverse backgrounds, including those from groups underrepresented in the biomedical and behavioral sciences, to pursue further studies or careers in research.

To accomplish the stated over-arching goal, this NOFO will support educational activities with a primary focus on:

Courses for Skills Development
Research Experiences
Mentoring Activities

Application budgets are not expected to exceed $351,000 in direct costs per year and should reflect the actual needs of the project. The scope of the proposed project should determine the project period. The maximum project period is five years.

Postbaccalaureate Research Education Program (PREP) (R25 - Independent Clinical Trial Not Allowed)
NIH
National Institute of General Medical Sciences (NIGMS)
Target audience: graduate students
Goal: research, training
https://grants.nih.gov/grants/guide/pa-files/PAR-22-220.html
Deadline: 1/31/2025
Amount Note:
The total direct costs for each award are limited to $400,000 annually.
The total project period may not exceed 5 years
The number of awards is contingent upon NIH appropriations and the submission of a sufficient number of meritorious applications.

The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The overarching goal of this R25 program is to support educational activities that encourage individuals from diverse backgrounds, including those from groups underrepresented in the biomedical and behavioral sciences, to pursue further studies or careers in research. To accomplish the stated over-arching goal, this FOA will support creative educational activities with a primary focus on:

Courses for Skills Development
Research Experiences

This Funding Opportunity Announcement (FOA) provides support to eligible, domestic institutions to develop and implement effective, evidence-informed approaches to biomedical research education and mentoring that will keep pace with the rapid evolution of the research enterprise. NIGMS expects that the proposed research education programs will incorporate extensive research experiences and well-designed courses for skills development to prepare recent baccalaureates from diverse backgrounds to transition into and complete rigorous, research-focused biomedical doctoral degree programs (e.g., Ph.D. or M.D./Ph.D.). This program is limited to applications from doctoral degree-granting institutions that are research-intensive (i.e., those with NIH research project grant (RPG) funding averaging greater than or equal to $7.5 million in total costs per year over the last three fiscal years). This FOA does not allow appointed participants to lead an independent clinical trial but does allow them to obtain research experience in a clinical trial led by a mentor or co-mentor.

National Institute of Standards and Technology (NIST)

Summer Undergraduate Research Fellowship (SURF) NIST Boulder Programs
NIST
National Institute of Standards and Technology (NIST)
United States Department of Commerce (DOC)
Target audience: undergraduates
Goal: research
https://www.nist.gov/surf/surf-boulder
Deadline: 1/31/2025
Students are invited to participate in the Boulder, Colorado, Laboratories' National Institute of Standards and Technology (NIST) Summer Undergraduate Research Fellowship (SURF) program for students majoring in science, mathematics, and engineering.

Opportunities are available across many STEM disciplines in the following NIST laboratories:

- Communications Technology Laboratory (CTL)
- Information Technology Laboratory (ITL)
- Material Measurement Laboratory (MML)
- Physical Measurement Laboratory (PML)

National Science Foundation

ADVANCE: Organizational Change for Gender Equity in STEM Academic Professions
National Science Foundation (NSF)
Target audience: faculty women, campus leadership
Goal: systemic change
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf20554
Program Page
Deadline: April 25 2024 - Confirmed / sponsor IT-Preliminary proposal Target Date - preliminary proposals are only required for institutions of higher education that want to submit a full Institutional Transformation proposal. IT-preliminary proposals are accepted
Amount Upper: $3,000,000
Amount Note: Estimated Number of Awards: 18 to 36
In each year, NSF expects to make approximately:

- six Adaptation awards up to $1,000,000 for three-year long projects
- six Partnership awards up to $1,000,000 for up to five-year long projects
- four Catalyst awards up to $300K for two years

NSF anticipates that two to four of the twelve Adaptation and Partnerships projects may qualify for an additional $250,000 for collaborating with a project initiated with NSF funding as described in the project description. Additionally, in FY 2021, the program anticipates making up to two Institutional Transformation awards for up to $3,000,000 for five-years. All award amounts include both direct and indirect costs.
Anticipated Funding Amount: $29,000,000
The NSF ADVANCE program contributes to the National Science Foundation's goal of a more diverse and capable science and engineering workforce. In this solicitation, the NSF ADVANCE program seeks to build on prior NSF ADVANCE work and other research and literature concerning gender, racial, and ethnic equity. The NSF ADVANCE program goal is to broaden the implementation of evidence-based systemic change strategies that promote equity for STEM faculty in academic workplaces and the academic profession. The NSF ADVANCE program provides grants to enhance the systemic factors that support equity and inclusion and to mitigate the systemic factors that create inequities in the academic profession and workplaces. Systemic (or organizational) inequities may exist in areas such as policy and practice as well as in organizational culture and climate. For example, practices in academic departments that result in the inequitable allocation of service or teaching assignments may impede research productivity, delay advancement, and create a culture of differential treatment and rewards. Similarly, policies and procedures that do not mitigate implicit bias in hiring, tenure, and promotion decisions could lead to women and racial and ethnic minorities being evaluated less favorably, perpetuating historical under-participation in STEM academic careers and contributing to an academic climate that is not inclusive.

All NSF ADVANCE proposals are expected to use intersectional approaches in the design of systemic change strategies in recognition that gender, race and ethnicity do not exist in isolation from each other and from other categories of social identity.
The solicitation includes four funding tracks:
Institutional Transformation (IT): preliminary proposal, fourth Thursday in April. **Only IHEs encouraged by NSF after review of an IT-Preliminary proposal should submit a full IT proposal**
Adaptation: LOI due first Monday in August;
Partnership: LOI due first Monday in August; full proposal, first Wednesday in November
Catalyst: full proposals are accepted before and after the target date, (first Friday in August)

Campus Cyberinfrastructure (CC*)
National Science Foundation (NSF)
Target audience: faculty, postdocs, graduate students, undergraduate students
Goal: instrumentation
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf24530
Program page
Deadlines: April 22, 2024; October 14, 2024
Amount Note: Approximately $15 million - $20 million will be made available in FY24 to support 32-55 awards, subject to the availability of funds.

The Campus Cyberinfrastructure (CC*) program invests in coordinated campus-level cyberinfrastructure improvements, innovation, integration, and engineering for science applications and distributed research projects. Projects that help overcome disparities in cyber-connectivity associated with geographic location, and thereby advance the geography of innovation and enable populations based in these locales to become more nationally competitive in science, technology, engineering, and mathematics (STEM) research and education are particularly encouraged. Science-driven requirements are the primary motivation for any proposed activity.

CC* awards will be supported in five program areas:

- Area (1) Data Driven Networking Infrastructure (Campus or Region),
- Area (2) Computing and the Computing Continuum (Campus or Region),
- Area (3) Network Integration and Applied Innovation (Small or Large),
- Area (4) Data Storage and Digital Archives, (Campus or Region), and
- Area (5) Strategy (Campus or Region).

Computer and Information Science and Engineering Research Expansion Program
National Science Foundation (NSF)
Directorate for Computer and Information Science and Engineering
Target audience: undergraduates, graduate students, postdocs, faculty
Goal: research enhancement, capacity building
https://nsf-gov-resources.nsf.gov/files/nsf24536.pdf
Program page
Deadlines: May 2, 2024; February 7, 2025; February 2026
With this solicitation, the National Science Foundation's (NSF) Directorate for Computer and Information Science and Engineering (CISE) is continuing its support of research expansion for Minority-Serving Institutions (MSIs). The goal of the CISE MSI program is to broaden participation by increasing the number of CISE-funded research projects from MSIs and to develop research capacity toward successful submissions to core CISE programs. MSIs are central to inclusive excellence: they foster innovation, cultivate current and future undergraduate and graduate computer and information science and engineering talent, and bolster long-term U.S. competitiveness.
Anticipated number, duration, and size of new awards:

Thread 1: Research Capacity Building Projects (RCBP)
Number of awards: 4-5
Project length: 2-3 years
Award size: Up to $400,000
Thread 2: Research Demonstration Projects (RDP)
Number of awards: 5-7
Project length: 2-3 years
Award size: Up to $600,000
Thread 3: Research Partnerships Enhancement Projects (RPEP)
Number of awards: 3-4
Project length: 3-4 years
Award size: $600,000 to $1,200,000
Thread 4: Research Planning Projects (RPP)
Number of awards: 3-4
Project length: 2 years
Award size: $100,000 to $200,000

Proposals may be submitted only by accredited Institutions of Higher Education (IHEs) that are recognized as **Minority Serving Institutions** (https://www2.ed.gov/about/oces/list/ocr/edlite-minorityinst.html).

EHR Core Research (ECR): Building Capacity in STEM Education Research (ECR: BCSER)
National Science Foundation (NSF)
Directorate for Education and Human Resources (EHR)
Target audience: faculty, undergraduates, graduate students
Goal: research, training
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf22548
Program page
Deadline: February 21, 2025
Amount Upper: $1,000,000 USD
Amount Note: NSF expects to make 29 standard or continuing grant awards. The ECR: BCSER competition anticipates making the following awards:
Individual Investigator Development in STEM Education Research: Up to 19 awards. The maximum award amount is $350,000 for three years.
Institutes for Methods and Practices in STEM Education Research: Up to 5 awards. The maximum award amount for is $1,000,000 for three years.
Conference: Up to 5 awards. The typical award amount for a conference is $25,000 to $100,000.
Anticipated Funding Amount: $12,000,000

ECR's Building Capacity in STEM Education Research (ECR: BCSER) supports projects that build investigators's capacity to carry out high-quality STEM education research that will enhance the nation's STEM education enterprise. In addition, ECR: BCSER seeks to broaden the pool of researchers who can advance knowledge regarding STEM learning and learning environments, broadening participation in STEM fields, and STEM workforce development. Researchers of races and ethnicities, genders, sexual orientations, and abilities who are currently underrepresented in their participation in STEM education research and the STEM workforce, as well as faculty at minority-serving and two-year institutions, are particularly encouraged to submit proposals.

Specifically, ECR: BCSER supports activities that enable researchers to expand their areas of expertise and acquire the requisite knowledge and skills to conduct rigorous research in STEM education. Career development may be accomplished through investigator-initiated professional development and research projects or through institutes that enable researchers to integrate methodological strategies with theoretical and practical issues in STEM education.

EMpowering BRoader Academic Capacity and Education (EMBRACE)
National Science Foundation (NSF)
Directorate for Geosciences (GEO)
Target audience: faculty, graduate students, undergraduate students
Goal: research, training
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23617
Program page
Deadline: May 15, 2024
Amount Note: Estimated Number of Awards: 20 to 25
The NSF Directorate for Geosciences (GEO) EMpowering BRoader Academic Capacity and Education (EMBRACE) program seeks to support research and educational efforts at "non-R1" institutions, including non-R1 minority serving institutions (MSIs), two-year colleges (2YCs), primarily undergraduate institutions (PUIs), and emerging research and masters level institutions (see Carnegie Classification and Integrated Postsecondary Education Data System). With this solicitation, the EMBRACE program aims to mitigate multiple barriers faced by faculty members in geosciences and related fields at non-R1 institutions in submitting and obtaining federal funding (e.g., high teaching loads, increased expectations for teaching and mentoring, low or no start-up packages, and limited institutional infrastructure and research support personnel).

The EMBRACE program supports two categories of proposals: **Seed** and **Growth**.

Seed proposals can request up to two years of funding for faculty members in GEO-related disciplines at non-R1 institutions to (1) initiate research and/or education programs at their own institutions; and/or (2) build or catalyze research collaborations or partnerships:

within the same institution; or
across peer institutions; or
with research-intensive institutions; or
with industry or other non-academic entities; or
any combination mentioned above.

Growth proposals can request up to four years of funding to enable faculty members at non-R1 institutions to establish independent GEO-related disciplinary research programs. In addition to research, funding may be used to support undergraduate and/or graduate students, post-doctoral scholars, salary (summer, course buyout, sabbatical) and other research related expenses.

Expanding AI Innovation through Capacity Building and Partnerships (ExpandAI)
National Science Foundation (NSF)
Target audience: faculty, graduate students and undergraduates
Goal: infrastructure development and partnerships
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23506
Program page
Deadline windows:
June 25, 2024 - October 18, 2024
January 6, 2025 - March 10, 2025
March 11, 2025 - June 23, 2025
June 24, 2025 - October 17, 2025

Eligible MSIs can submit a Concept Outline at any time. Those that have been invited to submit a full proposal can submit a proposal based on that Concept Outline at any time during one of the submission windows listed above (up to one year).

Track 1: ExpandAI Capacity Building Pilots
Capacity Building Pilots (CAP) are planning and growth efforts focused on the establishment of AI activities at the funded MSI and the early exploration of future synergistic partnerships that have the potential to be part of prospective ExpandAI Partnerships. Successful pilots will result in establishing new AI research capacity, education/workforce development in AI, and/or AI infrastructure capacity at the proposing institution and, potentially, a basis for future AI partnerships. CAP activities should plan for engaging appropriate communities to test the feasibility of partnerships as well as developing plans for continuing capacity development. Plans should consider required research infrastructure, plans to leverage established groups in related research areas, and inclusion of faculty training and research experiences that emphasize the diversification of investigators.
Each **Capacity Building Pilots (CAP)** award is anticipated to be a standard grant up to $400,000 total budget over two years.

Track 2: ExpandAI Partnerships

The ExpandAI Partnership (PARTNER) track is an opportunity for MSIs to scale up already-established AI research and/or education programs and to initiate/leverage new collaborations with AI Institutes. These partnerships will be multi-organization collaborations submitted by an MSI and will include a subaward to an AI Institute. PARTNER projects are centered around shared, complementary goals. Proposals will be submitted as single-organizational collaborative proposals. PARTNER proposals may only be submitted by a qualifying MSI as indicated in *Eligible Institutions* in this solicitation.
Each **ExpandAI Partnership (PARTNER)** award is anticipated to be a continuing award in the range of $300,000 to $700,000/year for up to 4 years.

Experiential Learning for Emerging and Novel Technologies
National Science Foundation (NSF)
Target audience: undergraduates, graduate students
Goal: research, training
https://new.nsf.gov/funding/opportunities/experiential-learning-emerging-novel-technologies/nsf23-507/solicitation
Program page
Deadline: September 12, 2024, All Tracks (Pivots, Beginnings, & Explorations); due by 5 p.m. submitters's local time
Amount Upper: $1,000,000 USD
Amount Note: Estimated Number of Awards: 25 to 35
ExLENT awards are expected to be up to three (3) years in duration with a total budget up to $1,000,000.

Anticipated Funding Amount: $30,000,000 Estimated program budget, number of awards and average award size/duration are subject to the availability of funds.
Through this new initiative, the Directorate for Education and Human Resources (EHR) and the newly established Directorate for Technology, Innovation and Partnerships (TIP) seek to support experiential learning opportunities for individuals from diverse professional and educational backgrounds that will increase access to, and interest in, career pathways in emerging technology fields (e.g., advanced manufacturing, advanced wireless, artificial intelligence, biotechnology, quantum information science, semiconductors, and microelectronics). As NSF seeks to support the development of technologies in such fields, similar support will be needed to foster and grow a diverse science, technology, engineering, and mathematics (STEM) workforce to contribute to such innovation. Large scale societal challenges like climate change and clean energy also require a STEM workforce that brings varied perspectives and expertise to further accelerate the translation of science and engineering discoveries into large-scale solutions. Moreover, as current and new emerging technologies continue to evolve, unforeseen issues around security, safety and privacy will impact the preparation of the workforce. Emerging technologies are also dynamic and rapidly changing, with career entry and advancement often requiring "learning-by-doing" experience, even for those with some STEM education. Therefore, NSF recognizes that a competitive emerging technology workforce must include individuals from traditional and nontraditional education pathways as well as those individuals who may have "stopped" out of traditional educational pathways.

The ExLENT program will support inclusive experiential learning opportunities designed to provide cohorts of diverse learners with the crucial skills needed to succeed in emerging technology fields and prepare them to enter the workforce ready to solve our Nation's most pressing scientific and societal challenges. Furthermore, the ExLENT program will directly support NSF's priority to build a diverse workforce1 in emerging technologies to assure the Nation's competitiveness in STEM.

Key goals of the program are to (1) expand access to career-enhancing experiential learning opportunities for a broader, more diverse population, including adult learners interested in re-skilling and/or upskilling (e.g., those who face or who have faced significant barriers to accessing a formal STEM education); (2) promote cross sector partnerships between organizations in emerging technology fields and those with expertise in workforce development; and (3) develop a workforce aligned with regional economies based on emerging technologies across the Nation, in alignment with the mission of the TIP Directorate.

Geoinformatics (GI)
National Science Foundation (NSF)
Division of Earth Sciences (EAR)
Directorate for Geosciences (GEO)
Target audience: faculty
Goal: Cyberinfrastructure
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23594
Program page
Deadlines: December 5, 2025 Innovative Resources only
December 6, 2024 Sustained Resources only. Prior to submission of full proposals, investigators for the Sustained Resources track are required to submit a Concept Outline, which is due at least three (3) months before the full proposal target date.
Amount Note: Estimated Number of Awards: 6 to 8
The Geoinformatics program funds the deployment, operation, and sustainment of cyberinfrastructure (CI) resources to serve and support Earth Sciences research and education. In this solicitation, Earth Sciences refers to the academic research communities supported by programs within NSF's Division of Earth Sciences (EAR) (https://www.nsf.gov/funding/programs.jsp?org=EAR).

Goals for Geoinformatics support include (but are not limited to):

(i) Enabling the management of and access to data, physical samples, and other research products in the Earth Sciences;
(ii) Facilitating the development and use of open-source software and modeling capabilities, preferably via approaches that leverage shared computing resources and collaborative software development processes;
(iii) Fostering transparent and reproducible modes of research and education in the Earth Sciences; and
(iv) Increasing the capacity of Earth Scientists to utilize cyberinfrastructure resources.

The Geoinformatics program will consider proposals within two tracks of support:

- The **Innovative Resources track** supports the early-stage development, deployment, and community-building for CI resources that serve Earth Sciences research and education.
- The **Sustained Resources track** supports the sustained operations and user community support for mature CI resources that serve Earth Sciences research and education.

Geoscience Opportunities for Leadership in Diversity (GOLD)
National Science Foundation (NSF)
Apply to PD 21-178Y (see Program Page below)
Target audience: high school students, undergraduates, graduate students
Goal:
Program Page
Deadlines: April 26, 2024 (target date), fourth Friday in April, annually thereafter
October 25, 2024 (target date), fourth Friday in April, annually thereafter

GEO encourages projects that will develop efforts and training that focus on the creation of BAJEDI (Belonging Accessibility Justice Equity Diversity and Inclusion) leaders through scaling of model professional development (PD) programs, identifying barriers that exist within academia and/or the geosciences that prevent the development of diversity champions, and the employment of strategies that will create and sustain cohorts of diversity leaders to maximize collective impact in the geoscience ecosystem.

Examples of focus areas for PD centered proposals could include: 1) training in BAJEDI for graduate students and postdocs who will soon be on the job market, 2) creation of curriculum and standards for safe, equitable and inclusive education and research practices, 3) development of guidance that would assist geoscience academic and research units in developing or implementing BAJEDI plans, and 4) identification and fostering of practices related to the valuation of BAJEDI leaders and their activities in institutional promotion systems.

Geoscience Capacity Building at Minority Serving Institutions (MSIs). With the recognition that Minority Serving Institutions (MSIs) operate with intentionality and holistic support of students (NASEM 2019), GEO also welcomes proposals that envision new efforts to create educational or degree granting geoscience programs at MSIs or scale existing geoscience programs into graduate programs at MSIs with the following elements in mind:

- Consideration of the necessary steps to create or scale an educational or degree granting geoscience program through partnerships and collaborations, with an emphasis on collaborative infrastructure as defined under the NSF INCLUDES Program.
- Development of pilot bridge programs (high school to undergraduate, undergraduate to graduate and graduate to workforce) to grow the pool of potential geoscience program majors at MSIs and prepare them to be geoscience professionals.
- Identification and reduction of barriers (e.g., grants infrastructure or institutional policies) that may hinder the creation and sustainability of educational and degree granting geoscience programs at MSIs.
- Creation of a coordinating unit to assist in supporting or building grants management infrastructure at MSIs.

Cultural Transformation in the Geoscience Community (CTGC)

National Science Foundation (NSF)

https://new.nsf.gov/funding/opportunities/cultural-transformation-geoscience-community-ctgc/nsf23-539/solicitation

New publication pending as of March 6, 2024. Please review the program page and the previous program announcement.

Program page

The Cultural Transformation in the Geoscience Community (CTGC) is seeking proposals that will:

1. Establish sustainable and long-term STEM learning and research ecosystems that will connect individuals' academic training with informal and work-based training opportunities through strong collaborative relationships and career-pathway mapping among schools, informal learning environments, private sector partners, and university and research partners.
2. Support the professional development of cohorts of individuals at different career stages through transition points, address areas where data demonstrates failure to engage or alienation from the research ecosystem of historically marginalized groups. Those engaged in this program will be proficient Earth system science team members whose contributions are cultivated in inclusive learning and workspaces.

Specific expectations about the cohort model:

1. Projects are asked to build cohorts of individuals at different career stages: post-baccalaureate, graduate students, postdocs, educators or researchers, or administrators (or equivalent). Projects should include cohorts from at least two of the stages listed above.
2. Each cohort will include at least six individuals that will participate in a wide range of professional development opportunities appropriate to their career stage.
3. The activities that the cohorts will undertake should include scientific and leadership skill building that sets them up to be agents of change.
4. The projects should use asset-based models that focus on strengths of individuals from historically minoritized/marginalized backgrounds and holistic mentoring.
5. There should be consideration of the various types of learning and research practices within the research community (e.g., individualism vs collectivism or use of Traditional Ecological Knowledge) and appropriate evaluation methods to track the impact of these diverse approaches and styles on both the research conducted and on engaging a more diverse set of scholars.
6. The projects should focus on creating a culture of sustained and measured educational and professional development.

The overall hypothesis of the program is that the newly formed cohorts of learners and practitioners will address societal issues related to global change using a systems approach, with individuals and local community engagement at the center of the endeavor. This program aims to disrupt and reverse colonizing approaches and will foster authentic and equitable collaborations between scientists and community members with the goal of addressing issues that contribute to the sustainability of the community.

NSF expects to make up to 11 awards through this competition, with up to 5 awards made for implementation grants and up to 6 awards being made for planning grants.

Implementation grants have a limit of $1.5M per year for up to 5 years, planning grants have a limit of $120,000 per year for up to 2.5 years. Implementation grants are eligible for renewal for an additional 5 years pending availability of funds and favorable review.

Improving Undergraduate STEM Education: Education and Human Resources (IUSE: EHR)
National Science Foundation (NSF)
Target audience: undergraduates
Goal: training, research
https://new.nsf.gov/funding/opportunities/improving-undergraduate-stem-education-directorate/nsf23-510/solicitation
Program page

Deadlines: July 17, 2024; third Wednesday in July, annually thereafter
Institutional and Community Transformation (Level 2) proposals and Engaged Student Learning (Level 2 and Level 3) proposals
January 15, 2025; third Wednesday in January, annually thereafter
Institutional and Community Transformation (Capacity-Building and Level 1) proposals and Engaged Student Learning (Level 1) proposals

This program announcement is structured around two tracks: (1) **Engaged Student Learning** and (2) **Institutional and Community Transformation**, each with several levels of scope, scale, and funding are available within each track.

Track 1: Engaged Student Learning

The Engaged Student Learning (ESL) track focuses on design, development, and research projects that involve the creation, exploration, or implementation of tools, resources, and models. Projects must show high potential to increase student engagement and learning in STEM. Projects may focus directly on students or indirectly serve students through faculty professional development or research on teaching and learning

ESL Level 1 projects have a maximum award of $400,000 and a maximum duration of three years. Awards at this level will support early-stage or exploratory research projects, as well as projects that propose adaptation of existing pedagogies and methodologies in novel environments on a small scale.

ESL Level 2 project awards range from $400,001 to $750,000 and have a maximum duration of three years. ESL Level 2 projects are intended to support design and development efforts or impact studies to improve student learning, including department-wide reform efforts, interdisciplinary or multi-disciplinary collaborations, or partnerships across institutions.

ESL Level 3 project awards range from $750,001 to $2 million and have a maximum duration of five years. Projects at this scale and scope are expected to benefit large numbers of students or broad communities of faculty and instructors through large-scale design and development studies or impact research.

Track 2: Institutional and Community Transformation

ICT Capacity-Building proposals may be submitted as individual or collaborative projects. The maximum award size is $200,000 for a single institution proposal or $400,000 for a multi-institution proposal. The maximum duration of both single and multi-institutional proposals is two years.

ICT Level 1 proposals have a maximum award size of $400,000 and a maximum duration of three years. Awards at this level are intended for early-stage exploratory projects

ICT Level 2 project awards range from $400,001 to $2 million up to five years. ICT Level 2 awards are intended to support design and development work or impact research

Conferences addressing important challenges in undergraduate STEM education may be submitted at any time following consultation with a program officer.

LSO Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES)

Limited Submission Opportunity: Limit of one as lead organization.

National Science Foundation (NSF)

Target audience: K-12, undergraduates, graduate students

Goal: training, research

https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf22622

Program page

Deadline: October 24, 2024, all components except Conferences

Network Connectors

Design and Development Launch Pilots

Collaborative Change Consortia

Conferences: May 14, 2024 full proposal target dates. Conference proposals may request up to $100,000 for one year**.**

Amount Note: Estimated Number of Awards10 to 15

NSF INCLUDES is a comprehensive, national initiative to enhance U.S. leadership in science, technology, engineering, and mathematics (STEM) discovery and innovation, focused on NSF's commitment to ensuring accessibility and inclusivity in STEM fields, as communicated in the NSF Strategic Plan for Fiscal Years (FY) 2022 - 2026. The vision of NSF INCLUDES is to catalyze the STEM enterprise to work collaboratively for inclusive change, resulting in a STEM workforce that reflects the diversity of the Nation's population. More specifically, NSF INCLUDES seeks to motivate and accelerate collaborative infrastructure building to advance equity and sustain systemic change to broaden participation in STEM fields at scale. Significant advancement in the inclusion of groups that have historically been excluded from or under-served in STEM will result in a new generation of STEM talent and leadership to secure the Nation's future and long-term economic competitiveness.

With this solicitation, NSF offers support for five types of projects that connect and contribute to the National Network: (1) Design and Development Launch Pilots, (2) Collaborative Change Consortia, (3) Alliances, (4) Network Connectors, and (5) Conferences. The NSF INCLUDES National Network is a multifaceted collaboration of agencies, organizations, and individuals working collectively to broaden participation in STEM. The NSF INCLUDES National Network serves as a testbed for designing, implementing, studying, refining, and scaling collaborative change models and is composed of:

- NSF INCLUDES funded projects
- Other NSF funded projects
- Subcommittee on Federal Coordination in STEM Education (FC-STEM) agencies
- Scholars engaged in broadening participation research and evaluation, and
- Organizations that support the development of talent from all sectors of society to build an inclusive STEM workforce.

All NSF INCLUDES funded projects must operationalize five design elements of collaborative infrastructure - (1) shared vision, (2) partnerships, (3) goals and metrics, (4) leadership and communication, and (5) expansion, sustainability, and scale - to create systemic change that will lead to the substantially broadened participation of individuals from historically excluded and undeserved groups in STEM.

Innovations in Graduate Education (IGE)

Limited Submission Opportunity: Limit of two per organization.

National Science Foundation (NSF)
Division of Graduate Education (DGE)
Directorate for Education and Human Resources (EHR)

Target audience: graduate students

Goal: training, research

https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf24529

Program page

April 12, 2024; March 25, 2025, March 25 annually thereafter

$300,000 USD

Amount Upper: $1,000,000 USD

Amount Note: Estimated Number of Awards: 16 to 20

IGE Track 1 Awards (6 to 10 anticipated in FY 2024) are expected to be up to three (3) years in duration with a total budget between $300,000 and $500,000.

IGE Track 2 Awards (6 to 12 anticipated in FY 2024) are expected to be up to five (5) years in duration with a total budget up to $1,000,000.

The Innovations in Graduate Education (IGE) Program is designed to encourage development and implementation of bold, new, and potentially transformative approaches to STEM graduate education training. The program seeks proposals that a) explore ways for graduate students in STEM master's and doctoral degree programs to develop the skills, knowledge, and competencies needed to pursue a range of STEM careers, or b) support research on the graduate education system and outcomes of systemic interventions and policies.

IGE projects are intended to generate the knowledge required for the customization, implementation, and broader adoption of potentially transformative approaches to graduate education. The program supports piloting, testing, and validating novel models or activities and examining systemic innovations with high potential to enrich and extend the knowledge base on effective graduate education approaches.

The program addresses both workforce development, emphasizing broad participation, and institutional capacity-building needs in graduate education. Strategic collaborations with the private sector, non-governmental organizations (NGOs), government agencies, national laboratories, field stations, teaching and learning centers, informal science organizations, and academic partners are encouraged.

Innovative Technology Experiences for Students and Teachers (ITEST)
National Science Foundation (NSF)
Division of Research on Learning in Formal and Informal Settings (DRL)
Directorate for Education and Human Resources (EHR)
Target audience: K-12
Goal: training, research
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf22585
Program page
Deadline: August 9, 2024
Amount Note: NSF anticipates having approximately $25,000,000 to $30,000,000 available for the FY23 competition and approximately $25,000,000 to $30,000,000 each year thereafter.
ITEST is an applied research and development program with goals to advance the equitable and inclusive integration of technology in the learning and teaching of science, technology, engineering, or mathematics (STEM) from pre-kindergarten through high school. The program's objective is to support all students's acquisition of the foundational preparation in STEM disciplines. Preparation for the current and future workforce is increasingly dependent upon the application and use of technology and computing.

Proposed ITEST projects are expected to (1) engage students in technology-rich learning to develop disciplinary and/or transdisciplinary STEM content knowledge, including skills in data literacy and evidence-based decision-making and reasoning; (2) prioritize the full inclusion of groups who have been underrepresented and/or underserved, including but not limited to Blacks and African Americans, Alaska Natives, Hispanics and Latinos , Native Americans, Native Hawaiians, Native Pacific Islanders, persons with disabilities, neurodiverse students, and women in the STEM and information and communication technologies (ICT) workforce; (3) motivate students to pursue appropriate education pathways to technology-rich careers; and (4) leverage strategic and community partnerships to expand education pathways in communities through public and private partnerships and collaborations.

ITEST supports three types of projects:

(1) Exploring Theory and Design Principles (ETD);
(2) Developing and Testing Innovations (DTI); and
(3) Scaling, Expanding, and Iterating Innovations (SEI).

ITEST also supports Synthesis and Conference/Workshop proposals.

ITEST will support one 5-year resource center starting in FY23. All ITEST proposals must address how the proposed research and development project meets the ITEST program Pillars: 1) Innovative Use of Technologies in Learning and Teaching, 2) Partnerships for Career and Workforce Preparation, and 3) Strategies for Equity in STEM Education (Program Description, section A.).

All proposals must also include high-quality research design, a section describing how the project meets the Solicitation-Specific Review Criteria and plans for project evaluation and dissemination of findings (Program Description, section B: Requirements for Research Proposals.)

International Research Experiences for Students (IRES)
National Science Foundation (NSF)
Office of International Science and Engineering (OISE)
Directorate for Engineering (ENG)
Target audience: undergraduates, graduate students
Goal: research
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf24506
Program page
October 28, 2024 - Confirmed / sponsor
Amount Upper: $750,000 USD
Amount Note: Estimated Number of Awards: 20 to 25
Approximately $12,000,000 in FY 2024, pending availability of funds. Up to $150,000 per year, for a maximum of 5 years, including indirect costs. A typical IRES project is for three years. However, longer duration projects up to 5 years will also be considered.
The International Research Experiences for Students (IRES) program supports international research and research-related activities for U.S. science and engineering students. The IRES program contributes to development of a diverse, globally engaged workforce with world-class skills. IRES focuses on active research participation by undergraduate and/or graduate students in high quality international research, education and professional development experiences in NSF-funded research areas.

The overarching, long-term goals of the IRES program are to enhance U.S. leadership in science and engineering research and education and to strengthen economic competitiveness through training the next generation of science research leaders. IRES focuses on the development of a world-class U.S. STEM workforce through international research experiences for cohorts of U.S. students.

Student participants supported by IRES funds must be citizens, nationals, or permanent residents of the United States. Students do not apply directly to NSF to participate in IRES activities. Students apply to NSF-funded investigators who receive IRES awards. To identify appropriate IRES projects, students should consult the directory of active IRES awards.
All PIs, co-PIs and Senior Personnel on IRES proposals must be from U.S. based organizations. Personnel from international partners should be listed as “non-NSF funded collaborators”. Guidance on information to provide for “non-NSF funded collaborators” is found in Section V.A.

IRES projects engage a group of undergraduate and/or graduate students in active high-quality collaborative research, in principle at an international site with mentorship from international researchers. IRES projects must be organized around a coherent overarching intellectual theme that may involve a single discipline or multiple disciplines funded by NSF.

For all IRES proposals, PIs are strongly encouraged to outline a variety of virtual, hybrid or other alternative approaches to strengthen and maintain international collaboration in addition to travel. It is expected that these approaches will extend collaboration beyond the actual international trip and strengthen IRES proposals overall.

Launching Early-Career Academic Pathways in the Mathematical and Physical Sciences (LEAPS-MPS)

National Science Foundation (NSF)

Directorate for Mathematical and Physical Sciences (MPS)

Target audience: non-tenured faculty

Goal: research

https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf22604

Program page

Deadline: January 25, 2025

Amount Note: **Estimated Number of Awards:** 32 to 48

Anticipated Funding Amount: $8,000,000 to $12,000,000

The Launching Early-Career Academic Pathways in the Mathematical and Physical Sciences (LEAPS-MPS) call has an emphasis to help launch the careers of pre-tenure faculty in Mathematical and Physical Sciences (MPS) fields at institutions that do not traditionally receive significant amounts of NSF-MPS funding, such as some minority-serving institutions (MSIs), predominantly undergraduate institutions (PUIs), and Carnegie Research 2 (R2) universities. LEAPS-MPS has the additional goal of achieving excellence through diversity and aims to broaden participation to include members from groups historically excluded and currently underrepresented in the Mathematical and Physical Sciences, including Blacks and African Americans, Hispanics, Latinos, Native Americans, Alaska Natives, Native Hawaiians, and other Native Pacific Islanders.

These grants are intended to support MPS principal investigators, particularly at the aforementioned institutions, for whom LEAPS funding would enable the PI to submit a subsequent successful proposal to a traditional, already-existing NSF funding opportunity, such as individual investigator programs, CAREER competitions, etc. By providing this funding opportunity, MPS intends to help initiate viable independent research programs for researchers attempting to launch their research careers such that LEAPS-MPS awards are followed by competitive grant submissions that build upon the research launched through this mechanism. This LEAPS-MPS solicitation welcomes proposals from principal investigators who share NSF's commitment to diversity.

Major Research Instrumentation
National Science Foundation (NSF)
Target audience: faculty, undergraduates, graduate students
Goal: instrumentation
https://new.nsf.gov/funding/opportunities/major-research-instrumentation-program-mri/nsf23-519/solicitation
Program page
Deadline window: October 15 2024 - November 15, 2024
The Major Research Instrumentation (MRI) Program serves to increase access to multi-user scientific and engineering instrumentation for research and research training in our Nation's institutions of higher education and not-for-profit scientific/engineering research organizations. An MRI award supports the acquisition of a *multi-user* research instrument that is commercially available through direct purchase from a vendor, or for the personnel costs and equipment that are required for the development of an instrument with new capabilities, thereby advancing instrumentation capabilities and enhancing expertise for instrument design and fabrication at academic institutions. MRI instruments are, in general, too costly and/or not appropriate for support through other NSF programs.

An MRI proposal may request from NSF up to $4 million for either acquisition or development of a research instrument. Each performing organization may submit in *revised* "Tracks" as defined below, *with no more than two (2) submissions in Track 1 and no more than one (1) submission in Track 2*. *For the newly defined Track 3, no more than one (1) submission per competition is permitted*. ***As a result, it is now possible for an institution to submit up to four MRI proposals within the Track limits as described above.***

Track 1 MRI proposals are those that request funds from NSF greater than $100,000 and less than $1,400,000.
Track 2 MRI proposals are those that request funds from NSF greater than or equal to $1,400,000 up to and including $4,000,000.
Track 3 MRI proposals are those that request funds from NSF greater than or equal to $100,000 and less than or equal to $4,000,000 that include the purchase, installation, operation, and maintenance of equipment and instrumentation to conserve or reduce the consumption of helium. ***Institutions may submit no more than one Track 3 proposal. Submission of a Track 3 proposal does not impact limits that apply for Track 1 and Track 2 proposals.***

Mathematical Sciences Infrastructure Plan
National Science Foundation (NSF)
Target audience: Mathematics faculty
Goal: training, infrastructure, conferences, symposia, travel support
PD 20-1260
Program page
Deadlines: August 6, 2024, first Tuesday in August, annually thereafter
February 4, 2025, first Tuesday in February, annually thereafter

The DMS Infrastructure program invites projects that support core research in the mathematical sciences, including: 1) novel projects supporting research infrastructure across the mathematical sciences community; 2) training projects complementing the Workforce Program, and 3) conference, workshop, and travel support requests that include cross-disciplinary activities or have an impact at the national scale.

Proposals under this solicitation submitted to DMS Infrastructure must show engagement in developing or enhancing the mathematical sciences research infrastructure in the U.S., including, but not limited to, broadening participation activities; professional development training; or involvement of students and early career researchers. Proposals must explain the regional or national scale impact of the activity that goes substantially beyond the submitting institution or the location of the event.

There are 3 categories of funding:

(1) **Novel projects that serve to strengthen the research infrastructure:** The DMS Infrastructure Program will consider novel projects that support and strengthen the research infrastructure across the mathematical sciences community. These projects most often cut across multiple sub-disciplines supported by DMS or involve interdisciplinary collaborations. The main goal of these projects should be to create a new research infrastructure or substantially enhance or transform an existing infrastructure with regional or national impact that goes substantially beyond the submitting institution or the location of the project. Full proposals must be submitted by the Full Proposal Target Date.

(2) **Training projects:** Training proposals submitted to DMS Infrastructure must not fit into one of the areas covered by solicitations in the Workforce Program in the Mathematical Sciences; they must be submitted by the Full Proposal Target Date. See the program page for more information

(3) **Conferences, Symposia, Working Research Sessions, Travel Support Requests**: Principal Investigators should carefully read the program solicitation Conferences and Workshops in the Mathematical Sciences to obtain important information regarding the substance of proposals for conferences, workshops, summer/winter schools, international travel support, and similar activities. Conference/workshop proposals that concern topics within a particular subdiscipline of mathematics or statistics should be submitted to the appropriate DMS disciplinary program(s). These submissions are subject to the lead-time requirements specified by the disciplinary program(s); see the program web pages listed on the DMS home page.

National Science Foundation Research Traineeship Program (NRT)
National Science Foundation (NSF)
Target audience: graduate students
Goal: training, research
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf21536
Program page
September 6, 2024; September 6 annually thereafter
Amount Upper: $3,000,000 USD
Amount Note: Estimated Number of Awards: 18 to 20

NRT Track 1 Awards (14-16 awards each year) are expected to be up to five (5) years in duration with a total budget up to $3,000,000.

NRT Track 2 Awards (4-6 awards each year) are expected to be up to five (5) years in duration with a total budget up to $2,000,000.

Anticipated Funding Amount: $55,000,000

Estimated program budget, number of awards and average award size/duration are subject to the availability of funds

The NSF Research Traineeship (NRT) program seeks proposals that explore ways for graduate students in research-based master's and doctoral degree programs to develop the skills, knowledge, and competencies needed to pursue a range of STEM careers. The program is dedicated to effective training of STEM graduate students in high priority interdisciplinary or convergent research areas, through a comprehensive traineeship model that is innovative, evidence-based, and aligned with changing workforce and research needs. Proposals are requested that address any interdisciplinary or convergent research theme of national priority.

The NRT program addresses workforce development, emphasizing broad participation, and institutional capacity building needs in graduate education. The program encourages proposals that involve strategic collaborations with the private sector, non-governmental organizations (NGOs), government agencies, national laboratories, field stations, teaching and learning centers, informal science centers, and academic partners. NRT especially welcomes proposals that include partnership with NSF Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (INCLUDES) and leverage INCLUDES project efforts to develop STEM talent from all sectors and groups in our society. Collaborations between NRT proposals and existing NSF INCLUDES projects should strengthen both NRT and INCLUDES projects.

NRT especially welcomes proposals that include partnership with NSF Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (INCLUDES) and leverage INCLUDES project efforts to develop STEM talent from all sectors and groups in our society (https://www.nsf.gov/news/special_reports/big_ideas/includes.jsp). Collaborations between NRT proposals and existing NSF INCLUDES projects should strengthen both NRT and INCLUDES projects.

NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM)

Limited Submission Opportunity An institution may submit up to two proposals (either as a single institution or as a subawardee or a member of an inter-institutional consortia project (lead or co-lead) for a given S-STEM deadline. Multiple proposals from an institution must not overlap with regard to S-STEM eligible disciplines.

National Science Foundation (NSF)

Division of Undergraduate Education (DUE; Directorate for Education and Human Resources (EHR)

Target audience: graduate students

Goal: research, training

https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf24511

Program page

March 4, 2025; First Tuesday in March annually thereafter

Note: The deadline for Track 1 proposals is concurrent with Tracks 2 and 3

Amount Note: Estimated Number of Awards: 50 to 90 subject to availability of funds

Anticipated Funding Amount: $80,000,000 to $120,000,000

Awards for Track 1 (**Institutional Capacity Building**) projects may not exceed $1,000,000 total for a maximum duration of 6 years.

Awards for Track 2 (**Implementation: Single Institution**) projects may not exceed $2,000,000 total for a maximum duration of 6 years.

Awards for Track 3 (**Inter-institutional Consortia**) projects may not exceed $5,000,000 total for a maximum duration of 6 years.

Collaborative Planning projects may not exceed $100,000 for a maximum duration of 1 year

The main goal of the S-STEM program is to enable low-income students with academic ability, talent or potential to pursue successful careers in promising STEM fields. Ultimately, the S-STEM program seeks to increase the number of academically promising low-income students who graduate with a S-STEM eligible degree and contribute to the American innovation economy with their STEM knowledge. Recognizing that financial aid alone cannot increase retention and graduation in STEM, the program provides awards to institutions of higher education (IHEs) not only to fund scholarships, but also to adapt, implement, and study evidence-based curricular and co-curricular1 activities that have been shown to be effective supporting recruitment, retention, transfer (if appropriate), student success, academic/career pathways, and graduation in STEM.

Social mobility for low-income students with academic potential is even more crucial than for students that enjoy other economic support structures. Hence, social mobility cannot be guaranteed unless the scholarship funds the pursuit of degrees in areas where rewarding jobs are available after graduation with an undergraduate or graduate degree.

The S-STEM program encourages collaborations, including but not limited to partnerships among different types of institutions; collaborations of S-STEM eligible faculty, researchers, and academic administrators focused on investigating the factors that affect low-income student success (e.g., institutional, educational, behavioral and social science researchers); and partnerships among institutions of higher education and business, industry, local community organizations, national labs, or other federal or state government organizations, as appropriate.

S-STEM Eligible Degree Programs: Associate of Arts, Associate of Science, Associate of Engineering, and Associate of Applied Science, Bachelor of Arts, Bachelor of Science, Bachelor of Engineering and Bachelor of Applied Science, Master of Arts, Master of Science and Master of Engineering, Doctoral (Ph.D. or other comparable doctoral degree)

S-STEM Eligible Disciplines Disciplinary fields in which research is funded by NSF, including technology fields associated with the S-STEM-eligible disciplines (e.g., biotechnology, chemical technology, engineering technology, information technology, etc.).

The following degrees and disciplines are **excluded**:

- Clinical degree programs, including medical degrees, nursing, veterinary medicine, pharmacy, physical therapy, and others not funded by NSF, are ineligible degrees.
- Business school programs that lead to Bachelor of Arts or Science in Business Administration degrees (BABA/BSBA/BBA) are not eligible for S-STEM funding.
- Masters and Doctoral degrees in Business Administration are also excluded.

Partnerships for Research Innovation in the Mathematical Sciences (PRIMES)
National Science Foundation (NSF)
Directorate for Mathematical and Physical Sciences
Division of Mathematical Sciences
Target audience: faculty, undergraduates, graduates
Goal: training, research
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf24517
Program page
Deadlines: August 21, 2024. Third Wednesday in August, annually thereafter
February 12, 2025. Second Wednesday in February, Annually Thereafter
Amount Upper: $400,000 USD
Amount Note: Estimated Number of Awards: 4 to 8
In FY 2024 awards are anticipated to be up to $400,000 for two years.
Anticipated Funding Amount: $2,000,000

The NSF Division of Mathematical Sciences' Partnerships for Research Innovation in the Mathematical Sciences program aims to enhance partnerships between minority-serving institutions and DMS-supported Mathematical Sciences Research Institutes. The activity seeks to boost the participation of members of groups underrepresented in the mathematical sciences through their increased involvement in research programs at the institutes.

Racial Equity in STEM Education (EHR Racial Equity)
National Science Foundation (NSF)
Directorate for Education and Human Resources (EHR)
Target audience: K-12, undergraduates, graduate students
Goal: training, research
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf22634
Program page
Deadlines: October 8, 2024; October 14, 2025
Note: Proposals due by 5 p.m. submitter's local time
Amount Note: **Estimated Number of Awards:** 15 to 35
Anticipated Funding Amount: $15,000,000 to $25,000,000

This solicitation aligns with the National Science Foundation (NSF) and the Directorate for Education and Human Resources (EHR) long-standing investments in the development of a diverse and well-prepared public and workforce, which was recently reinforced in the NSF Vision: A nation that leads the world in science and engineering research and innovation, to the benefit of all, without barriers to participation (p. 9, NSF 2022-2026 Strategic Plan (https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf22068).

The NSF Strategic Plan focuses on ensuring that U.S. research is an inclusive enterprise that benefits from the talent of all sectors of American society – a research enterprise that incorporates the rich demographic and geographic diversity of the nation. The strategic plan recognizes that the more people who engage in science, technology, engineering, and mathematics (STEM) research and the more diverse their backgrounds, the richer the range of questions asked. The result is a greater breadth of discovery and more creative solutions to societal challenges.

Racial inequities often create barriers to STEM knowledge generation, as well as access to and participation in all aspects of STEM education, research, and the workforce. In ongoing efforts to address these disparities, NSF EHR seeks to support bold, groundbreaking, and potentially transformative projects that contribute to advancing racial equity in STEM education and workforce development through practice and/or fundamental or applied research. EHR's mission builds from the NSF Strategic Plan, seeking "to achieve excellence in U.S. science, technology, engineering and mathematics (STEM) education at all levels and in all settings (both formal and informal) in order to support the development of a diverse and well-prepared workforce of scientists, technicians, engineers, mathematicians and educators and a well-informed citizenry that have access to the ideas and tools of science and engineering. The purpose of these activities is to enhance the quality of life of all citizens and the health, prosperity, welfare and security of the nation."

Collectively, proposals funded by this solicitation will:

(1) substantively contribute to institutionalizing effective research-based practices, policies, and outcomes in STEM environments for those who experience inequities caused by systemic racism and the broader community;

(2) advance scholarship and promote racial equity in STEM in ways that expand the array of epistemologies, perspectives, ideas, theoretical and methodological approaches that NSF funds; and

(3) further diversify project leadership (PIs and co-PIs) and institutions funded by NSF.

Research Coordination Networks (RCN)
National Science Foundation (NSF)
Target audience: faculty, undergraduates, graduate students
Goal: developing collaborations
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23529
Program page
Deadlines: October 8, 2024; October 14, 2025
PIs should consult program websites and contact cognizant program officers and are **encouraged to send a one-page concept paper to EDURacialEquity@nsf.gov in advance of submitting a proposal.**
Note: Submission deadlines vary by program. RCN proposals should be submitted to a particular NSF program according to the program's submission dates; PIs should consult program websites and contact cognizant program officers for guidance.
Amount Note: **Estimated Number of Awards:** 16 to 20. The actual number of awards varies across disciplinary research programs.
Anticipated Funding Amount: $7,500,000 to $12,500,000
The goal of the RCN program is to advance a field or create new directions in research or education by supporting groups of investigators to communicate and coordinate their research, training and educational activities across disciplinary, organizational, geographic, and international boundaries. The RCN program provides opportunities to foster new collaborations, including international partnerships where appropriate, and address interdisciplinary topics. Innovative ideas for implementing novel networking strategies, collaborative technologies, training, broadening participation, and development of community standards for data and meta-data are especially encouraged. RCN awards are not meant to support existing networks; nor are they meant to support the activities of established collaborations. RCN awards also do not support primary research. Rather, the RCN program supports the means by which investigators can share information and ideas; coordinate ongoing or planned research activities; foster synthesis and new collaborations; develop community standards; and in other ways advance science and education through communication and sharing of ideas.

Additional information about the RCN program and its impacts may be found in Porter et al. 2012 Research Coordination Networks: Evidence of the relationship between funded interdisciplinary networking and scholarly impact. BioScience, 62: 282-288

Proposed networking activities directed to the RCN program should focus on a theme to give coherence to the collaboration, such as a broad research question or a particular technology or a unique approach to address a current challenge. PIs are encouraged to consider approaches that enhance the geographic diversity of participation in the chosen theme.

Participating programs in the Directorates for Biological Sciences (BIO), Computer and Information Science and Engineering (CISE), Geosciences (GEO), STEM Education (EDU), Engineering (ENG), Social, Behavioral and Economic Sciences (SBE), and Technology, Innovation and Partnerships (TIP) will accept RCN proposals. PIs are encouraged to discuss suitability of an RCN topic with a program officer that manages the appropriate program. For proposals submitted to the CISE, ENG, SBE and TIP directorates consultation PRIOR to submission is mandatory (see Proposal Preparation instructions for supplementary documents). The NSF Growing Research Access for Nationally Transformative Equity and Diversity (NSF GRANTED) program welcomes inquiries about potential RCN proposals aimed at strengthening the capability of institutions of higher education to develop, submit, and manage research proposals and awards.

Research Coordination Networks in Undergraduate Biology Education (RCN-UBE)
National Science Foundation (NSF)
Target audience: undergraduates
Goal: training
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf22522
Program page
Deadline: January 28, 2025; Fourth Tuesday in January, annually thereafter
Amount Note: **Estimated Number of Awards:** 8 to 12; varies across disciplinary research programs and RCN tracks

Anticipated Funding Amount: $6,500,000 to $8,000,000, pending availability of appropriations

The goal of the RCN-UBE program is to link biological research discoveries with innovations in biology education to improve the learning environment in undergraduate biology classrooms. The program seeks to improve undergraduate education by leveraging the power of a collaborative network recognizing that new educational materials and pedagogies can simultaneously teach biological concepts while creating a supportive and engaging learning environment for all. The RCN-UBE program supports groups of investigators to communicate and coordinate their research, training, and education. The theme or focus of an RCN-UBE proposal can be on any topic likely to advance this goal, and activities across disciplinary, organizational, geographic, and international boundaries are encouraged. Acknowledging that students' educational pathways vary, networks that include under-resourced institutions as full, equitable partners are highly desired. Understanding that people from diverse backgrounds bring different experiences and viewpoints, the RCN-UBE program is interested in proposals that include individuals from traditionally underrepresented in biological research and education as members of the steering committee. Lastly, the RCN-UBE program is also interested in developing, testing, and sharing best practices that can transform the online learning environment.

These efforts supported by RCN-UBE are responsive to the national movement to revolutionize undergraduate learning and teaching in the biological sciences as described in the 2009 "Vision and Change in Undergraduate Biology Education" report. Collectively, the RCN-UBE program has contributed to developing and disseminating educational research resources and modules, to forging new collaborations, and to sharing best practices and processes for scalability and sustainability of activities. These efforts have involved a large cadre of faculty, students, and other stakeholders.

In accord with other RCN awards, RCN-UBE awards provide opportunities to address interdisciplinary topics, to explore innovative ideas for implementing novel networking strategies, to explore collaborative technologies, and to develop community standards. RCN-UBE awards do not support existing networks or the activities of established collaborations.

Research Experience for Undergraduates
National Science Foundation (NSF)
Target audience: undergraduates
Goal: training, research
https://new.nsf.gov/funding/opportunities/research-experiences-undergraduates-reu/nsf23-601/solicitation
Program page
Deadlines: August 21, 2024, third Wednesday in August, annually thereafter
The Research Experiences for Undergraduates (REU) program supports active research participation by undergraduate students in any of the areas of research funded by the National Science Foundation. REU projects involve students in meaningful ways in ongoing research programs or in research projects specifically designed for the REU program.

This solicitation features two mechanisms for supporting student research:

REU Sites are based on independent proposals to initiate and conduct projects that engage a number of students in research. REU Sites may be based in a single discipline or academic department or may offer interdisciplinary or multi-department research opportunities with a coherent intellectual theme.

REU Supplements may be included as a component of proposals for new or renewal NSF grants or cooperative agreements or may be requested for ongoing NSF-funded research projects.
REU projects with an international dimension are welcome.

Undergraduate student participants in either REU Sites or REU Supplements must be U.S. citizens, U.S. nationals, or U.S. permanent residents.

Students do not apply to NSF to participate in REU activities, and NSF does not select students for the opportunities. Investigators who receive REU awards establish their own process for receiving and reviewing applications and selecting students, and students follow the instructions provided by each REU Site or REU Supplement to apply. (In some cases, investigators pre-select students for REU Supplements.) To identify appropriate REU Sites, students should consult the directory of active REU Sites on the Web at https://www.nsf.gov/crssprgm/reu/reu_search.cfm.

Research Traineeship Program
National Science Foundation (NSF)
Target audience: graduate students
Goal: training
https://new.nsf.gov/funding/opportunities/national-science-foundation-research-traineeship/nsf21-536/solicitation
Program page
Deadlines: September 6, 2024, September 6, Annually Thereafter

The NSF Research Traineeship (NRT) program seeks proposals that explore ways for graduate students in research-based master's and doctoral degree programs to develop the skills, knowledge, and competencies needed to pursue a range of STEM careers. The program is dedicated to effective training of STEM graduate students in high priority interdisciplinary or convergent research areas, through a comprehensive traineeship model that is innovative, evidence-based, and aligned with changing workforce and research needs. Proposals are requested that address any interdisciplinary or convergent research theme of national priority, as noted above.

The NRT program addresses workforce development, emphasizing broad participation, and institutional capacity building needs in graduate education. The program encourages proposals that involve strategic collaborations with the private sector, non-governmental organizations (NGOs), government agencies, national laboratories, field stations, teaching and learning centers, informal science centers, and academic partners. NRT especially welcomes proposals that include partnership with NSF Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (INCLUDES) and leverage INCLUDES project efforts to develop STEM talent from all sectors and groups in our society (https://www.nsf.gov/news/special_reports/big_ideas/includes.jsp). Collaborations between NRT proposals and existing NSF INCLUDES projects should strengthen both NRT and INCLUDES projects.

NRT Track 1 Awards (14-16 awards each year) are expected to be up to five (5) years in duration with a total budget up to $3,000,000.

NRT Track 2 Awards (4-6 awards each year) are expected to be up to five (5) years in duration with a total budget up to $2,000,000.

Science, Technology, Engineering and Mathematics (STEM) Education Organizational Postdoctoral Research Fellowships (STEM Ed OPRF)
National Science Foundation (NSF)
Target audience: postdocs
Goal: training
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23545
Program page
Deadlines: April 26, 2024: Last Friday in April, annually thereafter
Amount Note: Duration: Up to 36 months of support may be requested.
Estimated Number of Awards: 2 to 4

The Directorate for STEM Education (EDU) STEM Education Postdoctoral Research Fellowships (STEM Ed PRF) Program funds postdoctoral fellowship projects designed to enhance the research knowledge, skills, and practices of STEM Education research by recent doctoral graduates in STEM, STEM Education, Education, and related disciplines This solicitation supports organizational postdoctoral fellowship projects; a companion solicitation (STEM Ed IPRF) supports individual postdoctoral fellowship awards. The Program is designed to broaden the pool of researchers who can advance knowledge regarding STEM learning and learning environments, broadening participation in STEM fields, and STEM workforce development. Principal Investigators who are women, veterans, persons with disabilities, and from groups underrepresented in STEM, or who have attended community colleges and minority-serving institutions (e.g. Historically Black Colleges and Universities, Tribal Colleges and Universities, Hispanic Serving Institutions, Alaska Native Serving Institutions, and Hawaiian Native and Pacific Islander Serving Institutions) are especially encouraged to apply.

STEM Ed OPRF awards provide support to organizations as they develop a STEM education postdoctoral research fellowship project and support a cohort of fellows. The program should enable fellows to engage in ongoing research, to develop independent research, and to implement an independent professional development plan under the guidance of a sponsoring researcher. Fellows are expected to devote themselves full time to the fellowship activities for the duration of the fellowship.

Workplace Equity for Persons with Disabilities in STEM and STEM Education
National Science Foundation (NSF)
Target audience: undergraduates, graduates, postdocs
Goal: training
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23593
Program page
Deadline: September 17, 2024; Third Tuesday in September, annually thereafter
Note: Conference, EAGER, and RAPID proposals are accepted before or after the target date. An EAGER or RAPID proposal may only be submitted after receipt of an NSF program officer concurrence email specifying that a proposal may be submitted.
Upper limit of funding: $1,500,000 USD
Amount Note: Estimated Number of Awards: 10 to 20
The Workplace Equity for Persons with Disabilities in STEM and STEM Education solicitation, which is managed by the Division of Equity for Excellence in STEM in the Directorate for STEM Education, supports fundamental, applied, and translational research that advances knowledge and practice about diverse, equitable, inclusive, and accessible STEM and STEM education workplaces and postsecondary training environments for persons with disabilities. Proposals should focus on one or more of the following three research themes: (1) Studying barriers and solutions to diversity, equity, inclusion, and accessibility in STEM and STEM education workplaces and training settings for persons with disabilities; (2) Applying intersectional social identity perspectives to investigate characteristics and conditions of STEM and STEM education workplaces and training environments that limit and/or improve diversity, equity, inclusion, and accessibility for persons with disabilities; and (3) Conducting use-inspired and solution-oriented translational research about diverse, equitable, inclusive, and accessible STEM and STEM Education workplaces and training settings for persons with disabilities.

Research proposals must address key project design components: (1) The inclusion of researchers, experts, and organizations with authentic disability experiences; (2) The identification of disability type(s) to be investigated; (3) The specific STEM and/or STEM education workplaces and postsecondary training settings to be studied; (4) The use of theoretical and/or conceptual frameworks and robust research hypotheses, questions, designs, methodologies, data analyses, and data interpretation; (5) A plan to assess the success of the project; and (6) A plan for the accessible dissemination of knowledge and practice outcomes to traditional and new audiences.

Building Research Capacity of New Faculty in Biology (BRC-BIO)
National Science Foundation (NSF)
Division of Biological Infrastructure (DBI)
Directorate for Biological Sciences (BIO)
Target audience: faculty in Biology
Goal: training
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf22500
Program page
Deadline window: May 1 – July 1, 2024
$500,000 USD
Amount Note: **Estimated Number of Awards:** Awards are for a maximum of 36 months and up to $450,000 plus $50,000 for equipment. Equipment costs above $50,000 will be considered on a case-by-case basis.

Anticipated Total Funding Amount: $10,000,000 to $15,000,000

With a focus on enhancing research capacity and broadening participation of new faculty of biology at minority-serving institutions (MSIs), predominantly undergraduate institutions (PUIs), and other universities and colleges that are not among the nation's most research-intensive institutions, the Directorate for Biological Sciences (BIO) offers the Building Research Capacity of New Faculty in Biology (BRC-BIO) program. The BRC-BIO program aims to a) broaden participation by expanding the types of institutions that submit proposals to BIO, and b) expand opportunities to groups underrepresented in the biological sciences, including Blacks and African Americans, Hispanics, Latinos, Native Americans, Alaska Natives, Native Hawaiians and other Pacific Islanders, and persons with disabilities, especially those serving at under-resourced institutions. Awards will provide the means for new faculty to initiate and build independent research programs by enhancing their research capacity.

These projects might also include biology-focused research collaborations among faculty within the same institution, across peer-, or research-intensive institutions, or partnerships with industry or other non-academic partners that advance the candidate's research program. By providing this funding opportunity, BIO recognizes the national urgency to broaden, strengthen, and diversify the science, technology, engineering, and mathematics (STEM) workforce. In particular, these awards will build capacity for research at institutions that have a primary focus on teaching and undergraduate education, or that have limited capacity for research. Projects should enable the establishment of sustainable research programs for faculty and also enrich undergraduate research experiences and thereby grow the STEM workforce. BRC-BIO welcomes proposals from principal investigators who share NSF's commitment to diversity, equity, and inclusion.

Proposals in response to this solicitation must be submitted to the Division of Biological Infrastructure (DBI) in the Directorate for Biological Sciences (BIO).

Research and Mentoring for Postbaccalaureates in Biological Sciences (RaMP)
National Science Foundation (NSF)
Division of Biological Infrastructure (DBI); Directorate for Biological Sciences (BIO)
Target audience: graduate students
Goal: training, research
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23514
Program page
Deadlines: January 16, 2025, Third Thursday in January, annually thereafter
Estimated Number of Awards: 10 to 12

The solicitation will support RaMP networks to engage 8-12 postbaccalaureate participants per year for 3 years (each award is expected to support a total of approximately 30 postbaccalaureate participants). Each participant will be supported by a stipend of at least $32,500 per year. Programs in areas with higher costs of living may adjust stipends to salary commensurate with the host institution's relevant payroll schedule. Mentors and co-mentors should be supported with professional development and mentoring training. Although support will be provided for 3 annual cohorts of mentees over 36 months, awards of up to 48 months are allowed to facilitate upfront work prior to the first cohort for network establishment, mentor training, mentee recruitment and selection, and plans for network assessment and evaluation.

The Research and Mentoring for Postbaccalaureates (RaMP) in Biological Sciences program invites the submission of proposals to establish networks to support full-time research, mentoring, and training for recent college graduates who have had few or no research or training opportunities during college in research fields typically supported by the Directorate of Biological Sciences (BIO). A strategic focus of the National Science Foundation is to foster the growth of a globally-competitive and diverse research workforce. To that end, proposals submitted to this program are expected to create strong evidence-based, inclusive and culturally-aware mentorship programs that will advance the goal of creating a competitive and highly representative science, technology, engineering and mathematics (STEM) workforce in the U.S. with a focus on the biological sciences. Projects are expected to train individuals for a range of potential career pathways in the biological sciences including: research-focused M.S. or Ph.D. graduate programs; entry-level positions in industry, federal, tribal, or state agencies, education and research centers, or not-for-profit science-based organizations; or other STEM careers.

Individuals from groups underrepresented in STEM, first generation college students, and students at under-resourced institutions frequently have limited opportunities to participate in the undergraduate research experiences that are necessary to be competitive for graduate programs or other STEM career pathways. This program will provide postbaccalaureate research experiences for cohorts of trainees, either in ongoing research programs, existing research networks, or in new research projects designed specifically for the RaMP networks.

Studies of capacity-building and training across diverse disciplines have emphasized the importance of inclusive training via cohort mentoring and networks of individuals working together towards a common purpose. Cohorts promote the development of long-term relationships, and networks foster the exchange of ideas and resources to pursue common goals and to address shared challenges. Proposals will use a network structure that generates a supportive and strong collaborative mentoring environment centered around a cohesive biological research theme. The networks are expected to include diverse organizations and can be regional, national, or have an international component. The network will facilitate the recruitment and selection of postbaccalaureate research participants (hereafter, mentees) and mentors. Projects must provide inclusive and culturally-aware training to mentors in addition to providing professional development opportunities for all network members, including mentees, mentors, co-mentors, and other STEM professionals. Networks are expected to involve and facilitate communication and training among mentors and mentees from different organizations, institutions, and/or departments. Proposals submitted under this solicitation should focus on research-based inquiry projects that include analytical and technical training and professional development opportunities.

Scholarships in STEM Network (S-STEM-Net): S-STEM Research Hubs

Limited Submission Opportunity: An organization may submit at most one S-STEM-Hub proposal (as a single institution, a subawardee, or a member of a collaborative research project). An individual may only serve as PI or Co-PI of one S-STEM-Hub proposal.

National Science Foundation (NSF)
Division of Undergraduate Education (DUE)
Directorate for Education and Human Resources (EHR)

Target audience: higher education institutions, faculty, scholars, researchers and evaluators, local and regional organizations, industry, and other nonprofit, federal, state, and local agencies

Goal: create a network of S-STEM research hubs

https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23536

Program Page

Deadlines: March 27, 2024, Fourth Wednesday in March, annually thereafter

Amount Note: **Estimated Number of Awards:** 1 to 5

Anticipated Funding Amount: $15,000,000

Through this solicitation, NSF seeks to foster a network of S-STEM stakeholders and further develop the infrastructure needed to generate and disseminate new knowledge, successful practices and effective design principles arising from NSF S-STEM projects nationwide. The ultimate vision of the legislation governing the S-STEM parent program (and of the current S-STEM-Net solicitation) is that all Americans, regardless of economic status, should be able to contribute to the American innovation economy if they so desire.

To support collaboration within the S-STEM network, NSF will fund several S-STEM Research Hubs (S-STEM-Hub). The S-STEM Network (S-STEM-Net) will collaborate to create synergies and sustain a robust national ecosystem consisting of multi-sector partners supporting domestic low-income STEM students in achieving their career goals, while also ensuring access, inclusion, and adaptability to changing learning needs. The Hubs will investigate evolving barriers to the success of this student population. It will also disseminate the context and circumstances by which interventions and practices that support graduation of domestic low-income students (both undergraduate and graduate) pursuing careers in STEM are successful.

The target audience for this dissemination effort is the community of higher education institutions, faculty, scholars, researchers and evaluators, local and regional organizations, industry, and other nonprofit, federal, state, and local agencies concerned with the success of domestic low-income STEM students in the United States.

Science, Technology, Engineering and Mathematics (STEM) Education Individual Postdoctoral Research Fellowships (STEM Ed IPRF)
National Science Foundation (NSF)
Directorate for Education and Human Resources (EHR)
Target audience: postdocs
Goal: training, research fellowships
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23544
Program page
Deadline: December 10, 2024, First Tuesday in December, Annually Thereafter
Amount Note: **Estimated Number of Awards:** 8 to 10

The Directorate for STEM Education (EDU) STEM Education Postdoctoral Research Fellowships (STEM Ed PRF) Program funds postdoctoral fellowship projects designed to enhance the research knowledge, skills, and practices of STEM Education research by recent doctoral graduates in STEM, STEM Education, Education, and related disciplines. This solicitation supports individual postdoctoral fellowship awards; a companion solicitation (STEM Ed OPRF) supports organizational postdoctoral fellowship programs. The STEM Ed PRF Program as a whole seeks to broaden the pool of researchers who can advance knowledge regarding STEM learning and learning environments, broadening participation in STEM fields, and STEM workforce development. The Program is designed to support postdoctoral fellows engaged in experiences that will advance their career goals by developing their expertise, skills, and competencies to conduct fundamental STEM education research. Principal Investigators who are women, veterans, persons with disabilities, and from groups underrepresented in STEM, or who have attended community colleges and minority-serving institutions (e.g., Historically Black Colleges and Universities, Tribal Colleges and Universities, Hispanic Serving Institutions, Alaska Native Serving Institutions, and Hawaiian Native and Pacific Islander Serving Institutions) are especially encouraged to apply.

STEM Ed IPRF awards provide direct support to Fellows to enable them to engage in ongoing research, to develop independent research, and to implement an independent professional development plan under the guidance of a sponsoring researcher. Fellows must affiliate with an appropriate host organization and are expected to devote themselves full time to the fellowship activities for the duration of the fellowship.

Science, Technology, Engineering and Mathematics Education Organizational Postdoctoral Research Fellowships (STEM Ed OPRF)
National Science Foundation (NSF)
Directorate for STEM Education
Target audience: postdocs
Goal: institutional funding for postdoctoral fellowships
https://new.nsf.gov/funding/opportunities/science-technology-engineering-mathematics/nsf23-545/solicitation
Program page
Deadline: April 26, 2024, Last Friday in April, Annually Thereafter
The Directorate for STEM Education (EDU) STEM Education Postdoctoral Research Fellowships (STEM Ed PRF) Program funds postdoctoral fellowship projects designed to enhance the research knowledge, skills, and practices of STEM Education research by recent doctoral graduates in STEM, STEM Education, Education, and related disciplines. This solicitation supports organizational postdoctoral fellowship projects; a companion solicitation (STEM Ed IPRF) supports individual postdoctoral fellowship awards. The Program is designed to broaden the pool of researchers who can advance knowledge regarding STEM learning and learning environments, broadening participation in STEM fields, and STEM workforce development. Principal Investigators who are women, veterans, persons with disabilities, and from groups underrepresented in STEM, or who have attended community colleges and minority-serving institutions (e.g. Historically Black Colleges and Universities, Tribal Colleges and Universities, Hispanic Serving Institutions, Alaska Native Serving Institutions, and Hawaiian Native and Pacific Islander Serving Institutions) are especially encouraged to apply.

Oak Ridge Associated Universities (ORAU)

Energy Efficiency and Renewable Energy Science, Technology and Policy Program
ORAU
Oak Ridge Institute for Science and Education (ORISE); Oak Ridge Associated Universities (ORAU)
Target audience: undergraduates, Master's students, postdocs, faculty in STEM
Goal: research
http://energy.gov/eere/energy-efficiency-and-renewable-energy-science-and-technology-policy-fellowships
Deadline: Applications accepted and reviewed all year.
The EERE STP Program provides an opportunity for highly talented scientists and engineers to participate in policy-related projects at DOE's Office of Energy Efficiency and Renewable Energy in Washington, D.C. and Golden, CO site office. EERE STP participants apply the expertise gained from their education and history of conducting research to new and ongoing EERE initiatives. As a result of their participation on this program, participants are expected to:

- Gain deep insight into the federal government's role in the creation and implementation of policies that affect energy technology development.
- Contribute to the implementation of energy policies by applying their scientific and technical expertise to the development of solutions for problems in areas of energy efficiency and renewable energy.
- Continue their education and involvement in areas that support the EERE mission either in a technical or policy-related role.
- Introduce policy-related knowledge and interest into research facilities supporting the EERE mission.

There are three levels:

Level 1: The stipend rates for Level 1 participants will start at $47,684. The stipend rates for matriculated undergraduates will be competitive with other summer programs.
Level 2: Participants with a Ph.D. will receive a stipend starting at $76,378.
Participants with a Master's degree will start at $58,000.
Level 3: The stipend amount for Level 3 will be based on the rate for participants plus a factor for years of experience after the receipt of the graduate degree.

Participants will receive an education/travel allowance of $10,000 per appointment year to cover expenses related to research and/or participation in scientific and professional development activities

The EERE Science and Technology Policy (STP) Fellowships serve as a next step in the educational and professional development of scientists and engineers interested in energy efficiency and renewable energy policy. The EERE STP Fellowships provide an opportunity for highly talented scientists and engineers to participate in policy-related projects at DOE's Office of Energy Efficiency and Renewable Energy in Washington, D.C. EERE STP Fellows apply the expertise gained from their education and history of conducting research to new and ongoing EERE initiatives. As a result of their participation on this program, Fellows are expected to:

- Gain deep insight into the federal government's role in the creation and implementation of policies that affect energy technology development
- Contribute to the implementation of energy policies by applying their scientific and technical expertise to the development of solutions for problems in areas of energy efficiency and renewable energy.
- Continue their education and involvement in areas that support the EERE mission either in a technical or policy-related role.
- Introduce policy-related knowledge and interest into research facilities supporting the EERE mission.

National Energy Technology Laboratory - Faculty Research Program (FRP)
ORAU
Oak Ridge Institute for Science and Education (ORISE)
Oak Ridge Associated Universities (ORAU)
Target audience: faculty in fields listed below
Goal: research
http://www.orau.gov/netl/programs/frp.html
Amount Note: Stipends are awarded monthly and based upon your current faculty contract. Participants with sabbatical leave appointments are expected to have at least one-half of their salaries paid by their home institutions.
The Faculty Research Program offers qualified academic faculty an opportunity to collaborate with NETL principal investigators on research that is mutually beneficial to NETL and the participant at state-of-the-art NETL facilities. While typical appointments are part-time, some appointments are offered during the summer and as a sabbatical. Prior to the appointment, the NETL principal investigator and participant will define the scope of research and schedule the appointment period.
Research and Development Areas:

- Carbon Management
- Chemical Reaction Engineering
- Combustion Science
- Computational Research
- Environmental Science
- Fuel Cell Research
- Geosciences
- High Temperature/High Pressure Science
- Materials Performance
- Methane Hydrates Research
- Process Development
- Reciprocating Engines Research
- Remote Sensing
- Sensors and Controls
- Separations Science
- Surface Science