Target Audience Faculty

Multidisciplinary Research Program of the University Research Initiative (MURI)
DOD - ONR
Target audience: undergraduates, graduate students, faculty
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, faculty
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, faculty
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

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).

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.

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.

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.

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)

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.

Cultural Transformation in the Geoscience Community (CTGC)
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.

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.

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

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

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.

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.

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).

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

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