

UPR external funding success is of utmost importance to strengthen the connection between its investigators/faculty and funding entities who have the potential to sponsor their research and academic endeavors. This publication has been developed in order to summarize funding opportunities and promote the participation of faculty and collaborative research groups in their intent to apply for external funds. Such efforts are aligned with the UPR Strategic Plan 2017-2022: A New Era of Innovation and Transformation for Student Success; Certification 50 (2016-2017) of the Governing Board, December 19, 2016. Strategic Area: Research and Creative Work. Goal 2: Increase Applications for and awards of external funds for research and creative work.

SELECTED FUNDING OPPORTUNITIES

This is a selection of identified funding opportunities for the period ending 11/08/2022 and is in no way all-inclusive of funding opportunities available. Further information has been shared with External Resource Coordinators and Research Coordinators at each UPR campus by e-mail or MS Teams.

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1. Centers of Excellence in Regulatory Science and Innovation (CERSI) (U01) Clinical Trials Optional, USDA

Application Deadline:

- Letter of Intent (Optional): October 31, 2023
- Full Proposal: December 22, 2022

Award Amounts:

- Individual Investigator Development in STEM Education Research: up to \$350,000 for three years
- Institutes for Methods and Practices in STEM Education Research: up to \$1,000,000 for three years
- Conference: between \$25,000 and \$100,000

ECR: BCSER supports three types of projects designed to build investigators' capacity to carry out high-quality STEM education research. The Individual Investigator Development in STEM Education Research track (ECR: BCSER: IID) invites proposals to support individual investigators – both experienced and new to STEM education research – who have identified specific capabilities they need to develop more fully to conduct high-quality STEM education research in a critical area, along with a detailed professional development plan that will enable the investigator to complete a research project. The Institutes for Methods and Practices in STEM Education Research track (ECR: BCSER: IMP) invites proposals for institutes that would provide training and support in the use of cutting-edge methodological techniques and/or research practices to advance participants' knowledge, skills and competencies in STEM education research. Proposals that seek support to conduct well-focused conferences (ECR: BCSER: CONF) relevant to the competition goals also are invited.

Relevant Capacity-Building Foci

To successfully conceptualize, design, and execute studies capable of making contributions to knowledge in STEM education and learning, broadening participation, and workforce development, investigators and their teams typically require a wide range of knowledge, skills, expertise, and experiences. Examples of relevant capacity-building foci span a range of topics including but not limited to:

- Deep knowledge of subject-matter literature: Domain expertise (mastery of theories and findings) is critical to investigators' ability to identify important scientific questions and articulate a theoretically derived and framed rationale for the project.
- Interdisciplinary perspectives: Theories, methodologies, analytical techniques, and findings that can have a catalytic effect when explored in the context of multiple fields. Moreover, interdisciplinary endeavors also increase the human capacity of the nation to address problems, broadening the range and diversity of scholars working toward their solution (Porter & Rafols, 2009).
- Skill operationalizing research questions and articulating theories of change: Investigators should be able to operationalize the conceptual framework that organizes the responses to the research questions before collecting data, e.g., reducing variables into measurable factors.
- Expertise in study design, research methods, and data analysis techniques and familiarity with advances in computational, quantitative, qualitative and evaluative research methodologies: Expertise in these areas is essential in arguing the feasibility and appropriateness of the proposed research to generate sufficiently robust evidence on the topic(s) of interest and in executing the study as planned. Depending upon the nature of the research proposed, experience may be required identifying appropriate measures, devising appropriate sampling strategies, developing and establishing the psychometric properties of research instruments, and aligning analytic methods with the study design.
- Expertise that could advance educational innovation: Investigators should be able to incorporate new methods and techniques in their research that will improve education quality. For example, they may consider how artificial intelligence tools or large data sets could be used or mined to enhance traditional teaching and learning methods. Areas where this research may be applicable could include intelligent tutoring systems, personalized learning, computer-adapted assessments, or in automating of teaching tasks.
- Skill synthesizing study findings through meta-analysis, meta-synthesis, and other systematic review methodologies.
- Experience collecting, managing, documenting, and archiving data (e.g., to facilitate replication and reproducibility studies and secondary analyses).

- Experience building teams, establishing partnerships, leading collaborations, and mentoring junior collaborators.

Proposal Types

1. **Individual Investigator Development in STEM Education Research (ECR: BCSER: IID):** supports individual investigators – both experienced and new to STEM education research – in engaging with professional development activities that will build their capacity to advance knowledge of STEM education. The primary goal of ECR: BCSER Individual Investigator Development in STEM Education Research (ECR: BCSER: IID) awards is to facilitate the acquisition of expertise that will position the investigator to successfully conceive and execute STEM education research with the potential to meaningfully advance current knowledge about STEM learning and learning environments, broadening participation in STEM, and STEM workforce development. 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. ECR: BCSER encourages IID proposals that will support investigators in shifting their research foci to potentially transformative, under-researched areas, including culturally competent and equitable STEM education research. IID submissions also may request support that would enable the PI to access facilities and other resources necessary to complete the proposed STEM education research project.
 - a. **Investigators New to STEM Education Research:** intended to support investigators who are new to the field and provide them with experiences that will build their capacity to make meaningful contributions to the STEM education knowledge base, while supporting them in establishing their careers within a STEM education research community.
 - b. **Investigators Experienced in STEM Education Research:** to support experienced STEM education researchers are intended to enable researchers to expand their areas of expertise and acquire additional requisite knowledge and skills to conduct rigorous fundamental STEM education research. ECR: Core and ECR: BCSER define fundamental research as curiosity-driven or use-inspired basic research that makes important contributions to general, explanatory knowledge (e.g., theories) that underlies STEM education. Fundamental research generates knowledge and understanding with the potential for broad relevance. (By contrast, applied research generates knowledge primarily with specific relevance such as to a particular pedagogy, curriculum, or technology.)
2. **Institutes for Methods and Practices in STEM Education Research:** supports field-initiated institutes that provide participants with training and support in the use of cutting-edge methodological techniques and/or practices that advance the participants’ knowledge, skills, and competencies in STEM education research. Institute participants may include investigators at any stage in their career development.
3. **Conference Proposals:** proposals seeking for support to conduct well-focused conferences related to the ECR: BCSER goals may also be submitted. Proposals should include a conceptual framework for the conference, draft agenda, possible participant list, the outcomes or products that will result from the conference, and how these products serve the goals of the ECR: BCSER competition. Proposals focused on transition from discipline-based research to STEM education research and building skills for the future of STEM education research are of particular interest. Proposals focused on components of the national network of NSF INCLUDES also are welcomed. Investigators are encouraged to contact a cognizant EHR Program Officer prior to submission

Link to Additional Information: <https://www.nsf.gov/pubs/2022/nsf22548/nsf22548.htm>

2. Arcibo Center for STEM Education and Research (ACSER), NSF

Application Due Date: February 28, 2023

Anticipated Funding Amount: \$5,000,000 for one cooperative agreement

NSF solicits proposals for the establishment of ACSER at the AO site. The focus of AO has always been scientific immersion and wonder. In its 50-year history, more than 100,000 visitors and researchers have engaged in the many opportunities afforded at the site, traditionally related to the astronomical sciences. Although the 305-m telescope is no

longer operational, the site boasts numerous assets (e.g., laboratory space, visitor's center, lodging, etc.) that afford an opportunity to further expand the disciplinary focus at the site, including emerging areas of interest in STEM education and research. Given its historical significance and its importance to Puerto Rico, NSF is committed to the protection and evolution of AO by investing in meritorious ideas to leverage the site for STEM research, education, and public engagement in Puerto Rico and beyond.

ACSER would build and expand upon existing programs and opportunities currently in place on AO, while implementing new STEM education, research, and outreach activities and programs. It would engage pre-kindergarten - 12th grade students, undergraduate students, graduate students, postdoctoral scholars, educators/faculty, researchers, and interested communities in and outside of Puerto Rico.

The four primary goals of ACSER would be to:

- Promote STEM education, learning, and teaching.
- Support fundamental and applied STEM and STEM education research.
- Broaden participation in STEM.
- Build and leverage existing and new collaborations and partnerships.

There are also four primary functions of ACSER that would align with the above stated goals.

- Engage the public in STEM through education and outreach activities.
- Develop and implement a research and workforce development program.
- Support participation of individuals from underrepresented groups in STEM education and research.
- Cultivate and build authentic partnerships within and outside of Puerto Rico.

Proposals must address each function detailed below and clearly articulate how each is being addressed.

1. **Promote public engagement in STEM through education and outreach activities** - An informed citizenry is essential and of national importance in the promotion of STEM. Informed public awareness about scientific phenomena and critical issues in STEM helps people to better understand the world around them, to think critically and creatively, and to make well-reasoned judgments and decisions that maintain U.S. global competitiveness. Research continues to show sustained high levels of public trust in science centers and museums as sources of information. The role of ACSER would be significant in public engagement in STEM.

Wide latitude is given to proposers in designing appropriate education and outreach programs and initiatives for ACSER. Proposed activities should be grounded in evidence-based practices and sound programmatic approaches that are clear and well-defined with measurable goals and objectives. Proposed activities must be feasible, logical, and comprehensive, with the intention of increasing STEM educational experiences and outreach for individuals and communities, especially in Puerto Rico and including those underrepresented in STEM fields. These activities might include preK-12 school field trips or visits, summer/after-school programming, stationary and traveling exhibitions, interpretative displays, cyber-enabled learning and engagement platforms and experiences, interactive STEM spaces or laboratories, and community-based events.

2. **Develop and implement a research and workforce development program** - The site currently supports ongoing STEM research activities, including, but not limited to, NSF Research Experiences for Undergraduates (REU) and Research Experiences for Teachers (RET) programs. ACSER would leverage existing NSF-supported research and workforce development initiatives and create new opportunities that might include formal and informal STEM research opportunities for high school, undergraduate, and graduate students, postdoctoral scholars and STEM researchers and professionals, especially from groups underrepresented in STEM.

The ACSER research and workforce development program portfolio might include initiatives and research activities focused on:

- a. STEM disciplinary and field research
- b. STEM learning or teaching

- c. program effectiveness
- d. visitor studies
- e. public participation in scientific research
- f. science of broadening participation
- g. STEM education research
- h. emerging research topics of interest.

Ongoing field research, student internships, summer residential research programs, public participation in research opportunities, and professional development for K-12 teachers and higher education faculty and professionals are exemplars of research and workforce development activities that might be facilitated by ACSER.

3. **Support participation of individuals from underrepresented groups in STEM education and research** - As articulated in the NSF Strategic Plan 2022-2026, NSF's vision is "a nation that leads the world in science and engineering research and innovation, to the benefit of all, without barriers to participation (pg. 9)." NSF values the knowledge, skills, abilities, experiences, and perspectives that individuals from different backgrounds bring to the scientific enterprise and strives to support this diverse representation in the broader national community. It recognizes and supports outstanding researchers and innovative thinkers from across the Nation's diversity of regions, organizations, and demographic groups.

ACSER would play a significant role in modeling and advancing equitable and inclusive STEM education and research. This is especially important for groups that continue to be underrepresented in STEM fields — including African Americans, Alaska Natives, American Indians, Hispanics, Native Hawaiians, Native Pacific Islanders, persons with disabilities, veterans, and women. Proposers should incorporate best practices into proposed activities for reaching and engaging diverse groups through culturally relevant and responsive practices. The voices, knowledge, perspectives, and experiences of those underrepresented in STEM should be integral, including in, for example: conceptualization of the proposal, project leadership and staff positions, research opportunities, program development and implementation, outreach activities, participation, decision-making processes, partnerships and collaborations, evaluative activities, and in the interpretation and dissemination of center activities and research. The proposed work should provide positive outcomes for the individuals and communities engaged.

4. **Cultivate and build collaborations and partnerships within and outside of Puerto Rico** - Diverse collaborations and partnerships can enhance the intellectual, economic, capacity, impact, and sustainability of ACSER. Diverse and strategic partnerships can also provide access to resources and opportunities to individuals and communities that might not otherwise have engaged in STEM activities. This is especially important in communities local AO and in Puerto Rico, which are predominately Hispanic and underrepresented in STEM. A commitment to establishing and cultivating authentic partnerships with individuals and communities in Puerto Rico most impacted by inequities and a lack of access to STEM educational opportunities is important. Meaningful partnerships demonstrate evidence of authenticity by ensuring that each entity has an integral role and is actively engaged in all aspects of ACSER work, from the leadership to conceptualization and implementation. These collaborations and partnerships would likely create and strengthen STEM partnerships between the U.S. mainland and Puerto Rico through personally and professionally enriching STEM experiences.

Central to this function, ACSER partners and community stakeholders would assist in identifying and supporting research and education opportunities that enhance STEM awareness and workforce development. Opportunities, such as entrepreneurship, apprenticeships, externships, internships, faculty or K-12 teacher development, and mentoring may be considered to promote or support STEM engagement and interest. Stakeholders may include, but are not limited to, community-based groups or organizations, nonprofit or philanthropic organizations, state and local education agencies (K-12), businesses, libraries, museums, educational institutions, and other agencies.

This solicitation calls for proposals to manage the education, research, and outreach aspects of ACSER.

Resources available on site for education, research, and outreach efforts include:

- The Ángel Ramos Foundation Science & Visitor Center, which includes
 - Visitor's Center (with Visitor Center shop)
 - Exhibition Space
 - Auditorium
- Learning Center (separate building with classroom space for approx. 30)
- Office Space
- Laboratory Space
- Cafeteria
- Dormitories

Link to Additional Information: <https://www.nsf.gov/pubs/2023/nsf23505/nsf23505.htm>

3. Cultural and Community Resilience, NEH

Application Due Dates:

- **Optional Draft: December 1, 2022; April 11, 2023,**
- **Full Proposal: January 12, 2023; May 16, 2023**

Award Budget: up to \$150,000 for up to 2 years

Resilience is the ability to prepare for, recover from, and adapt to the impacts of our changing climate and world. The CCR program supports community-based efforts to mitigate the impacts of climate change and the COVID-19 pandemic by safeguarding cultural resources and fostering cultural resilience through the identification, documentation, and/or collection of cultural heritage and community experience.

Communities are a complex and dynamic group with shared locality, experiences, practices, and traditions. Humanists and preservationists in libraries, archives, museums, and institutions of higher education play an important role in strengthening communities facing change. As culture-keepers, they sustain memory and identity; as knowledge-brokers, they transfer abilities and perspectives that deepen our understanding of our place in the natural world and inform contemporary ways of working and living.

The CCR program contributes to the continuity of cultural heritage and its availability for future generations by supporting community-based projects that empower people to define, collect, and use cultural and historical resources. In addition, the CCR program recognizes the importance of documenting contemporary experiences with climate change and the COVID-19 pandemic and of deepening our understanding of their social, economic, and emotional impact on individuals and communities.

NEH welcomes applications at all stages of project development from planning through implementation, especially those that employ inclusive methodologies, such as participatory archiving, oral history, rapid response collecting, shared stewardship arrangements, and community-centered access. NEH also encourages you to leverage open access online resources and use Creative Commons licenses, when possible and as appropriate.

The CCR program supports activities such as:

- identifying and capturing cultural and historical resources, including through digital means, in communities potentially endangered by climate events, such as wildfires, drought, hurricanes, or rising sea levels
- safeguarding cultural resources to mitigate the impacts of the COVID-19 pandemic
- collecting oral histories from individuals impacted by extreme weather events or the COVID-19 pandemic, including survivors and first responders
- documenting traditional knowledge, memories of elders, practices, or technologies
- engaging in collaborative planning efforts to prepare communities for rapid response collecting; and
- applying insights from cultural heritage identification and documentation projects to inform local and regional community resilience strategies

4. Expanding AI Innovation through Capacity Building and Partnerships (ExpandAI), NSF

Submission Window Dates: January 09, 2023 - March 13, 2023

Award Budget:

- **CAP award: up to \$400,000 total budget over two years**
- **Partner award: it is anticipated to be a continuing award in the range of \$300,000 to \$700,000/year for up to 4 years**

The Expanding AI Innovation through Capacity Building and Partnerships (ExpandAI) program is a multi-year program that aims to significantly diversify participation in AI research, education, and workforce development through capacity development and partnerships within the National AI Research Institutes ecosystem.

PROGRAM TRACKS

This program solicitation offers two Tracks corresponding to stages of readiness for partnerships in AI Institutes. These are “ExpandAI Capacity Building Pilots” and “ExpandAI Partnerships” as described below.

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.

Proposals must articulate a clear vision motivating the capacity building activities, with a focus on long-term benefits to the MSI such as enhanced faculty capacity for foundational and/or use-inspired AI research or new effective models for increased education and career pathways in AI. Proposals to this track must include a strong Institutional Need and Support Statement (see proposal preparation instructions) containing an assessment of the current AI research and instructional capacity and infrastructure, a demonstration of institutional need for capacity building in AI, and a statement of the commitment of institutional support for the proposed activities. Proposals that substantiate a strong case in this need and support statement are likely to be most compelling for the funding opportunity. Further guidance for this supporting document can be found in Proposal Preparation Instructions.

Successful proposals will feature a Capacity Building Plan that features clear and measurable outcomes/benefits of capacity building. Suitable activities for such a plan are:

- establishment or significant enhancement of foundational or use-inspired AI research, marked by increased faculty research output
- design of academic pathways or innovative models for teaching and learning in AI, incorporating how students learn effectively in AI activities, and bringing AI disciplinary advances into the undergraduate and graduate experience
- establishment or significant expansion of AI career pathways for students resulting from new AI activities
- enhanced AI research infrastructure
- significant increase in the participation of investigators and students who have been traditionally underserved and underrepresented in AI
- a plan for objective process evaluation in support of the proposed efforts

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.

PARTNER proposals should scale up and make fully productive an appropriate existing capacity in AI research, education/workforce development, and/or infrastructure capacity. The proposing MSI in this track is not required to have previously been awarded a CAP project under this program. PARTNER proposals must constitute a significant new partnership that has the clear potential to build on the institution's current AI capacity as well as leverage the intrinsic strengths and talents of the MSI for mutual benefit in collaborative AI activities.

MSIs applying for this track must demonstrate readiness to leverage external expertise and financial resources to focus on medium- and long-range plans to leverage this funding opportunity and new partnerships to develop AI capacity within the MSI, including but not limited to further development of the MSI's envisioned methodological thrusts, use cases, educational and/or workforce development activities, and the potential for the MSI to expand and scale these efforts through formal, mutually beneficial partnerships. Proposals should include at least one (and if appropriate, more) established AI Institutes in developing a roadmap for collaborative work in some unifying theme or focus.

PARTNER proposals must feature a compelling Partnership Roadmap for collaborative work in some unifying theme or focus. Roadmaps are the beginning of a joint strategy between organizations for collaborative work. These roadmaps may also include community building activities (e.g., workshops) to further develop common interests, objectives, and goals for the growth of collaborative activities. Effective roadmaps are both depicted visually (e.g., conceptual diagram, logic model, table, etc.) and fully explained by a descriptive narrative. The roadmap should address all proposed projects involving research, education/workforce development, infrastructure, and any other types that are applicable to the collaboration. Roadmaps might address:

- enhancement of existing projects by virtue of new collaboration
- initiation of new projects made possible by the collaboration
- community building activities (e.g., workshops) to further develop common interests, objectives, and further growth of the partnership
- potential and plans for scaling nascent programs
- an evaluation plan for measuring the growth and mutual benefit of activities in all projects

ACCESS TO EXPERIMENTAL RESEARCH CYBERINFRASTRUCTURE (considerations for all proposals)

PIs are encouraged to consider utilizing NSF-supported research infrastructure (such as the Platforms for Advanced Wireless Research, FABRIC, Chameleon, CloudLab, and CISE Community Research Infrastructure projects) when formulating their research plans and submitting proposals. Descriptions of the capabilities of each system and their availability can be found on their websites.

For projects requiring access to high-performance computing resources, data infrastructure, or advanced visualization resources at scales beyond what is available locally, PIs are encouraged to consider production scale and testbed advanced research cyberinfrastructure, such as those supported by the ACSS Program, the Frontera Leadership-class system, the Partnership to Advance Throughput Computing (PATH), and others. Access to the broadening array of advanced cyberinfrastructure systems is coordinated through the ACCESS program. Descriptions of such infrastructure can be found on their websites.

CLOUD COMPUTING RESOURCES

Proposals may request cloud computing resources to use public clouds such as Amazon Web Services (AWS), Google Cloud Platform (GCP), IBM Cloud, and Microsoft Azure. Cloud computing resources described in proposals may be obtained through an external cloud access entity (CloudBank) supported by NSF’s Enabling Access to Cloud Computing Resources for CISE Research and Education (Cloud Access) program. Proposers should describe this request in a Supplementary Document including: (a) which public cloud providers will be used; (b) anticipated annual and total costs for accessing the desired cloud computing resources, based on pricing currently available from the public cloud computing providers; and (c) a technical description of, and justification for, the requested cloud computing resources.

Proposers should describe this request in a Supplementary Document (as described in proposal preparation instructions below). The proposal budget should not include the costs for accessing public cloud computing resources via CloudBank. Also, the total cost of the project, including the cloud computing resource request, may not exceed the budget limit described in this solicitation.

Submitting organizations (“proposers”) are encouraged to submit their first Concept Outline at any time, regardless of the solicitation windows. NSF will review the submitted Concept Outline and officially respond via email. NSF may ask for more information before making a final decision.

Link to Additional Information: <https://www.nsf.gov/pubs/2023/nsf23506/nsf23506.htm>

5. Ryan White HIV/AIDS Program Part F Community Based Dental Partnership Program, HRSA

Application Deadline: December 16, 2022

Award Budget: Approximately \$4,000,000 for up to 13 recipients

The purpose of this program is to improve access to oral health care services for low-income people with HIV in underserved geographic areas while simultaneously providing education and clinical training for dental students, dental hygiene students, dental residents, or other dental providers in community-based settings. CBDPPs will accomplish program goals through collaborations between dental and dental hygiene education programs recognized by the Commission on Dental Accreditation and community-based dental providers.

Recipients must adhere to the following statutory requirements and programmatic expectations.

- **Education and Training** – RWHAP Part F CBDPP recipients must ensure HIV related oral health education and training for dental students, dental hygiene students, dental residents, or other dental providers in community-based settings. Recipients must establish and manage clinical rotations for trainees to deliver oral health services to people with HIV in community-based settings located in the service area under the supervision of community-based dentists. Education and training curricula should be interdisciplinary and focus on comprehensive oral health care for people with HIV. Additionally, education and training should allow trainees opportunities to learn about and apply principles of trauma-informed care, gender affirming care for gender-diverse populations, and other social determinants of health. RWHAP Part F CBDPP recipients are strongly encouraged to follow the National HIV Curriculum (NHC). The NHC is a free, HRSA- funded educational website that provides ongoing, up-to-date information needed to meet the core competency requirements for HIV prevention, screening, diagnosis, ongoing treatment and care to health care providers in the United States.
- **Oral Health Care Service Delivery** – RWHAP Part F CBDPP recipients must ensure that low-income people with HIV have access to community-based, comprehensive, oral health care services in the existing or proposed service area.
- **Integration of Oral Health into Primary HIV Care** – RWHAP Part F CBDPP recipients must ensure integration of oral health services with primary HIV medical care. Integration of oral health and medical care can happen at multiple points of the care trajectory. Some examples include reciprocal dental and medical referral relationships, integrated medical-dental intake and assessment forms, and educational outreach programs to inform people with HIV of the availability of oral health services. Other examples may include dental residents teaching HIV medical providers how to conduct a basic oral health assessment and providing oral health

education to medical patients during integrated medical appointments. CBDPP recipients will establish formal arrangements such as contracts or memoranda of understanding (MOUs) to support integration of services.

- **Partnerships** – HRSA HAB expects RWHAP Part F CBDPP recipients to establish collaborative partnerships with community-based organizations in the service area, including community-based dental providers, to ensure that dental students, dental hygiene students, and/or dental residents are providing oral health care services in community-based settings. Examples of partnering organizations include other RWHAP-funded clinics and service organizations, local Ryan White HIV/AIDS Program AIDS Education and Training Centers (AETCs); and local/state dental societies associated with but not limited to the American Dental Association, American Dental Education Association, National Dental Association, Hispanic Dental Association, and the Indian Dental Association.
- **Medicaid Provider Status** – All providers of services available under the state Medicaid plan must have entered into a participation agreement under the state plan and be qualified to receive payments under such plan or receive a waiver from this requirement. This requirement may be waived for free clinics that do not impose a charge for health services and do not accept reimbursement from Medicaid, Medicare, private insurance, or any other third-party payor.
- **Clinical Quality Management** – RWHAP Part F CBDPP recipients are encouraged to have a clinical quality management (CQM) program that ensures coordination of activities aimed at improving patient care, health outcomes, and patient satisfaction. The following quality management resources can be helpful to establishing or continuing a CQM program:
 - HAB Policy Clarification Notice (PCN) 15-02 Clinical Quality Management and related Frequently Asked Questions for PCN 15-02
 - Quality of Care | Ryan White HIV/AIDS Program
 - HRSA/HAB Oral Health Performance Measures:
<http://hab.hrsa.gov/deliverhivaidscares/habperformmeasures.html>
 - The Center for Quality Improvement and Innovation (CQII)
 - The National HIV/AIDS Strategy for the United States 2022–2025
- **Performance Measurement, Performance Management, and Program Evaluation** – RWHAP Part F CBDPP recipients are encouraged to include HRSA HAB oral health measures and NHAS indicators that align with national goals to end the HIV epidemic. Recipients should identify, collect, analyze, and report data to assess the impact of oral health education and clinical training of dental students, dental hygiene students, or dental residents on oral health care outcomes for people with HIV in their respective clinics or service areas. For the HAB oral health performance measures, see <http://hab.hrsa.gov/deliverhivaidscares/habperformmeasures.html>
- **Involvement of People with HIV** – People with HIV receiving services at a RWHAP-funded organization should be actively involved in developing, implementing, and evaluating the CBDPP and CQM activities. To accomplish effective involvement of people with HIV, programs should provide necessary training, mentoring, and supervision. Examples of involvement of people with HIV include but are not limited to the following:
 - Representation on a newly established or existing Advisory Board.
 - Serving as volunteer HIV peer navigators working directly with patients to help them address issues related to keeping dental appointments, treatment decisions, and adherence, as examples.
 - Participation on workgroups, committees and task forces, such as a Quality Committee or a Patient Education Committee.
 - Serving as paid peer educators, outreach workers, or clinic staff, with fair and equitable pay for the job they are performing.
 - Participation through patient satisfaction and needs assessment surveys, forums, and focus groups.
 - Participation as guest faculty on panel of persons with lived experience in community-based, dental or service-learning courses.

- **Communities of Practice (CoP)** – Through a contract, HRSA may conduct at least one CoP during the period of performance. The CoP will diffuse interventions and evidenced-based strategies, share best practices, and build new knowledge around several important areas, including but not limited to strengthening the community based dental education of trainees and integration of oral health and primary care. HRSA HAB expects all CBDPP recipients to participate in a future oral health CoP. A CoP is an established group of people that participates in collaborative learning sessions with other organizations and uses process improvement to enhance performance in a high impact area. Teams will use results from organizational self-assessments and lessons learned through didactic learning on specific topics to develop programmatic goals and implement key activities and improvement projects that will benefit their organization.
- **Evaluation of CBDPP** – HRSA may conduct an evaluation of the CBDPP during the period of performance and expects all CBDPP recipients to participate.
- **HRSA Supported Meetings or Conference** – HRSA expects RWHAP Part F CBDPP grant recipients to participate in and support the travel and training for HAB supported meetings or conferences, such as the biennial National Ryan White Conference during the period of performance.
- **Payor of Last Resort and Eligibility Determination** – With the exception of programs administered by or providing the services of the Indian Health Service, the RWHAP is the payor of last resort. Recipients may not use RWHAP Part F CBDPP funds for a service if payment has been made, or reasonably can be expected to be made by a third-party payor.
- **Program Income** – Recipients are required to track, appropriately use, and report all program income generated by the award consistent with RWHAP requirements. This includes third party reimbursement, client fee collections, income generated by participation in the 340B Drug Discount Program, or any other sources of program income.
- **Information Systems** – Recipients must have an information system that has the capacity to track and report at a minimum the data requested in the RWHAP Dental Services Report (DSR).
- **Service Availability** – Oral health care services for people with HIV should be available to clients no later than 90 days from the start date of the RWHAP Part F CBDPP period of performance.
- **Sub awarded Services** – In addition to the information included in 45 CFR § 75.352, subrecipient agreements must include:
 1. The total number of people with HIV to be served
 2. Medicaid certification eligibility of the dental providers
 3. Details of services to be provided
 4. Assurance that providers will comply with RWHAP Part F CBDPP legislative and program requirements, data sharing, and DSR submission.
- **Medication Discounts** – RWHAP grant recipients that purchase, are reimbursed for, or provide reimbursement to other entities for outpatient prescription drugs are expected to secure the best prices available for such products and to maximize results for their organization and its patients (see 42 CFR part 50, subpart E). Eligible health care organizations/covered entities that enroll in the 340B Drug Pricing Program must comply with all 340B Program requirements and will be subject to audit regarding 340B Program compliance. 340B Program requirements, including eligibility, can be found at <https://www.hrsa.gov/opa/>.
- **Other Financial Management Issues** – Recipients must have appropriate financial systems in place that provide internal controls in safeguarding assets, ensuring stewardship of federal funds, maintaining adequate cash flow to meet daily operations, and maximizing revenue from non-federal sources.

6. Experiential Learning for Emerging and Novel Technologies (ExLENT), NSF

Application Due Dates:

- **Pivots & Beginnings Tracks: March 2, 2023**
- **All Tracks (Pivots, Beginnings and Exploration): September 14, 2023**

Award Budget: up to \$1,000,000 for up to three (3) years

The ExLENT program aims to connect companies, governments, agencies, schools, professional organizations, and/or non-profits in order to provide individuals the experiential STEM learning opportunities needed to accelerate the Nation's innovation capacity. Given the breadth of age and educational/professional experiences of potential learners, there will be no "one-size fits all" requirement for this program. Experiential learning opportunities supported by ExLENT can serve a broad range of learners including secondary school youth and adults at any stage of career development (Figure 1). Further, proposed experiential learning activities can range from fully immersive experiences, such as internships, to extensive course-based activities that are constructed by (or driven by) workplace partner input to approximate real-world experiences (Figure 1).

The ExLENT program seeks to fund new and/or existing cross-sectoral partnerships to design engaging activities that provide individuals with (1) the opportunity to gain new skills and (2) the resources necessary to successfully navigate a career path into emerging technology fields, whether they are exploring new careers, striving toward career entry, or seeking to upskill or reskill their capabilities. Proposals should leverage evidence-based best practices in experiential learning to attract diverse learners to emerging technology careers; establish pathways into emerging technology fields for individuals historically underrepresented in STEM fields; and to further develop and hone the talent of workers in these rapidly evolving fields. Successful proposals will outline a comprehensive program curriculum that includes:

- Experiential learning opportunities that provide participants with an enhanced understanding of the emerging technology landscape and training in the STEM entrepreneurial and technical skills that increase their employability.
- Workplace driven career exploration activities that allow participants varied pathways into, and job opportunities in, emerging technology fields.
- Mentorship to support participants' professional development and pursuit of careers in emerging technology fields, providing them with paths beyond the ExLENT program.
- Establishment of a participant cohort designed to help participants develop a STEM career identity and a sense of community within the emerging technology fields.
- Intentional support in diversity, equity, inclusion, and accessibility for all stakeholders to create environments that value diverse perspectives critical for innovation and that promote a competitive, resilient emerging technology workforce.

ExLENT Proposal Tracks

Recognizing that the familiarity with (and preparedness for) a career in an emerging technology field varies widely, this solicitation provides three tracks to best support the broad range of learners:

1. **Pivots** - aims to attract individuals not currently enrolled in post-secondary educational programs, and have acquired useful skills such as time management, communication, and teamwork in non-emerging technology careers. This may include participants who require upskilling to work in emerging technology fields. Participants benefiting from this track should be highly motivated to change their career trajectory into an emerging technology field. Proposed projects should provide participants with experiential learning opportunities that build skills and competencies necessary for current professionals to pivot into careers in emerging technology fields.
2. **Beginnings** - aims to provide individuals possessing some existing STEM competencies (e.g., those with stackable certificates in STEM or those enrolled in associate degree programs, etc.) with experiential learning

opportunities that deepen knowledge and skills in emerging technology fields. Proposed projects should enable participants to pursue or advance their career in an emerging technology field.

3. Explorations - aims to provide individuals with limited or no specialized STEM education the inspiration and opportunity to explore the potential of a career path in emerging technology fields. Proposed projects in this track should provide participants with experiential learning opportunities that build interest, motivation, and knowledge in emerging technology fields and identify pathways to careers in these areas. Proposals submitted to this track should focus on a wide range of participants from diverse backgrounds and may include those enrolled in traditional education pathways (e.g., secondary school, college, and/or military). Alternatively, a proposal might focus on participants who are not enrolled in a traditional educational pathway (i.e., self-learners, members of incubators) who are inclined to explore hands-on learning and development opportunities in emerging technology fields.

ExLENT projects should demonstrate an integrative and comprehensive approach that includes the following key features:

- Provides pathways into the emerging technology workforce.
- Includes individuals from diverse backgrounds and experiences, especially individuals from groups historically underrepresented and/or underserved in STEM.
- Provides in situ emerging technology-specific, competitively compensated, professional work experiences or emerging technology-specific career exploration for participants.
- Where relevant, includes attention to issues of cybersecurity, safety, and/or privacy in considering applications of emerging technologies in professional settings and/or in other experiential learning opportunities.
- Involves partnerships between appropriate stakeholders committed to an integrated, collaborative network to best support participants.
- Builds community between all those involved in the project by using a cohort model for engaging participants.
- Provides both mentoring by peers and mentoring by experienced emerging technology professionals for participants that includes career development planning beyond program participation.
- Includes diversity, equity, inclusion, and accessibility (DEIA) instruction, as appropriate, for the different stakeholders.
- Includes a sustainability plan that explains how partners will continue to provide pathways into the emerging technology workforce after the project's conclusion.
- Includes an evaluation plan that examines the extent to which the program delivered on its proposed activities.

Link to Additional Information: <https://www.nsf.gov/pubs/2023/nsf23507/nsf23507.htm>

7. Developing and Demonstrating Nanosensor Technology to Detect, Monitor, and Degrade Pollutants, EPA

Application Deadline: December 7, 2022

Award Budget: \$1,500,000 for one award

This RFA is soliciting research to develop and demonstrate nanosensor technology with functionalized catalysts that have potential to degrade selected contaminants in addition to detecting and monitoring pollutants.

The Science to Achieve Results (STAR) Program's goal is to stimulate and support scientific and engineering research that advances EPA's mission to protect human health and the environment. It is a competitive, peer-reviewed, extramural research program that provides access to the nation's best scientists and engineers in academic and other nonprofit research institutions. STAR funds research on the environmental and public health effects of air quality, environmental changes, water quality and quantity, hazardous waste, toxic substances, and pesticides.

EPA recognizes that it is important to engage all available minds to address the environmental challenges the Nation

faces. At the same time, EPA seeks to expand the environmental conversation by including members of communities which may have not previously participated in such dialogues to participate in EPA programs.

Specific Research Areas of Interest/Expected Outputs and Outcomes

EPA is interested in a holistic approach for detecting, monitoring, and degrading environmental pollutants. Nanosensors to detect and monitor pollutants should be integrated with a nanotechnology-based treatment or remediation process. Projects should make a case for a sensing solution as well as a decontamination solution.

The class of contaminants (e.g., pesticides, heavy metals, pathogens, PFAS, halogenated compounds) is not limited by this RFA. The type of nanomaterial (e.g., carbon-based, metal oxides, quantum dots), recognition element (e.g., antibodies, enzymes, DNA), and signal transduction method (e.g., optical, electrochemical, magnetic) that make up the nanosensor are also at the discretion of the applicant. Projects may use different nanoparticles for the detection/monitoring and degradation portions of the project but should focus on the same contaminant.

This RFA is seeking nanotechnology that is ready to be validated and demonstrated outside the lab in the relevant environment, equivalent to a TRL of 5-6. Applications should clearly define the TRL of their technology. Projects with a TRL of 4 or less may not be rated as highly as those with a TRL of 5-6. (NOTE: STAR grant funding must be used for research and cannot be used for commercialization or for-profit initiatives such as business creation. Therefore, this solicitation does not support projects with a TRL of 7-9.)

Examples of holistic projects could include, but are not limited to:

- Nanotechnology-based monitoring of contaminants in surface water and a treatment process for safe drinking water.
- Detection of low levels of contaminants in drinking water and nanotechnology-enabled treatment process to remove these contaminants to safe levels for human consumption.
- Nanosensor-based detection and non-targeted analysis of multiple contaminants and remediation of toxic pollutants.
- Nanosensor-based detection of multiple pollutants in reclaimed water for crop irrigation, and the ability to remove contaminants to prevent harm to plants and soils, maintain food safety, and protect the health of farm workers.
- Nanotechnology-enabled sensors for viral particles as aerosols in indoor environments and disinfection of airborne pathogens.
- Monitoring of roadside air pollution and nanotechnology-enabled purification of ambient air inside tunnels or near parking lots.
- Use of nanotechnology for detecting and removing soil contaminants and enhancing soil quality and fertility.

This RFA solicits applications that address both of the following research areas. Applications that only address one research area may not be rated as highly as those that address both.

Research Area 1: Develop and demonstrate nanosensor technology to detect and monitor pollutants - The proposed nanotechnology should detect and monitor pollutants that are linked to adverse health outcomes.

The ideal nanosensor should:

- Have a broad range of capabilities for the measurement of pollutants in environmental matrices (air, water, and soil).
- Be reliable and easy to operate.
- Function in a range of chemical concentrations relevant to human health.
- Demonstrate high sensitivity and selectivity with a low detection limit value.
- Detect pollutants in the environment at or near to real time.
- Function under conditions normally associated with real environmental matrices.
- Provide temporal data for the location and time of measurement.

- Collect information on fate and transport of pollutants across a large distance.
- Communicate wirelessly to users.
- Have potential to be integrated into a comprehensive monitoring system

Research Area 2: Develop and demonstrate nanosensor technology with functionalized catalysts to degrade selected contaminants - The proposed nanotechnology should capture and/or degrade contaminants through chemical reactions that render the pollutants harmless. Applications should demonstrate enhanced performance of the nanotechnology-enabled catalysis through improved efficiency (speed and completeness of the reaction) and sustainability (input and by-products of the reaction).

Outputs expected from the research funded under this RFA may include, but are not limited to, the following:

- Nanosensors with proven sensitivity and selectivity for environmental pollutants in relevant media.
- Validation of nanosensors that are scalable and practical for use beyond laboratory settings.
- Nanotechnology with demonstrated ability to capture and/or degrade pollutants in environmental matrices.
- Identification of cases where environmental sensing and management needs are unmet and may be addressed with nanotechnology.
- Demonstration of how nanotechnology can be developed, scaled, and implemented for environmental sensing and management.
- Evidence for development and scale-up process, demonstration scenarios, and cost structure to apply nanotechnology sensors and catalysts in environmental sensing and management.
- Established test cases for future applications of nano-enabled sensing and catalysis for environmental monitoring and management.
- Versatile and vibrant systems which involve cutting-edge techniques in sensing and monitoring varieties of harmful chemicals and toxins in different environmental media.
- Reports and peer reviewed publications pertaining to the research areas listed above.
- Outreach materials for stakeholders such as state and local governments demonstrating the benefits of nanosensor technology for environmental sensing and management.

Outcomes expected from the research funded under this RFA may include, but are not limited to, the following:

- Improved understanding of environmental sensing at the nanoscale.
- Improved ability for nanosensors to measure many analytes simultaneously and near real-time.
- Improved spatial and temporal resolution of nanosensors for more accurate and precise modeling.

Link to Additional Information: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=344112>

8. Landmarks of American History and Culture, NEH

Application Deadline:

- **Optional Draft: December 15, 2022**
- **Full Proposal: February 1, 2023**

Award Budget: up to \$190,000 for a period of performance of 15 months

This notice solicits applications for the Landmarks of American History and Culture program from the NEH Division of Education Programs. The program supports a series of one-week residential, virtual, and combined format workshops across the nation that enhance and strengthen how K-12 educators, higher education faculty, and humanities professionals incorporate place-based teaching and learning in the humanities.

Landmarks of American History and Culture workshops (Landmarks) situate the study of topics and themes in the humanities within sites, areas, or regions of historic and cultural significance to expand participants' knowledge of and approaches to teaching about diverse histories, cultures, traditions, languages, and perspectives in the United States and its jurisdictions. Landmarks workshops offer participants:

- enhanced knowledge of content through humanistic inquiry, experiential learning, discussions, readings, lectures,

and multimedia presentations

- place-based learning activities, such as visits to museums, libraries, archives, monuments, memorials, national parks, historic homes and buildings, walking tours, and public performances
- access to essential source materials, including primary texts, documents, oral histories, artifacts, archival resources, and digital media
- a community of inquiry that encourages dialogue and the exchange of ideas
- opportunities to examine and design implementation strategies; work with digital resources and tools that emphasize place-based teaching, learning, and research in the humanities; and collaborate on the creation of educational materials
- a team of humanities scholars: topic experts, local organizations, community partners, and faculty with K-12 education experience (where required), who contribute to all phases of the program

Landmarks workshops may examine a range of topics, take a variety of forms, occur in-person and/or virtually, and include multiple place types. They may support activities such as:

- considering how monuments, markers, and memorials interpret events, eras, individuals, and/or groups at national, regional, and local levels
- exploration of physical, natural, and/or cultural landscapes while studying art history, literature, environmental humanities, anthropology, archaeology, architecture, and related fields
- engagement with materials and subject matter experts at archives, museums, and historic sites when studying the events and legacies of America's conflicts
- designing public humanities and experiential learning activities such as collecting oral histories, working with digital mapping resources, and developing collaborations with community members or local organizations
- site visits, presentations by invited speakers, and work with interactive digital resources to study the places, perspectives, and legacies of American history and culture

Project Design

Each Landmarks workshop must include two separate sessions of five to seven days each for two different groups of participants. The content, presenters, site visits, activities, and readings should be substantively the same for each session. You can offer Landmarks workshops in the following formats:

- **Residential:** All participants attend for the duration of the workshop at the host site.
- **Virtual:** All participants attend for the duration of the workshop using an online platform. This can include synchronous and asynchronous sessions.
- **Combined Format:** All participants attend a portion of the workshop online and a portion of the workshop at the host site. Online and residential sessions occur at different times, but participants attend the same format simultaneously.

Given the importance of immersive study to Landmarks workshops, you should consider the variety of academic-year calendars when you schedule your workshops. Landmarks workshops are typically offered between the last week of June through the second week of August. If you propose activities outside the summer season, you may consider asynchronous and synchronous sessions before and/or after the summer program.

Pre-Application Webinar: a pre-recorded webinar will be posted to the program resource page by November 9, 2022.

Pre-Application Q&A session: December 6, 2022, 12:00 p.m. Eastern Time

Meeting ID: 234 115 288 818

Audio: +1 202-600-8430

Phone Conference ID: 817124610#

Link to Additional Information: <https://www.nifa.usda.gov/grants/funding-opportunities/biotechnology-risk-assessment-research-grants-program>

9. Improving Undergraduate STEM Education: Education and Human Resources (IUSE: EHR), NSF

Application Deadline: January 18, 2023; July 19, 2023

Award Budget:

- **Track 1:**
 - **ESL Level 1: \$400,000 for up to 3 years**
 - **ESL Level 2: range from \$400,001 to \$750,000 for up to 3 years**
 - **ESL Level 3: range from \$750,001 to \$2 million for up to 5 years**
- **Track 2:**
 - **ICT Capacity Building: \$200,000 for a single institution or \$400,000 for a multi-institution for up to 2 years**
 - **ICT Level 1: \$400,000 for up to 3 years**
 - **ICT Level 2: range from \$400,001 to \$2 million for up to 5 years**

The IUSE: EHR program supports projects designed to contribute to a future in which all undergraduate students are fully engaged in their STEM learning. The IUSE: EHR program promotes (1) Engaged Student Learning: the development, testing, and use of teaching practices and curricular innovations that will engage students and improve learning, persistence, and retention in STEM, and (2) Institutional and Community Transformation: the transformation of colleges and universities to implement and sustain highly effective STEM teaching and learning.

All projects supported by IUSE: EHR must:

- Demonstrate a strong rationale for project objectives or incorporate and build on educational practices that are demonstrably effective
- Contribute to the development of exemplary undergraduate STEM education
- Add to the body of knowledge about what works in undergraduate STEM education and the conditions that lead to improved STEM teaching and learning
- Measure project progress and achievement of project goals

To accomplish these goals, IUSE: EHR projects may focus their activities at any level, including the student, faculty, institutional or community levels. Development, propagation, adaptation, and transferability of evidence-based practices are also important considerations. Projects should consider designing materials and practices for use in a wide variety of institutions or institutional types. Topics of interest to the IUSE: EHR program include, but are not limited to, the following:

- Development and study of the efficacy of innovative teaching and learning practices and resources
- Development, testing, and dissemination of instruments for measuring student outcomes
- Efforts to increase the diversity of the STEM workforce including K-12 teachers and/or the faculty and institutions engaged in work to improve undergraduate STEM education
- Faculty professional development to increase the use of evidence-based teaching practices
- Implementation of and research on sustained change processes involved in adopting evidence-based and effective instruction within or across departments, disciplines, or institutions
- Efforts to achieve STEM educational goals through innovative partnerships, for example with community organizations, local, regional, or national industries, centers for teaching and learning, professional societies, or libraries
- Propagating and sustaining transformative and effective STEM teaching and learning through institutional practices or involvement of professional societies
-

IUSE: EHR also welcomes proposals to conduct workshops and conferences aimed at improving undergraduate STEM education, developing implementation practices, and/or assembling research partnerships and agendas.

All IUSE: EHR projects are expected to increase knowledge about effective STEM education. This may be achieved through posing one or more research questions that will be answered through the course of the study or through evaluation of project activities, impacts, or outcomes⁶. Projects should include a well-designed plan to gather data and should specify

methods of analysis that will be employed to answer the questions posed and mechanisms to evaluate success of the project. Projects should also specify strategies for generating and using formative and summative assessment of project processes, outputs, and/or outcomes.

The IUSE: EHR program strongly encourages collaboration among disciplinary instructors, departmental and institutional administrators, and educational researchers in the design and implementation of a project. Transferability and propagation are important aspects for IUSE: EHR-supported efforts and should be addressed throughout a project's lifetime. Dissemination plans should ensure that resources and findings from the project are accessible for multiple audiences, such as researchers and educators. Ultimately, results and findings from IUSE: EHR projects are expected to contribute to EHR's larger themes focusing on STEM learning and learning environments, broadening participation and institutional capacity in STEM, and/or STEM professional workforce development.

Program tracks and levels

The IUSE: EHR program features two tracks: (1) Engaged Student Learning and (2) Institutional and Community Transformation. Several levels of scope, scale, and funding are available within each track, as summarized in Table 1 and detailed below.

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. Whatever the focus, all projects should be both evidence-based and knowledge-generating, with well-developed plans to study student experiences and evaluate student outcomes. NSF's investment in research and development for Engaged Student Learning in undergraduate STEM education encompasses a range of approaches including:

- Development and implementation of novel instructional methods or adaptation of existing evidence-based pedagogies in STEM disciplines or in multi-disciplinary or interdisciplinary courses or programs
- Design and assessment of metrics aiming to measure STEM teaching and learning or student outcomes
- Local, regional, or national efforts to develop and disseminate tools, resources, or models designed to improve STEM teaching and learning
- Discipline-based educational research or research that spans multiple disciplinary domains
- Faculty learning through professional development
- Re-envisioning or adaptation of learning environments
- Co-curricular activities that increase student motivation and persistence in STEM
- Investigation of novel instructional tools or learning systems, including cyber-learning or learning technologies
- Synthesis or meta-analysis of prior work to examine differences in findings across studies and variations in the types of interventions, for whom, and under what conditions
- Collaborations between two-year and four-year institutions to develop innovative pathways for student transfers and success

Three levels of funding are available for ESL projects. These funding levels should align with the scale and scope of the effort and the capacity of the team to conduct the proposed study. The scale of the work refers to the number of students, faculty, departments, institutions, or other groups that the work engages while the scope of the work refers to the range of project components involved. Inclusion of investigators and/or institutions new to NSF as project team members or collaborative partners is encouraged as a mechanism for expanding project impact and for building capacity in STEM disciplinary, interdisciplinary, or multi-disciplinary engaged student learning.

- ESL Level 1 – 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. Proposals from a single institution involving one or more faculty members in a single discipline or across several disciplines are appropriate for this level, as are partnerships across disciplines, institutions, or communities focused on a unifying thematic approach or problem. Pilot data illustrating initial efforts may be helpful in assessing the viability of the project, but projects with a strong grounding in the relevant literature are also appropriate for this level. Investigators from institutions new to the IUSE program are encouraged to consult NSF 20-034, Dear Colleague Letter: Stimulating Participation from Institutions New to the Improving Undergraduate STEM Education: Education and Human Resources Program.

- ESL Level 2 – The projects should have a scale and scope beyond what would be expected for ESL Level 1 projects. 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 2 projects may be from a single institution or involve multi-institutional collaborations. Partnerships with professional societies, industries, or community partners are also appropriate for this level.
- ESL Level 3 – 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. ESL Level 3 projects are expected to demonstrate sufficient scale and scope to warrant this level of support. ESL Level 3 projects are expected to contain highly developed research plans including significant research questions or large-scale evaluation efforts. Budgetary requests should be commensurate with the scope and scale of the proposed project. Collaborations among disciplinary instructors, departmental and institutional administrators, and educational researchers are likely to strengthen ESL Level 3 proposals. In addition, ESL Level 3 proposals are likely to involve two or more institutions, although submissions from single entities will be considered if the scale and scope of the project is appropriate.

To determine suitability of a project for consideration as an ESL Level 3 effort, or for assistance in distinguishing between ESL Level 3 and ICT Level 2 projects (see below), proposers are encouraged to contact an NSF program officer prior to preparation and submission of a full proposal.

Track 2: Institutional and Community Transformation

The Institutional and Community Transformation (ICT) track funds innovative work applying evidence-based practices that improve undergraduate STEM education and research on the organizational change processes involved in implementing evidence-based practices. The emphasis of this track is on systemic change that may be measured at the departmental, institutional, or multi-institutional level, or across communities of STEM educators and/or educational researchers.

Institutional and Community Transformation projects are expected to include one or more theories of change to guide the proposed work. A theory of change functions to identify and organize the dimensions of the proposed work and is a critical component of ICT projects. Competitive proposals will examine the impact of deliberate interventions in undergraduate STEM education. While proposed projects will vary in approach and the underlying theory/theories of change identified, promising proposals will recognize that STEM higher education is a complex system and that achieving goals involves analyzing and addressing organizational factors, such as institutional policies and practices or opportunities for professional growth.

ICT projects may focus on departments or colleges within institutions, entire institutions, on groups of institutions, or on STEM communities of educators, practitioners, and/or educational researchers. NSF's investment in research and development in institutional and community transformation encompasses a range of approaches, such as:

- Transformation of high-enrollment, lower-division courses within a discipline or across disciplines to include evidence-based teaching practices

- Developing disciplinary or interdisciplinary teaching evaluation rubrics that are rooted in a common research-based framework
- Development and propagation of faculty communities of practice to support efforts to improve accessibility or sustainability of evidence-based educational approaches
- Examination of change processes in colleges, universities, or academic communities and developing metrics and identifying best practices to guide the process of institutional transformation
- Re-envisioning of learning environments or support networks for faculty and students
- Inclusion of non-tenure-track faculty or instructors through policy or professional development
- Identification of common elements across disciplines, programs, institutions, or systems that support students from groups underrepresented in STEM to be successful.

Three levels of funding are available for Institutional and Community Transformation projects.

These funding levels align with the scale and scope of the empirical effort and the capacity of the team to conduct the proposed research. The scale of the work refers to the number of students, faculty, departments, institutions, or other groups that the work engages while scope refers to the range of project components involved. Inclusion of investigators and/or institutions new to NSF as project team members or collaborative partners is encouraged as a mechanism for expanding project impact and for building capacity in institutional and community transformation.

ICT Capacity-Building – Proposals may be submitted as individual or collaborative projects. Proposals are expected to enable institutions that have not served as the lead institution on a prior ICT award to identify a project of interest. Funding for these projects is intended to support efforts to assess institutional needs, formulate departmental and/or institutional commitments, develop necessary campus partnerships, audit prior institutional efforts, gather data, learn about relevant theories of change, identify relevant institutional practices and policies, and/or formulate plans for advancing institutional or community transformation. Proposers are encouraged to include a variety of participants such as disciplinary or educational researchers, assessment and evaluation experts and advisors, and institutional leaders. Funds awarded for ICT Capacity-Building proposals are intended to defray costs such as coordinating among project participants, sharing data, and attending relevant meetings including IUSE: EHR PI meetings.

- ICT Level 1 – Awards at this level are intended for early-stage exploratory projects⁶ or small to mid-scale projects that build on prior work.
- ICT Level 2 – Proposals are intended to support design and development work or impact research⁶. Projects at this scale and scope may be disciplinary, interdisciplinary, or multi-disciplinary in nature and are intended to examine and/or incorporate broad communities of institutions, departments, or faculty. ICT Level 2 projects are expected to demonstrate sufficient scale and scope to warrant support at this level. Prior work need not have been funded through the IUSE: EHR Program but should provide data and document expertise of the project team in support of project objectives. ICT Level 2 work is expected to contain robust research plans including either significant research questions or large-scale evaluation efforts, along with appropriate assessment efforts.

To determine suitability of a project for consideration as an ICT Level 2 effort, or for assistance in distinguishing between ICT Level 2 and ESL Level 3 projects (see above), proposers are encouraged to contact an NSF program officer prior to preparation and submission of a full proposal.

Conferences

Proposals for conferences addressing important challenges in undergraduate STEM education may be submitted at any time following consultation with a program officer. Conference proposals that address diversity in STEM teaching and learning, and those involving collaborations of educational researchers and disciplinary scientists to ensure that STEM teaching reflects cutting-edge STEM disciplinary research are especially encouraged.

Link to Additional Information: <https://www.nsf.gov/pubs/2023/nsf23510/nsf23510.htm>

10. AHEAD (Advancing Head and Neck Cancer Early Detection Research) (U01 Clinical Trial Not Allowed), NIH

Application Due Date:

- Letter of Intent: December 11, 2022
- Full Proposal: January 27, 2023

Anticipated Funding Amount: limited to \$500,000 direct costs per year for up to 5 years

Head and neck cancers (HNC), the sixth leading type of cancer by incidence worldwide, are a heterogeneous group of malignancies that arise in the oral and nasal cavities, paranasal sinuses, pharynx, larynx, and salivary glands. In the United States, more than 65,000 individuals are newly diagnosed with HNC every year. Head and neck squamous cell carcinoma (HNSCC) accounts for about 80% of all HNC; less common HNC types include adenocarcinomas (<15%), lymphomas (<5%), melanomas (<3%), and salivary gland carcinomas (<3%). The primary risk factors associated with HNC include tobacco use, alcohol consumption, and viral infections, such as Human Papilloma Virus (HPV), Epstein-Barr Virus (EBV), and Human Immunodeficiency Virus (HIV).

Research Objectives and Scope

The predominant precursor for HNC is tissue dysplasia. Treatment approaches for dysplastic lesions include observation, excision, phototherapy, laser therapy, cryotherapy, or pharmacological therapy. Estimates of the propensity for lesions to progress to cancer vary considerably, and in most cases, there are limited biomarkers that can predict which lesions will progress to cancer and which will not. In addition, tumor recurrence and metastasis after treatment, and the development of secondary tumors are risk factors for poor prognosis of HNC patients. Better understanding of the molecular characteristics of dysplastic lesions and early recurrence are needed to provide biomarkers that improve lesion classification relevant to predicting cancer progression, which could have a significant impact on cancer prevention and treatment optimization.

Examples of research areas that fall within the scope of this FOA include, but are not limited to:

- Identify and develop signatures for early cancer classification of HPV(+) and HPV(-) HNC, or premalignant lesions. This may include molecular, immunological, cellular, imaging, or multi-omics (genomic, epigenomics, transcriptomics, proteomics) signatures to detect tumor heterogeneity and plasticity for predicting potential of dysplastic lesions to transform.
- Identify and evaluate prognostic biomarkers and technologies that complement current clinical methods (e.g. CT, MRI, pathology) to increase sensitivity and specificity for assessing risk for early cancer development and progression, and early cancer recurrence and metastasis after treatments.
- Develop novel tools and methods for detecting molecular, immunological, and cellular hallmarks in bodily fluids obtained by non-invasive or minimally invasive methods for HNC detection, with standardization of sample collection.
- Integrate high throughput technologies of cancer multi-omics, with large datasets, bioinformatics computation, artificial intelligence (AI), and machine learning (ML) approaches to accelerate the process of cancer early detection and prognostic biomarker discovery and validation.
- Identify and characterize factors for risk prediction or early detection of HNC, including nutrition, microbiome, immunocompetence, oral health, and health disparities.

While molecular biomarkers have been studied, there are major gaps in the systematic discovery and validation of these potential biomarkers for clinical use. The immediate benefit of AHEAD is the creation of interdisciplinary groups with diverse backgrounds to conduct cohesive collaboration targeted specifically for HNC early detection. Each interdisciplinary group must bring together expertise from different disciplines such as, laboratory-based technologies, molecular biomarker discoveries, animal models, high throughput technologies, data science, population cohorts, and clinical studies to identify and validate molecular biomarkers for HNC early detection.

Projects supported through this FOA are encouraged to use highly annotated (pathologic and clinical) biospecimen

collections including longitudinal sampling, from human and preclinical experimental sources. The prospective collection of patient's biospecimens of hyperplasia, dysplasia, or HNC recurrence in high-risk population is allowed. Applications proposing prospective collection must define why the population is considered high-risk (ie, rate of transformation) and justify that the population will yield sufficient cancer progression cases for power/analysis within the grant period.

In addition, the partnership between NIDCR and NCI will encourage AHEAD investigators access to valuable NIDCR and NCI resources to enhance their research capabilities. Awardees of AHEAD will join NCI's Early Detection Research Network (EDRN), a national infrastructure funded to discover, develop, and validate biomarkers for risk assessment, detection, and molecular diagnosis and prognosis of early cancer. The awardees will act as members of EDRN to participate in all activities of EDRN, including monthly calls and EDRN Steering Committee meetings twice per year. When the AHEAD awardees join EDRN network and interact with EDRN awardees, they must sign a confidential Disclosure Agreement and follow the policy on data sharing. For details on EDRN, see edrn.nci.nih.gov.

Link to Additional Information: <https://grants.nih.gov/grants/guide/rfa-files/RFA-DE-23-013.html>

11. Biology Integration Institutes (BII), NSF

Application Due Date: February 1, 2023

Award Amount: no more than \$15,000,000 (i.e., an average of \$2,500,000 per year) for six years

The NSF Directorate for Biological Sciences program for Biology Integration Institutes (BII) supports diverse and collaborative teams of researchers investigating questions that span multiple disciplines within and beyond biology. The goal is to stimulate creative integration of disparate fields using innovative experimental, theoretical, and modeling approaches to discover underlying principles operating across multiple levels of life, from molecules to cells, organisms, species, ecosystems, biomes and the entire Earth. Funding will be at a higher level and for a longer time frame than is typical for standard NSF awards. The Institutes must enable an environment conducive to integration of research, infrastructure, resources, and training, explore new modes of collaboration, and prepare the next generation of biological scientists to be leaders who pursue multidisciplinary research throughout their careers. These next generation leaders should be able to help transform the scientific enterprise to become fully inclusive. Institutes may be localized at one organization or may span multiple organizations; they may comprise a single group of collaborators or incorporate additional researchers as the project evolves. While this solicitation focuses on the integration of biological subdisciplines, any field beyond biology may be included as needed to address the overarching biological theme. NSF invites proposals with organizational structures that are best suited to tackle integrative biological questions. New models for team interaction may be needed for productive discipline-spanning research within each Institute. Therefore, while particular activities are not prescribed, proposers must demonstrate thoughtful attention to elements that will make the institutes function cohesively. For example, sustaining communication across disciplines over time requires creative community-building efforts and establishing "habitats" where language and cultural differences between disciplines and people can be addressed and harmonized. These new Institutes face additional challenges of logistics and project management, including: integration and interoperability of data, cyber, and other infrastructure among multiple disciplines, agreement on cross-organizational intellectual contribution and credit plans, development of co-mentorship and personnel exchange programs, and formalization of conflict resolution procedures. Solutions to these challenges will require thorough consideration and may necessitate innovative solutions tailored to the team and questions being addressed. In addition, it is expected that the institutes establish a climate of inclusion and equity through such practices as contemporary team science, open science, and other strategies that effectively include and engage scientists diverse in demography, disciplines, and geographies. Proposals from EPSCoR jurisdictions, Primarily Undergraduate Institutions, and Minority-Serving Institutions are strongly encouraged.

Each Institute must identify a **Research Theme**, centered around a compelling and broad biological question poised for breakthroughs by collaboration across biological subdisciplines. The Theme must be larger in scope than research projects typically submitted to core programs in the BIO Directorate. While it does not have to span all biological subdisciplines, it should span more than one subdiscipline and be compelling across the subdisciplines spanned.

To address such a broad question, the Research Theme of each Institute will likely encompass multiple research projects.

The proposal must demonstrate how these projects, and associated community-building activities will integrate across different disciplines. Critically, it must show how the individual parts are necessary to answer the overarching question such that the whole is more than the sum of individual parts. The proposal must also describe how the educational components will enable researchers to work successfully across disciplines. Finally, the proposal must justify the involvement of each team member in addressing its goals.

To facilitate proposal planning, the following Hallmarks of Successful Proposals may be useful:

1. The proposed research plan must tackle critical, cross-cutting biological questions that are larger in scope than typical proposals to BIO Core Programs.
2. The institute must have outcomes that are greater than the sum of its parts.
3. The proposed research plan should include a range of objectives and research approaches that are clearly integrated under a coordinated vision.
4. Investigative teams should be optimally configured.
5. Investigative teams should be diverse.
6. The management plan should promote the synthetic nature of the project.
7. The proposal must include a robust, integrated education and training component.
8. The proposal should attempt to leverage prior NSF investments in biological research, training, and cyberinfrastructure resources, as appropriate.
9. Broadening participation must be inherent to the project as well as in the institute leadership.
10. Outreach activities should include a clear assessment plan.
11. Public access and timely release of project outputs should be clear and routine.
12. International collaborations, if included, must be fully justified.

Proposers are highly encouraged to contact the Program Directors prior to submission with any questions about research ideas, budgets, and submissions.

Link to Additional Information: <https://www.nsf.gov/pubs/2023/nsf23511/nsf23511.htm>

12. FY2023 Scientific Leadership Awards For Minority Institutions and other Minority Serving Institutions (MSI), Dept. of Homeland Security

Application Deadline: January 4, 2023

Anticipated Funding Amount: up to \$1,000,000 per award recipient

Program Overview, Objectives, and Priorities

DHS S&T Office of University Program (OUP) is requesting applications for the SLAs from accredited U.S. colleges and universities defined as minority institutions and other minority serving institutions by § 365(3) of the Higher Education Act (HEA) (20 U.S.C. § 1067k (3)). Awarded institutions will:

- a. Provide opportunities for students and faculty to engage in research projects addressing Homeland Security (HS) research areas.
- b. Consistently engage with DHS S&T and the DHS Centers of Excellence (COEs) to ensure that the program is effectively building the next generation workforce that will support the Homeland Security Enterprise (HSE).
- c. Develop innovative programs to experiential learning activities with government, academia, and the private sector for students studying science, technology, engineering, and mathematics (STEM) and faculty.
- d. Engage with community colleges to identify the academic strengths of their local MSI communities and promote pathways toward STEM degree completion and transition from 2-year to 4-year institutions.

Based upon the Department of Homeland Security's Strategic Plan for Fiscal Years 2020-2024 | Homeland Security (dhs.gov), the SLA program mission objectives are:

- Objective 1: Recruit 2-year and 4-year postsecondary students to participate in opportunities to apply classroom knowledge to HS challenges through experiential learning.

- Objective 2: Build MSI research capacity in HSE topics and foster their ability to compete for ongoing funding and development.
- Objective 3: Develop and maintain a highly qualified, diverse, and reflective student population equipped to support the DHS mission.
- Objective 4: Work towards developing innovative approaches and effective solutions to challenges faced by the HSE.

Through the SLA program, S&T aims to support the ability of MSIs to learn techniques, build capacity, and connect with various organizations conducting business in or directly supporting HS mission areas. These institutions will enhance STEM programs to increase the pool of culturally, geographically, and ethnically diverse multidisciplinary job applicants who possess highly desired skills and competencies in areas of critical needs to the HSE. Operational topics of interest, as related to the scientific domains of the HSE, include but not limited to: applied qualitative and quantitative analysis; arctic domain awareness; border security, trade, and immigration, countering biothreats in supply chains; cybersecurity, infrastructure protection and resilience; quantum computing, artificial intelligence and machine learning; law enforcement investigations; maritime domain awareness; natural hazards and resilience; homeland security technology transition; transportation security and screening; and terrorism prevention.

Link to Additional Information: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=344370>

13. MCH Nutrition Training Program, HRSA

Application Deadline: February 2, 2023

Anticipated Funding Amount:

- **MCH Nutrition Training Program: up to \$225,000 per year for five years**
- **Nutrition Workforce Equity Enhancement: up to \$130,000 per year for five years**

The purpose of this program is to promote the healthy nutrition of mothers, children, and families by establishing and enhancing nutrition centers of excellence to train future and current MCH nutrition professionals. MCH Nutrition Training Programs provide interdisciplinary graduate-level training in MCH nutrition and collaborate with the Title V Maternal and Child Health (MCH) Block Grant Program and other MCH programs to provide continuing education (CE) and technical assistance (TA) to local, state, and national organizations serving MCH populations. The program provides training in nutrition science, social determinants of health, primary prevention and population-based environmental and policy interventions, life course initiatives, program planning and links between epidemiology and public health practice. The program develops a well-trained, diverse workforce that can effectively design, manage, and deliver nutrition interventions that address population health goals and objectives; provide care in diverse clinical, community, and public health settings; and meet the emerging needs of the MCH population.

The overall MCH Nutrition Training Program will accomplish this purpose through four overarching objectives:

1. Increase the number of graduate-level trainees (long-, medium-, and short-term) trained in MCH nutrition leadership with a focus on MCH systems, populations, and services.
2. Increase the number of practicing providers who receive CE related to emerging issues in MCH nutrition.
3. Increase the number of TA activities each year to support state Title V agencies and other local, state, and national organizations serving MCH populations.
4. Increase the number of trainees that are from backgrounds that are underrepresented in the current nutrition workforce.

The purpose of the optional Nutrition Workforce Equity Enhancement is to increase diversity in the nutrition workforce through partnerships with Minority Serving Institutions (MSIs) to recruit and support nutrition professionals and students from underrepresented groups. For the purposes of this NOFO, “MSI” is defined as an institution that has a demonstrated record of or historical commitment to serving underrepresented or disadvantaged students, including but not limited to, Historically Black Colleges and Universities (HBCUs), Tribal Colleges and Universities (TCUs), Hispanic Serving Institutions, Asian American and Pacific Islander Serving Institutions and Alaska Native and Native Hawaiian Serving Institutions.

Link to Additional Information: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=340397>

14. Seniors Workforce Development Senior Demonstration Program, AmeriCorps

Application Deadline: February 1, 2023

Estimated Total Program Funding: \$5,000,000

AmeriCorps Seniors is publishing this funding notice with the purpose of creating the AmeriCorps Seniors Workforce Development Senior Demonstration Program (herein referred to as WFD) to support projects focused on supporting older adults as they seek to secure employment in professional, skilled labor, or para-professional careers. In addition, AmeriCorps Seniors is partnering with Public Health AmeriCorps, which seeks to support projects that address the public health needs of local communities, advance health equity and create pathways to public health careers for older adults. Applicants that propose public health careers programming would apply via the Public Health Careers Track. All other career programming will apply via the non-public health careers track. Through WFD funding opportunities, applicants must demonstrate how they will engage adults ages 55 and older, using service opportunities, certification, training, and mentoring as the avenue that will lead to employment in skilled, professional, and/or para-professional career employment.

AmeriCorps' priorities for this funding opportunity are:

- Support older adults in obtaining permanent employment in skilled labor, professional or paraprofessional careers (for the purpose of this NOFO, professional is defined as “engaged in a specified activity as one’s main paid occupation rather than as a pastime and requires a particular skillset in order to be successful.” Paraprofessional is defined as “specially trained or credentialed employment, in fields such as education, healthcare, engineering, law.”).
- Provide training and/or certification for employment, and supports such as mentorship, coaching, transportation, and other forms of support.
- Provide mentoring and/or coaching in regular increments, including during pre- and post- employment placement.
- Provide a competitive stipend to remove barriers for older adults’ service. If the program model does not include a stipend for beneficiaries, a full explanation must be provided, including how the program recruits, retains, supports volunteers, and a pattern of success.

Public Health Careers Track: Applicants interested in addressing immediate public health needs, reducing health disparities in their communities and building the public health workforce may propose a program that aligns with Public Health AmeriCorps. See Appendix III for more information about Public Health AmeriCorps, and ensure applications address the Public Health Careers Track elements under Selection Criteria in addition to the other criteria as written.

Applicants that are proposing public health workforce development projects should select the eGrants Notice of Funding Availability (NOFA) labeled “FY 2023 AmeriCorps Seniors Public Health Workforce Development.” Applicants that are proposing other types of workforce development projects should select the eGrants Notice of Funding Availability (NOFA) labeled “FY 2023 AmeriCorps Seniors Workforce Development.” See the Application Instructions document for more information.

Link to Additional Information: <https://www.americorps.gov/funding-opportunity/fy-2023-ameri-corps-seniors-workforce-development-senior-demonstration-program>

15. Paleoclimate, NSF

Application Deadline: Proposals Accepted Anytime

Award Budget: budgets are not limited but need to reflect the actual needs of the proposed project

The goals of the paleoclimate program are to: (i) provide a baseline for present climate variability and future climate

trends, and (ii) improve the understanding of the physical, chemical, and biological processes that influence climate variability and trends over the long-term.

Research topics include observational and modeling studies of past climate variability and its drivers and studies that develop new paleoclimate proxies and records. Competitive proposals will address specific aspects of scientific uncertainty for their proposed research.

The Paleoclimate program of the Division of the Atmospheric and Geospace Sciences together with other Divisions in the Geoscience Directorate have joined in coordinating and supporting the annual Paleo Perspectives on Present and Projected Climate (P4CLIMATE) competition with the objectives to support studies within two research themes: 1) Past Regional and Seasonal Climate; and 2) Past Climate Forcing, Sensitivity, and Feedbacks.

Researchers are encouraged to consider the P4CLIMATE competition as a possible source of support for their global change research. Since proposals eligible for funding in the P4CLIMATE competition are not eligible for funding in the Paleoclimate Program, researchers are strongly advised to contact the Directors of the Paleoclimate Program for guidance as to the suitability of their proposed research for either program.

The paleoclimate program strongly encourages proposals from:

- Researchers at all career stages, including through the AGS Postdoctoral Research Fellowship program.
- Researchers at all institution types, including MSIs, non-R1 institutions, and institutions in EPSCoR jurisdictions.
- Researchers from traditionally underrepresented groups in Paleoclimate Science.

Link to Additional Information: <https://beta.nsf.gov/funding/opportunities/paleoclimate>

Non-Scientific Forecasted Opportunities

1. Behavioral Interventions Scholars, Administration for Children and Families, DHHS

The Administration for Children and Families (ACF), Office of Planning, Research, and Evaluation (OPRE) anticipates soliciting applications for Behavioral Interventions Scholars grants to support dissertation research by advanced graduate students who are using approaches grounded in behavioral science or behavioral economics to examine specific research questions of relevance to social services programs and policies. These grants are meant to build capacity in the research field to apply a behavioral science or behavioral economics lens to issues facing low income and vulnerable families in the United States, and to foster mentoring relationships between faculty members and high-quality doctoral students. Applicants will be required to demonstrate how their research is grounded in behavioral economics/behavioral science and the applicability of their research to practice or policy serving low-income children, adults, and families, especially those that seek to improve their well-being. Specific topics of interest may be delineated in the full Notice of Funding Opportunity. For information about OPRE, please go to <https://www.acf.hhs.gov/opre>. For information about OPRE's ongoing work in this area, please go to <https://www.acf.hhs.gov/opre/project/behavioral-interventions-advance-self-sufficiency-bias-research-portfolio>.

Link to Additional Information: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=344226>

Scientific Forecasted Opportunities

1. Notice of Intent to Publish a Funding Opportunity Announcement for Animal and Biological Material Resource Centers (P40) (Clinical Trials Not-Allowed), NIH

The Office of Research Infrastructure Programs (ORIP) intends to reissue RFA-OD-20-002 Animal and Biological Material Resource Centers (P40) (Clinical Trials Not-Allowed).

This Notice is being provided to allow potential applicants sufficient time to develop meaningful collaborations and responsive projects.

The FOA is expected to be published in fiscal year 2023 with an expected application due date in fiscal year 2023.

Link to Additional Information: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=344173>

2. Notice of Intent to Publish a Funding Opportunity Announcement for Superfund Hazardous Substance Research and Training Program (P42 Clinical Trial Optional), NIH

The National Institute of Environmental Health Sciences intends to publish a Funding Opportunity Announcement (FOA) to solicit applications for the Superfund Hazardous Substance Research and Training Program (P42 Clinical Trial Optional), referred to as Superfund Research Program (SRP) Centers. SRP Center grants will support problem-based, solution-oriented research Centers that consist of multiple, integrated projects representing both the biomedical and environmental science and engineering disciplines; as well as cores tasked with administrative (which includes research translation), data management and analysis, community engagement, research experience and training coordination, and research support functions. The scope of the SRP Centers is taken directly from the Superfund Amendments and Reauthorization Act of 1986, and includes: (1) advanced techniques for the detection, assessment, and evaluation of the effect on human health of hazardous substances; (2) methods to assess the risks to human health presented by hazardous substances; (3) methods and technologies to detect hazardous substances in the environment; and (4) basic biological, chemical, and physical methods to reduce the amount and toxicity of hazardous substances. This Notice is being provided to allow potential applicants sufficient time to develop meaningful collaborations and responsive projects/cores.

Link to Additional Information: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=344175>

3. Addressing Implicit Bias through Training for Maternal Health Providers, HRSA

The purpose of this program is to address implicit bias among maternal health care providers to reduce health disparities and improve maternal health outcomes.

Link to Additional Information: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=344180>

Proposals Accepted Anytime

1. Division of Environmental Biology, NSF
<https://www.nsf.gov/pubs/2022/nsf22541/nsf22541.pdf>
2. Mathematical Biology, NSF
<https://beta.nsf.gov/funding/opportunities/mathematical-biology>
3. Computational and Data-Enabled Science and Engineering in Mathematical and Statistical Sciences, NSF
<https://beta.nsf.gov/funding/opportunities/computational-and-data-enabled-science-and-engineering-mathematical-and>
4. Sedimentary Geology and Paleobiology (SGP), NSF
<https://www.nsf.gov/pubs/2022/nsf22597/nsf22597.htm>
5. Condensed Matter and Materials Theory (CMMT), NSF
https://www.nsf.gov/pubs/2022/nsf22610/nsf22610.htm#pgm_desc_txt
6. Division of Materials Research: Topical Materials Research Programs (DMR: TMRP), NSF
<https://www.nsf.gov/pubs/2022/nsf22609/nsf22609.htm>

7. Research in the Formation of Engineers, NSF
<https://beta.nsf.gov/funding/opportunities/research-formation-engineers-rfe>
8. Computer and Information Science and Engineering (CISE): Core Programs, NSF – Small Projects
<https://www.nsf.gov/pubs/2022/nsf22631/nsf22631.htm>

Announcing Previous Important Funding Opportunities

1. Computer and Information Science and Engineering (CISE): Core Programs, NSF
Deadline: December 22, 2022
<https://www.nsf.gov/pubs/2022/nsf22631/nsf22631.htm>
2. Advancing Informal STEM Learning (AISL), NSF
Deadline: January 11, 2023
<https://www.nsf.gov/pubs/2022/nsf22626/nsf22626.htm>
3. NIAID Investigator Initiated Program Project Applications (P01 Clinical Trial Not Allowed), NIH
Deadline: January 11, 2023
<https://grants.nih.gov/grants/guide/pa-files/PAR-22-225.html>
4. National Digital Newspaper Program (NDNP), NEH
Deadline: January 12, 2023
<https://www.neh.gov/grants/preservation/national-digital-newspaper-program>
5. Preservation Assistance Grants for Smaller Institutions, NEH
Deadline: January 12, 2023
<https://www.neh.gov/grants/preservation/preservation-assistance-grants-smaller-institutions>
6. Racial Equity in STEM Education (EHR Racial Equity), NSF
Deadline: January 17, 2023
<https://www.nsf.gov/pubs/2022/nsf22634/nsf22634.htm>
7. Launching Early-Career Academic Pathways in the Mathematical and Physical Sciences (LEAPS-MPS), NSF
Deadline: January 26, 2023
<https://www.nsf.gov/pubs/2022/nsf22604/nsf22604.htm>
8. Dangers and Opportunities of Technology: Perspectives from the Humanities, NEH
Deadline: February 2, 2023
<https://www.grants.gov/web/grants/view-opportunity.html?oppId=343684>
9. National Early Care and Education Workforce Center, HHS
Deadline: February 2, 2023
<https://www.grants.gov/web/grants/view-opportunity.html?oppId=341390>
10. Mid-Career Advancement (MCA), NSF
Deadline Window Date: February 01, 2023 - March 01, 2023
<https://www.nsf.gov/pubs/2022/nsf22603/nsf22603.htm>
11. EHR Core Research: Building Capacity in STEM Education Research (ECR: BCSER), NSF
Deadline: February 24, 2023
<https://www.nsf.gov/pubs/2022/nsf22548/nsf22548.htm>
12. NHPRC-Mellon Planning Grants for Collaborative Digital Editions in African American, Asian American, Hispanic

Fellowships and Scholarships Funding Opportunities

1. Mathematical and Physical Sciences Ascending Postdoctoral Research Fellowships (MPS-Ascend), NSF

Deadline: January 25, 2023

The twofold purpose of the MPS-Ascend program is to support future scientific leaders in MPS fields by facilitating their participation in postdoctoral research environments that will have maximal impact on their future scientific development, and to broaden the participation of members of groups that are historically excluded and currently underrepresented (defined in this solicitation as Blacks or African Americans, Hispanics, Latinos, Indigenous or Native Americans, Alaska Natives, Native Hawaiians and other Native Pacific Islanders) in science areas supported by MPS. MPS recognizes a gap in the participation of members of these underrepresented groups in academia in MPS fields¹. It is anticipated that Fellows will eventually transition into academic tenure track positions where in addition to their further development as leaders in their scientific fields, they will become key leaders in the efforts to bridge the participation gap as strong proponents of diversity, equity, and inclusion, both locally and nationally.

Fellows supported through this program will affiliate at all times with a host institution(s) during the postdoctoral appointment component of the Fellowship and select a scientific mentor who will provide mentoring and guidance for the research proposed by the proposer. If more than one host institution is identified, one must be designated as the primary host institution. In addition, the scientific mentor must design a mentoring plan for the Fellow. The proposer is responsible for making prior arrangements with the host institution and scientific mentor(s). If more than one mentor is proposed, one must be named lead mentor and the roles of the other secondary mentors must be clearly stated in the Project Description. An important basis for judging the suitability of the host institution is the degree to which the scientific mentor's statement describes and offers a research, education, and mentoring plan that could not be provided without Fellowship support. (See Section V. Proposal Preparation Instructions for additional information about the scientific mentor statement.) Scientific mentors are strongly discouraged from serving as the primary scientific mentor of more than one Ascend Fellow at a time.

The Fellowship amount of \$100,000 per year for up to three years consists of two separate payments:

- 1) A monthly stipend of \$5,833 (up to \$70,000 annually) for full-time support is paid directly to the Fellow as an electronic funds transfer into a personal account at a financial institution.
- 2) A total allowance of \$30,000 annually is paid to the Fellow in the same manner for:
 - a) expenses directly related to the conduct of the research, above and beyond what is normally provided by the host institution, such as some materials and supplies, subscription fees and recovery costs for databases, travel, and publication expenses and/or
 - b) support of fringe benefits, including health insurance provided through either a group plan offered by the host organization or an individual plan secured by the Fellow, dental and/or vision insurance, disability insurance, retirement, dependent care, and moving expenses.

Link to Additional Information: <https://www.nsf.gov/pubs/2023/nsf23501/nsf23501.htm>



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