

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 09/25/2023 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.

INDEX

	<u>Page</u>
1. Focused Research Groups in the Mathematical Sciences (FRGMS), NSF	2
2. Early-stage Biomedical Data Repositories and Knowledgebases (R24 Clinical Trial Not Allowed), NIH	3
3. National Center for Education Research (NCER): Research Training Programs in The Education Sciences, Assistance Listing Number (ALN) 84.305B, D & N, Dept. of Education	4
4. University Turbine Systems Research (UTSR), Department of Energy	5
5. ADVANCE Predoctoral T32 Training Program to Promote Diversity in Health Disparities Research, Preventive Interventions, and Methodology (T32, Clinical Trial Not Allowed), NIH	5
6. Approaches to Identifying Preteen Suicide Risk and Protective Factors (R01 Clinical Trial Not Allowed), NIH	7
7. Desalination and Water Purification Research Program: Research Projects, Department of the Interior	9
8. Improving Care and Outcomes for Cancer Survivors from Sexual and Gender Minority (SGM) Populations (R01 Clinical Trial Optional), NIH	10
9. Environmental Education Local Grants Program for Region 2, EPA	11
10. Organismal Response to Climate Change, NSF	13
11. NIDA REI: Academic Research Enhancement Award (AREA) Training a Diverse Data Science Workforce for Addiction Research (R15 Clinical Trial Not Allowed), NIH	15
12. Improving Choice, Use, and Equitable Implementation of Biomedical HIV Prevention for Women (R34 Clinical Trial Optional), NIH	16
13. Cancer Research Education Grants Program - Research Experiences (R25 Clinical Trial Not Allowed), NIH	18
14. HEAL Initiative: Research to Increase Implementation of Substance Use Preventive Services (R01 Clinical Trial Optional), NIH	19
Fellowship Opportunities	20
Non-Scientific Forecasted Opportunities	21
Proposals Accepted Anytime	21
Announcing Previous Important Funding Opportunities	23

1. Focused Research Groups in the Mathematical Sciences (FRGMS), NSF

Application Deadlines: December 06, 2023

Award Amount: from \$150,000 up to \$500,000 per year, for up to three years

The purpose of the Focused Research Group activity is to support synergistic research collaborations that respond to recognized scientific needs of pressing importance or that take advantage of current scientific opportunities; in each case, progress must depend on developing significant new advances in mathematics or statistics. Groups may include, in addition to mathematicians and statisticians, researchers from other scientific and engineering disciplines appropriate to the proposed research. Projects supported under this activity should be essentially collaborative in nature and depend for their advancement on the coordinated interaction of a group of researchers.

Each project should be focused on a significant and well-delineated major research challenge. A major challenge is an outstanding problem of significant importance whose solution will have wide impacts in the mathematical sciences and potentially in other areas; it is more than a collection of questions. It is not the intent of this activity to provide general support for group infrastructure. Projects should be timely, limited in duration to up to three years, and substantial in both their scope and likely impact. DMS anticipates that those funded Focused Research Group projects showing substantial progress in their first two years, consistent with the criteria for creativity extensions, could be recommended for a creativity extension for up to two additional years to foster breakthrough advances and innovations. However, Focused Research Group projects are intended to be time limited. Therefore, no Focused Research Group project will be supported for more than five years. Proposed continuations of previously funded Focused Research Group projects may be appropriate for other competitions but are unlikely to be suitable for the FRGMS activity. Proposals to this program solicitation for work based on topics or approaches for which group members previously received Focused Research Group support will be returned without review. Questions about the suitability of a project for the FRGMS competition may be sent to a program officer for one of the relevant DMS programs.

Here is a list, by no means exhaustive, of indicators suggesting that a Focused Research Group approach might be appropriate. In each case, anticipated advances in other disciplines must be accompanied by significant anticipated advances and innovations in mathematics or statistics.

- Accumulated scientific results point to the possibility of a major, innovative breakthrough.
- A major recent breakthrough has created new possibilities for significant progress.
- New, interdisciplinary collaboration has revealed means to achieve accelerated progress through such cooperation, with corresponding advances and impacts in the mathematical sciences.

The aim of the activity is to support projects for which the collective effort by a group of researchers is necessary to reach the scientific goals in a timely manner. The advantages of pooled insights, complementary expertise, diverse points of view, and shared tasks make a successful research group more than the sum of its parts. Thus, Focused Research Group proposals must explain how interaction and group effort are critical to the success of the project.

Examples of possible outcomes for Focused Research Group projects include the following:

- Through development of mathematical/statistical innovations, substantial progress is made toward solution of a set of major open questions.
- New research directions that have become possible due to recent advances are explored, and significant progress is achieved.
- As a direct result of the group effort, an important focused research agenda in mathematics or statistics as well as in science or engineering is advanced significantly.

Additional outcomes, such as training of students and postdoctoral researchers, are beneficial but secondary to the research outcomes of these projects. Focused Research Group projects should take advantage of opportunities and resources at or near the organizations at which the research will be performed. Research groups are required to disseminate the results of their work in a timely and effective fashion.

Link to Additional Information: <https://www.nsf.gov/pubs/2023/nsf23621/nsf23621.htm>

2. Early-stage Biomedical Data Repositories and Knowledgebases (R24 Clinical Trial Not Allowed), NIH

Application Deadlines:

- Letter of Intent: November 26, 2023
- Full Proposal: January 25, 2024

Award Amount: up to \$350K in direct costs per year for a project period of four years

This Notice of Funding Opportunity (NOFO) supports the development of early-stage or new data repositories or knowledgebases that could be valuable for the biomedical research community. The overall goal is to support pilot activities that demonstrate the need and potential impact of the data resource. The NOFO will also support transitioning resources that are currently supported as investigator-initiated research efforts into quality controlled, standards-based resources that address governance, and efficiency of operations. Efforts to consolidate existing data repositories or independent knowledgebases are also in scope for this NOFO.

Each resource must: (a) deliver scientific impact to the communities served; (b) employ and promote good data management practices (as outlined by the FAIR Data Principles including adherence to the NIH desirable characteristics of repositories) and efficient operations for quality and services; (c) engage with the user community and continuously address their needs; and (d) support a process for data life-cycle analysis, long-term preservation, and trustworthy governance.

The evaluation of the Data Repository will be based on the primary function to ingest, archive, preserve, manage, distribute, and make accessible the biomedical data related to a particular system or systems.

The evaluation of The Biomedical Knowledgebase will be based on the function to extract, accumulate, organize, annotate, and link growing bodies of information related to core datasets.

Both the data repository and the knowledgebase should provide publicly available documentation on the services offered; be responsible for providing quality services; demonstrate the utility of the data and offered services; demonstrate usage and utility; must commit to community engagement and needs, trustworthiness of stewardship, and governance.

Scope

Initiatives supporting data resources differ from typical hypothesis-driven research (e.g., U01 or R01) grants. Data resources funded under this NOFO can support 1) creation of a new data resource or 2) propose activities required to combine/transition existing data resources. Projects have the potential to mature into an established data resource eligible for support via the established resources NOFO (PAR-23-237).

Applications appropriate for this NOFO can support data resources for biomedical research, spanning biological scales including molecular, cellular, tissue, organism, and/or population data, as well as social and behavioral data. Support for software and tool development must be limited to that which provides essential functions or significantly increases the efficiency of resource operations. An application should distinctly support either a data repository or a knowledgebase. Resources that desire to support both should submit separate applications to ensure their proper review per the distinct review criteria.

NIH ICs participating in this NOFO are interested in resources that apply to biomedical questions and diseases relevant to their own Institutes and Centers.

Applicants are strongly encouraged to request consultation with ODSS and staff at the appropriate participating Institute/Centers when planning an application through submission of a Letter of Intent (LOI).

Link to Additional Information: <https://grants.nih.gov/grants/guide/pa-files/PAR-23-236.html>

3. National Center for Education Research (NCER): Research Training Programs in The Education Sciences, Assistance Listing Number (ALN) 84.305B, D & N, Dept. of Education

Application Deadlines: January 11, 2024

Award Budget:

- **Research Training Programs in the Education Sciences (ALN 84.305B): \$80,000 to \$267,000 for up to four years**
- **Methods Training for Education Researchers Statistical and Research Methodology in Education (ALN 84.305D): \$100,000 to \$300,000 for up to three years**
- **Research Networks Focused on Critical Problems of Education Policy and Practice (ALN 84.305N):**
 - **Digital Learning Platform Network Research Teams: \$200,000 to \$500,000 for up to two years**
 - **Career and Technical Education Network Research Teams: \$200,000 to \$800,000 for up to four years**

In awarding the research grants, the Institute of Education Sciences (IES) intends to provide national leadership in expanding knowledge and understanding of (1) education outcomes for all learners from early childhood education through postsecondary and adult education, and (2) employment and wage outcomes when relevant (such as for those engaged in career and technical, postsecondary, or adult education). IES research grant programs are designed to provide interested individuals and the general public with reliable and valid information about education practices that support learning and improve academic achievement and access to education opportunities for all learners. These interested individuals include parents, educators, learners, researchers, and policymakers. In carrying out its grant programs, IES provides support for programs of research in areas of demonstrated national need. In awarding research training grant programs, IES aims to prepare individuals to conduct rigorous and relevant education and special education research that advances knowledge within the field and addresses issues important to education policymakers and practitioners.

The IES National Center for Education Research (NCER) is announcing three competitions—one competition in each of the following areas: education research training; statistical and research methodology in education; and research networks focused on critical problems of education policy and practice.

1. **Research Training Programs in the Education Sciences (ALN 84.305B)** - Under this competition, NCER will consider only applications that address one of the following topics:
 - Early Career Development and Mentoring Program for Education Research
 - Early Career Development and Mentoring Program for Faculty at Minority-Serving Institutions
2. **Methods Training for Education Researchers Statistical and Research Methodology in Education (ALN 84.305D)** - Under this competition, NCER will consider only applications that address one of the following topics:
 - Core Grants (which supports the development of new and improved statistical and research methods and their dissemination to education researchers)
 - Toolkits, Guidelines, Compendia, and Review Papers
3. **Research Networks Focused on Critical Problems of Education Policy and Practice (ALN 84.305N)** - Under this competition, NCER will consider only applications that address one of the following topics:
 - Career and Technical Education (CTE) Network, which includes Research Teams
 - Digital Learning Platforms Network, which includes Research Teams.

Link to Additional Information: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=350118>

4. University Turbine Systems Research (UTSR), Department of Energy

Application Due Date: November 7, 2023

Award Budget: up to \$800,000 plus \$200,000 (20%) cost share for a total of \$1,000,000 for a period of 36 months

The University Turbine Systems Research (UTSR) Program encompasses a portfolio of gas turbine-focused university projects which address a wide variety of technical topics (including combustion, aerodynamics/heat transfer, and advanced materials topics) by conducting cutting edge R&D. Technical topics are relevant to research goals of the US DOE and the gas turbine industry and support advanced technologies that can increase energy efficiency, reduce emissions, and provide additional performance benefits.

Given the extensive interest in hydrogen-based electricity generation, topics in this FOA focus on fundamental and applied research to further advance the use of hydrogen as a gas turbine fuel.

The objective of this FOA is to solicit and competitively award university-based R&D projects that address and resolve fundamental scientific challenges and applied engineering technology issues associated with thermal management of combustors and hot gas path components for gas turbines. Specifically, R&D projects will conduct fundamental and applied research to develop advanced materials and advanced hot gas path components which utilize these advanced materials, advanced cooling architectures, and advanced manufacturing methods.

The FOA will seek to solicit and competitively award laboratory/bench-scale R&D in the following areas of interest (AOI):

- AOI 1: Fundamental Materials Development for Hot Gas Path Hydrogen Turbine Components
- AOI 2: Applied Materials Development for Hot Gas Path Hydrogen Turbine Components
- AOI 3: Fundamental Materials Development for Hydrogen Rotating Detonation Engines (RDEs)

Link to Additional Information: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=350126>

5. ADVANCE Predoctoral T32 Training Program to Promote Diversity in Health Disparities Research, Preventive Interventions, and Methodology (T32, Clinical Trial Not Allowed), NIH

Application Due Dates: October 31, 2023

Award Amount: \$300,000 direct costs per year for a project period of 5 years

The purpose of the Ruth L. Kirschstein National Research Service Award (NRSA) Institutional Research Training Grant (T32) program is to develop and/or enhance research training opportunities for individuals interested in careers in biomedical, behavioral or social sciences, and clinical research, in health services research, or in any other research discipline relevant to the NIH mission.

This Notice of Funding Opportunity (NOFO) does not allow appointed Trainees to lead an independent clinical trial but does allow them to obtain research experience in a clinical trial led by a mentor or co-mentor. NIH strongly supports training towards a career in clinically relevant research and so gaining experience in clinical trials under the guidance of a mentor or co-mentor is encouraged.

Purpose

ODP and participating NIH ICs are soliciting T32 applications to train predoctoral scholars from diverse backgrounds, including those from groups underrepresented in prevention relevant fields, in three integrated areas: 1) health disparities/health equity research, 2) development and implementation of multi-level preventive interventions, and 3) methods for the design and analysis of studies to evaluate multi-level preventive interventions (see Notice of NIH's Interest in Diversity).

Need for the Program

To effectively address health disparities, preventive interventions must address social determinants of health, including the conditions and stressors that individuals, groups, and populations experience in their homes, schools, workplaces, healthcare settings, and communities. Addressing these social determinants requires moving beyond individual attitudes, knowledge, and behaviors to address factors at the interpersonal, family, organizational, community, and societal levels. Rigorous evaluation of multi-level preventive interventions requires special research designs in which participants are prospectively assigned to intervention conditions in groups or clusters (e.g., families, clinics, schools, worksites, communities, counties, states). Training in appropriate methodology will be critical for new investigators who wish to evaluate multi-level preventive interventions to address health disparities. Training for mentors and predoctoral fellows in strategies to improve engagement in service areas of the interventions is critical to the effectiveness of the intervention.

Program Description & Requirements

T32 applications should train predoctoral scholars from diverse backgrounds, including those from groups underrepresented in prevention relevant fields, in three integrated areas:

- 1) health disparities/health equity research
- 2) development and implementation of multi-level preventive interventions
- 3) methods for the design and analysis of studies to evaluate multi-level preventive interventions (see Notice of NIH's Interest in Diversity)

Institutions may offer training activities directly within their institution and/or leverage collaborations with other institutions. All three areas must be addressed as training or professional development components of the award.

Appropriate research training and professional development topics include, but are not limited to, those listed below.

- Health Disparities/Health Equity Research:
 - Community-engaged research strategies to obtain input and perspectives from community members, organizations, service providers, and policymakers, such as intervention mapping, engagement studies, etc.
 - Adaptation or tailoring of evidence-based preventive interventions for specific populations that experience health disparities.
 - Co-creation of new preventive interventions by researchers and community collaborators
 - Structural interventions that address social or environmental determinants of health disparities in preventable health conditions.
 - Dissemination and implementation of evidence-based interventions in populations that experience health disparities.
 - Examination of health impacts among populations experiencing health disparities of policy interventions within systems, institutions, and local/state government.
- Development and Implementation of Multi-level Preventive Interventions:
 - Primary or secondary preventive interventions implemented in community settings (e.g., schools, health clinics, workplaces, etc.)
 - Healthcare-based interventions to increase engagement in screening or preventive services.
 - Multi-sectoral interventions that involve collaborations among two or more service sectors (e.g., health, public health, housing, education, labor, transportation, parks and recreation, criminal/legal, etc.).
- Methodological or Statistical Approaches
 - Randomized intervention study designs for testing interventions across multiple groups, organizations, or communities, such as parallel group-, cluster-randomized trials, or stepped-wedge group- randomized trials
 - Effectiveness-implementation hybrid randomized trials
 - Adaptive or optimization intervention designs, including Multiphase Optimization Strategy (MOST) or Sequential, Multiple Assignment, Randomized Trial (SMART) designs.

- Rigorous quasi-experimental designs to test prospective interventions, such as group- or cluster-level regression discontinuity designs or interrupted time-series designs
- Rigorous quasi-experimental designs to evaluate natural experiments of existing policy and practice implementation.
- Methods for the statistical analysis of longitudinal multidimensional, multi-level, or clustered data to assess intervention outcomes.
- Advances in data science including artificial intelligence, machine learning, deep learning, natural language processing, large generative language models (such as GPT), to inform preventive intervention research design, execution, and impact assessment.

Link to Additional Information: <https://grants.nih.gov/grants/guide/rfa-files/RFA-OD-23-018.html>

6. Approaches to Identifying Preteen Suicide Risk and Protective Factors (R01 Clinical Trial Not Allowed), NIH

Application Deadlines:

- **Letter of Intent: October 9, 2023**
- **Invited Full Proposal: November 9, 2023**

Award Amount: up to \$400k direct costs per year for a project period of 4 years

This initiative supports 4-year longitudinal studies that seek to refine protocols for the assessment of pre-teen STBs and associated risk and protective factors and/or define risk trajectories in pre-teen youth, with consideration for identification of novel targets for future development of prevention and intervention efforts. For the purposes of this announcement, pre-teen, is defined as ages 8-12. An emphasis is placed on efforts that will enhance our knowledge of suicide risk among youth from sub-populations at higher risk for STBs or in which suicide death rates have been rising at significant rates, particularly those typically underrepresented in suicide research. Applications are expected to define and justify the sampling strategy of the proposed research in terms of risk and associated burden (e.g., the number of affected individuals, the associated level of suicide risk, and/or overall burden associated with unmet mental health needs) and anchor the assessment of risk and protective factors in the relevant developmental and cultural context.

The scope of the proposed research may include optimizing existing assessment instruments to ensure that they are developmentally and culturally appropriate, developing and validating new or adapted measures to assess STBs and risk or resilience constructs that may have high predictive value for risk in pre-teens, examining the acceptability and utility of new or existing assessment methods, and/or developing and testing methods for characterizing risk trajectories.

Awarded R01 projects will be expected to create a Consortium that will work to identify and incorporate common data elements and develop a core assessment battery. This will include optimizing assessment protocols and examining the feasibility, acceptability, psychometric properties (reliability and validity), safety, and predictive utility of assessment approaches for use with diverse youth and families. This NOFO is intended to work in conjunction with a companion NOFO (RFA-MH- 24-322) that will facilitate data coordination support and the harmonization of study datasets. Harmonized datasets are intended to support the examination of measures across a diverse pool of participants, provide the statistical power needed to examine various types of measurement validity (e.g., concurrent; predictive) in diverse samples, and test approaches for modeling risk-factor trajectories.

This NOFO is centered around three core objectives:

1. To leverage the capacity of multiple, multidisciplinary teams to refine developmentally and culturally relevant assessment approaches, sampling strategies, and methods for longitudinal assessment of risk and risk trajectories in diverse samples.
2. To establish a community of practice, comprised of a Consortium of individual research projects and a Data Coordination Center, to identify and administer core common measures that could be integrated into future research and validate their utility for understanding risk and risk trajectories.

3. To leverage the power of combined cohorts to better understand mental health and suicide risk disparities among sub-populations and identify unique and common risk and protective factors in service of a long-term goal of improved screening, prevention, and treatment.

To address these objectives, this NOFO is specifically intended to inform:

- the selection of common data elements that will be included in a “best practice” core assessment battery for future use by investigators and clinicians working with pre-teen youth at risk for STBs.
- optimized stakeholder-informed and community-engaged strategies for sampling and engaging sub-populations of youth that experience health disparities are at increased risk for STBs, and/or are typically underrepresented in youth suicide research.
- multi-level, multi-domain and mixed method (I.e. qualitative and quantitative) approaches to characterizing relevant risk and protective factors, including behavioral, neurocognitive, physiological and clinical assessments. An emphasis is placed on mutable factors, across domains, that might represent potential targets for intervening on risk.
- inclusion of state-of-the-science measures of social determinants of health, with a focus on strategies for identifying key constructs that may be most relevant to pre-teen suicide risk, operationalizing these constructs, and testing low-burden assessment approaches for capturing the relevant data.
- scalable developmentally and culturally informed assessment approaches that have clinical utility for characterizing both risk/protective factors, identifying potential intervention targets, differentiating between self-harm and suicide-related behaviors, and suicide risk and outcomes.
- methods and model specifications for longitudinal assessments that can be used to identify risk and protective factors, characterize risk-factor trajectories, and understand imminent risk and the transition from ideation to behavior in diverse pre-teen youth.
- developmentally informed schedules of assessment to capture the timing and unfolding of risk (e.g., interactions among risk/protective factors, intersectionality).

NIMH encourages multi-level, translational assessment approaches to characterize core constructs, domains of functioning, and relevant cognitive/affective processes associated with pre-teen suicide risk. Applicants should provide the empirical justification for the selection of constructs, measures, and assessment schedules. Consideration should also be given to the environmental/social/developmental factors that have been empirically linked with suicide risk states and are relevant to the project’s empirically grounded assessment strategy (e.g., exposure to early adversity or economic hardship; geographic location/neighborhood context; familial/social context and support; developmental stage; victimization/bullying; experience of discrimination; digital media exposure). For constructs related to social determinants of health, including systemic, structural, and interpersonal racism, referencing the National Institute on Minority Health and Health Disparities Research Framework is recommended. Rigorous mixed method approaches are strongly encouraged. Studies that employ only qualitative methods will not be considered responsive to this announcement.

Translational assessment approaches that are developmentally and culturally informed are encouraged and may include, but are not limited to, multi-level assessment of Research Domain Criteria (RDoC)-like domains and constructs, such as negative valence, cognitive control, arousal and regulatory systems, and social processes that can be feasibly measured via low-burden approaches that go beyond self-report (e.g., mobile- or sensor-based assessments, computerized or task-based assessments, exposure to social media and other digital content). While translational assessment approaches including measures of neurobiology are allowed, applicants are also encouraged to consider including surrogate measures that are feasible and practical for use in larger scale research studies and clinical practice. Applicants are also encouraged to consider measures that might be included across linked sites as part of a core common assessment battery as part of a consensus process facilitated by the Data Coordinating Center as outlined in RFA-MH-24-322.

This NOFO strongly encourages applications that assemble an interdisciplinary, collaborative research team comprised of experts in the fields of mental health research and clinical practice, suicide research, developmental psychopathology, minority mental health and health disparities, and community-engaged research, as well as investigators with expertise relevant to the project’s focal area and/or methodological approach (e.g., digital health, translational assessment,

measurement development, biostatistics/computational approaches, risk-factor modeling). Inclusion of community stakeholders is also encouraged to ensure the outcomes and interpretation of the research reflect the priorities of the populations being studied.

Potential applicants are strongly encouraged to consult with NIMH program staff when developing plans for an application.

Link to Additional Information: <https://grants.nih.gov/grants/guide/rfa-files/RFA-MH-24-320.html>

7. Desalination and Water Purification Research Program: Research Projects, Department of the Interior

Application Deadline: November 15, 2023

Award Amounts:

- **Funding Group I – Laboratory-Scale Projects: up to \$250,000 per award for up to 2 years**
- **Funding Group II – Pilot-Scale Projects: up to \$800,000 per award for up to 3 years**

The goal of the Desalination and Water Purification Research Program (DWPR) program is to address the need to reduce the costs, energy requirements, and environmental impacts of treating impaired and unusable water. The program also aligns with Executive Order (E.O.) 14008, “Tackling the Climate Crisis at Home and Abroad,” by investing in development and application of advanced water treatment technologies that expand access to otherwise unusable water resources, thereby increasing water supply flexibility under the risks of long-term climate change and shorter-term drought.

The goal of the DWPR Program is to increase water supplies by reducing the cost, energy consumption, and environmental impacts of treating impaired and otherwise unusable waters. This DWPR Research NOFO invites applicants to address any of the following objectives:

- Develop or improve process or approaches to reduce the cost, energy consumption, feasibility, and/or environmental impacts of desalination and water treatment.
- Improve existing membrane technologies, including reverse osmosis, electrodialysis, nanofiltration, membrane filtration, and pretreatment processes.
- Carry out basic and applied research on next-generation desalination technologies, including improved energy recovery systems and renewable energy-powered desalination systems.
- Develop cost-effective approaches for concentrate management that address feasibility, cost, and/or environmental impacts.
- Develop technologies or processes for the selective removal of nutrients and other target contaminants.
- Study methods for the recovery of byproducts resulting from desalination to offset the costs of treatment and to reduce environmental impacts from those byproducts.
- Develop improved intake/outfall methods at coastal facilities to minimize marine environment impacts such as impingement of larger organisms, entrainment of smaller ones, and impacts to benthic communities.
- Develop a better understanding of pathogen removal efficiencies and the variability of performance in various unit processes and multibarrier treatment and develop ways to optimize these processes.
- Identify better indicators and surrogates to monitor process performance in desalination and reuse scenarios and develop online real-time or near real-time analytical monitoring techniques for their measurement.
- Develop a better understanding of the formation of hazardous and other transformation products during water treatment for reuse and ways to minimize or remove them.
- Improve the detection, characterization, monitoring, and separation of per- and polyfluoroalkyl substances and other contaminants of concern.
- Develop new technologies or processes for the destruction of per- and polyfluoroalkyl substances.

Applicants can apply for two categories of projects under this NOFO:

- **Funding Group I – Laboratory-Scale Projects** - projects are typically bench-scale studies involving small flow rates. These projects are used to determine the viability of a novel process, new materials, or process modifications. Funding Group I project can also include modeling studies, decision support tools, literature, and technology reviews, etc. that address objectives identified in Section A.3 Notice of Funding Opportunity Purpose and Objectives. Research at this stage often involves a high degree of risk and uncertainty.
- **Funding Group II – Pilot-Scale Projects** - test a novel process at a sufficiently large scale to determine the practicality of implementing the technology at a larger scale. These projects should involve flow rates above 1 gallon per minute and use natural water sources rather than synthetic or laboratory-made feed water. Pilot-scale studies are used to generate data over a sufficient period that can be used to estimate the operational requirements (e.g., labor, chemical addition, power requirements) of the process and show performance with respect to finished water quality goals. Pilot-scale projects are generally preceded by laboratory studies (funded previously by the DWPR Program or others) that demonstrate technology feasibility.

Link to Additional Information: <http://www.usbr.gov/research/dwpr>

8. Improving Care and Outcomes for Cancer Survivors from Sexual and Gender Minority (SGM) Populations (R01 Clinical Trial Optional), NIH

Application Deadlines:

- **Letter of Intent: 30 days prior to the application due date**
- **Full Proposal: February 5, 2024**

Estimated Range of Awards: budgets are not limited but need to reflect the actual needs of the proposed project

Through this notice of funding opportunity (NOFO), the National Cancer Institute (NCI) intends to support the rigorous assessment of barriers to quality cancer treatment and follow-up care for sexual and gender minority (SGM) cancer survivors. This funding opportunity is intended to address a critical need for improved care delivery and outcomes for SGM cancer survivors. The goal is to address the disease burden in an underserved and understudied population that is at higher risk of poorer health outcomes. The NCI solicits proposals for observational and/or interventional studies of SGM survivors designed to understand barriers and/or improve care and outcomes for SGM people with cancer, using interoperable sexual orientation and gender identity (SOGI) data collection in cancer care settings, where appropriate.

This NOFO solicits proposals that call for observational and/or intervention research to understand and address predictors of disparities experienced by SGM cancer survivors, and to support the foundation, development, testing, and/or scaling of innovative, feasible and effective interventions to address barriers experienced by SGM populations in cancer care. This funding opportunity is intended to support studies that address one or more of the following key scientific areas:

1. Understanding and/or addressing barriers to cancer treatment and follow-up care for SGM cancer survivors.
2. Characterizing and/or developing approaches to address factors that put SGM cancer survivors at higher risk for poorer mental and physical health outcomes.
3. Testing interventions to improve cancer care targeting cancer care providers, that may be focused exclusively on clinicians, on clinician-survivor dyads, or on clinicians, SGM survivors, and caregivers.

Examples of research topics may include, but are not limited to the following:

- Studies that characterize challenges faced by SGM cancer survivors that affect cancer treatment and follow-up care adherence (e.g., fear of prejudice/discrimination, fear of SGM disclosure, financial hardships, inclusion of caregivers, distance from treatment facilities).
- Studies investigate barriers to quality care delivery associated with the cancer sites/types most prevalent among SGM individuals and to understand and address disparities related to HIV-associated malignancies in SGM

cancer survivors.

- Intervention studies to address barriers to care that lead SGM cancer survivors to avoid or delay seeking or maintaining care, such as medical system mistrust, fear of SGM disclosure, or managing unconscious bias of providers.
- Interventions that increase rates of surveillance follow-up and referrals to supportive care for SGM cancer survivors such as tracking referrals and appointments linked to SOGI data, testing outreach strategies to SGM survivors to ensure adherence, and developing interventions that include integration with community organizations.
- Interventions to improve symptom management such as identifying and treating symptoms that may be unique to transgender populations arising from gender affirming treatments concurrent with cancer treatments, and managing psychological symptoms such as anxiety and depression that may be a consequence of the intersection of cancer, its treatment, and medical mistrust related to SGM status.
- Research to understand oncology care providers' knowledge gaps related to unique SGM care needs, as well as implementation and testing of training programs for clinicians and their professional organizations to increase sensitivity to those needs.
- Studies to address survivor/caregiver/provider communication, including development and implementation of shared care approaches, such as interventions that address unique survivor/caregiver configurations, implementing provider education strategies to support culturally sensitive care, and implementation of SOGI data collection across providers, to support care coordination for survivors.
- Evaluation of strategies for surveillance and management of physical and psychosocial effects of cancer and treatment among SGM survivors.
- Evaluation of health-related outcomes for SGM survivors diagnosed with different types of cancer or at different sites, e.g., capturing longitudinal SOGI data among SGM survivors with different types of cancer to identify those cancers with higher need.
- SGM-tailored interventions to address palliative and end-of-life care needs.
- Studies of transgender and gender-nonconforming individuals to understand interactions between gender-affirming care (i.e., surgery, hormonal therapy) and cancer treatment such as treatment safety and efficacy, and follow-up care, including surveillance needs for individuals who have had gender affirming surgery and/or hormonal therapy.
- Studies examining intersections of sexual orientation, gender and gender identity, race, ethnicity, class, and/or geography are strongly encouraged.
- Studies that include community clinics in addition to academic medical centers to support geographically, demographically, and linguistically diverse populations are encouraged.

Link to Additional Information: <https://grants.nih.gov/grants/guide/pa-files/PAR-23-292.html>

9. Environmental Education Local Grants Program for Region 2, EPA

Application Deadline: July 1, 2024

Award Information: between \$50,000 and \$100,000 for a project period of up to two years

The goal of this solicitation is to fund locally focused EE projects that design, demonstrate, and/or disseminate environmental education practices, methods, or techniques, as described in this solicitation. EPA will provide financial support for projects that promote environmental stewardship and help develop informed, knowledgeable, and responsible individuals in the community(ies) in which the project is located.

EPA's Educational Priorities: Applications must address at least one of these Educational Priorities to be considered eligible.

1. **Community Projects:** Increasing public understanding of the benefits of and participation in environmental stewardship through community collaboration on issues including, but not limited to climate change, water and soil quality, food waste management, management of ecosystem health and/or local fire or flood prevention.

Projects can take place in rural, suburban, and urban settings, in a formal or non-formal educational context, and use outdoor, place-based, experiential, service learning and/or community-focused stewardship activities as the primary teaching tool(s).

2. **Career Development:** Educating students of any age group and/or training their educators or community leaders on how to teach, in formal and non-formal settings, about environmental issues, solutions and stewardship for the purpose of encouraging interest in gratifying careers in one of the environmental fields. These fields include, but are not limited to natural resource conservation and/or management, climate change, water infrastructure, and water and air quality management.
3. **Environmental Education Capacity Building:** Building the capacity of agencies and organizations to develop, deliver, and sustain comprehensive environmental education programs. Capacity building proposals may focus on one state, multiple states, or a region of the country.
4. **Environmental Justice:** For purposes of this solicitation, Environmental Justice (EJ) refers to activities increasing public awareness and knowledge that disproportionate and adverse environmental, human health, climate-related and other cumulative impacts are more likely to affect or have affected underserved communities. By learning about environmental justice and local environmental issues, program participants will enhance their ability to be meaningfully involved in future EJ discussions that affect their local environments.
5. **Indigenous Knowledge:** Educating project participants on the importance of recognizing, understanding, supporting, and incorporating Indigenous Knowledge into strategies aimed at solving local environmental issues. By enriching environmental education with diverse perspectives and cultivating deep respect for the environment and Indigenous Knowledge holders' relationship to it, program participants will value both cultural diversity and environmental stewardship.

EPA's Environmental Priorities: Consistent with Section 6 of the National Environmental Education Act, applications must address at least one of the Administrator's Environmental Priorities to be considered eligible. From the list below, select at least one numbered priority. Then specify a topic under the priority that the application will address. Note that for illustrative purposes only, sample topics are listed under each priority. You may choose one of the sample topics or propose another topic relevant to your local area and consistent with the Administrator's priorities and the Agency's Strategic Plan.

1. **Addressing Climate Change and Improving Air Quality:** These efforts help protect the health of all Americans and the ecosystems we depend on by preventing pollution, increasing energy efficiency, improving indoor and outdoor air quality, reducing industrial air pollution and pollution from vehicles and engines, protecting the stratospheric ozone layer, reducing acid rain, and addressing climate change.

Sample Topics:

- a. Educate students and community members about the impacts of climate change and explore local adaptation strategies that reduce vulnerability to the harmful impacts of climate change in schools, homes, and underserved communities.
- b. Educate students and community members about the impacts of climate change and explore local mitigation strategies and/or strategies that incorporate indigenous knowledge to reduce the flow of heat-trapping greenhouse gases into the atmosphere, especially in underserved communities where the adverse impacts of climate change are often disproportionately felt.
- c. Address gaps between scientific and popular understanding of climate change and climate risk at the local level by exploring local environmental impacts of climate change, such as shifts in weather patterns, the spread of invasive species, changes in water quality or quantity, and sea-level rise.
- d. Increase climate literacy through interactive lessons or action plans designed to engage adults and children of all ages.

2. **Ensuring Clean and Safe Water:** These efforts help ensure that drinking water is clean and safe for all communities. They also contribute to the restoration and maintenance of oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitats for wildlife and plants.

Sample Topics:

- a. Prevent future water quality and human health issues through appropriate communications about the risks of poor water quality in local area(s), especially in communities with existing water quality issues.
 - b. Participate in the conservation of quality water resources; e.g., educating school-age children, their parents, and the community about water conservation through the establishment and maintenance of school or community gardens or the removal of invasive plant species and/or planting of native gardens.
 - c. Manage nutrients in water systems by reducing the use of non-biodegradable products, pesticides and/or nutrient runoff from soil, while maintaining both quality agricultural yields and minimal environmental harm.
 - d. Prevent future water quality and human health issues through appropriate management for flood and hurricane preparedness.
3. **Cleaning Up our Communities by Revitalizing Land and Preventing Contamination:** These efforts provide guidelines for safe and environmentally friendly practices in waste management to support cleaning up and restoring land for productive uses and healthy communities. These efforts also lead to a reduction in waste, an increase in reuse, and prevention of environmental contamination.

Sample Topics:

- a. Work to manage food waste for environmental benefits (e.g., the benefits of composting, reduction of waste going to landfills, etc.).
- b. Increase plastic recycling and other efforts to reduce plastic disposal in landfills.
- c. Educate individuals about human health and environmental risks associated with improper management of waste and the benefits associated with reducing trash, non-biodegradable products, and contaminants in waterways.
- d. Engage individuals in exploring their local communities to identify previously contaminated sites and develop solutions and actions plans to revitalize the land, making the community safer and greener in the process.

Link to Additional Information: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=350204>

10. Organismal Response to Climate Change, NSF

Application Deadline: December 13, 2023

Anticipated Funding Amount: a minimum of \$10,000,000 for 10 to 14 awards

The goal of this solicitation is to invite mechanistic studies of organismal response to climate change (ORCC) as a foundation that, when integrated with research at other levels of organization, will lead to a deeper understanding and better predictions of the integrity, the resilience, and the adaptation of organismal systems to climate change.

Proposals are encouraged to include collaborative teams with an overarching goal of using convergence approaches across biological subdisciplines to improve our ability to anticipate adaptive and maladaptive organismal responses to future and novel environmental conditions brought upon by climate change. All aspects of organismal response associated with global climate change are open for consideration, but proposals should integrate organismal mechanisms with eco-

evolutionary approaches to be generalizable across temporal, geographic, and/or biological scales. Competitive proposals will describe how the incorporation of mechanistic insights at the organismal level can increase understanding of persistence, dynamics, resilience and/or resistance of organisms to climate change.

Proposals submitted to this solicitation must translate the foundational research results in use-inspired outcomes that address societal challenges arising from climate change, including but not limited to assisted migration, resource and agricultural systems management, food security, management of disease and pest outbreaks, conservation, and maintenance of ecosystem services and global resiliency. Proposals that lack a specific focus on mechanistic responses to climate change, do not bridge disciplinary components, and could normally be submitted to the "core" or special programs of IOS, OCE, or DEB are not appropriate for submission to this solicitation. Please contact a cognizant program officer if you have questions about where your planned proposal fits. Competitive projects are expected to develop causal frameworks and to employ experimental, theoretical, and/or computational approaches to increase understanding of organismal responses to climate change. Competitive proposals are anticipated to have strong plans for assessing success and impact of proposed activities. Additionally, competitive proposals should lead to generalizable concepts that can be applied to systems beyond the organism(s) under study.

Types of Proposals:

- **Research** - proposals focused on incorporating mechanistic insights at the organismal level to increase understanding and the ability to accurately predict persistence, dynamics, resilience, and resistance of organisms to climate change. Competitive proposals should include explanations for how the findings obtained with any study system are generalizable to other systems and relevant to societal concerns generated by climate change, such as conservation, biodiversity, resource management, food security, disease and pest outbreaks, maintenance of ecosystem services, or planetary resilience. Leveraging publicly available data generated by continental-scale environmental monitoring platforms such as, but not limited to, the National Ecological Observatory Network (NEON) and the Ocean Observatories Initiative (OOI) is encouraged.
- **Research Coordination Network (RCN)** - proposals to build collaborative networks of scientists in diverse disciplines to coordinate, expand, and synthesize research on the causal bases of genetic, developmental, neural, physiological, behavioral, or ecological responses to climate change. Highest priority will be given to RCNs that bring together researchers bridging experimental, ecological, oceanographic, computational, and/or '-omic' expertise from diverse experimental systems. Competitive proposals would include experts in applied fields, such as agriculture, forestry, fisheries, conservation, and natural resource management. Please note that RCN proposals must be submitted by the deadline specified in this solicitation. Proposers should contact a program officer prior to submission to discuss their ideas. For general guidance about preparing RCN proposals, please consult the RCN program page.
- **Workshop and Conference** - proposals that bring together teams of scientists bridging experimental, ecological, oceanographic, computational, and/or '-omic' expertise to address research bottlenecks in climate change studies. For example, conference topics might include: What types of resources, including computational expertise and cyber- infrastructure, will the research community need to best incorporate organismal mechanisms into predictive models of the response of living systems to climate change? What metrics should be used to determine the most critical species/habitats/ecosystems for research? How will future research efforts in this area ensure that all individuals and groups, to include those who are under-represented in the biological sciences are included? In what ways will recruitment, training, and mentoring of early-career individuals aid in the development of integrative approaches to climate change research in the future? Conference activities and any resulting outcomes reports should be designed to advance integrative, synthetic research that incorporates mechanistic studies of organismal response to climate change and aims to improve the ability to foresee and prepare for adaptive and maladaptive responses of biological systems to climate change. Please note that conference proposals may be submitted anytime during the year and reviewed accordingly. Proposers should contact a program officer prior to submission to discuss their ideas. For general guidance about conferences, follow the current PAPPG guidance for preparing Conference Proposals.

Link to Additional Information: <https://www.nsf.gov/pubs/2023/nsf23622/nsf23622.htm>

11. NIDA REI: Academic Research Enhancement Award (AREA) Training a Diverse Data Science Workforce for Addiction Research (R15 Clinical Trial Not Allowed), NIH

Application Deadlines:

- **Letter of Intent: 30 days prior to application due date**
- **Full Proposal: January 24, 2024**

Award Information: up to \$300,000 in direct costs for the entire project period of up to 3 years

The main objective of this NOFO is to train a diverse data science workforce for drug addiction research through the following : (1) provide support for meritorious data science for drug addiction research at undergraduate-focused institutions or institutional components; (2) strengthen the data science for drug addiction research environment at these institutions/components; and (3) give undergraduate students an opportunity to gain significant data science for drug addiction research experience through active involvement in the research. For the purpose of this announcement, an undergraduate-focused institution/component is one in which the undergraduate enrollment is greater than the graduate enrollment. Research projects must focus on leveraging the potential of artificial intelligence and machine learning (AI/ML) to accelerate the pace of biomedical and socio-behavioral innovation in drug addiction research and training a diverse data science workforce in drug addiction research field.

The AREA program will enable qualified scientists to receive support for small-scale data science for drug addiction research projects. It is anticipated that investigators supported under the AREA program will benefit from the opportunity to conduct independent data science for addiction research; that the grantee institution will benefit from a data science for addiction research environment strengthened through AREA grants; and that students at recipient institutions will benefit from exposure to and participation in scientific research in the field of data science for addiction science so that they consider careers in this area. This AREA NOFO emphasizes the engagement and inclusion of undergraduates in research.

The research project must involve undergraduate students, and the research team must be composed primarily of undergraduate students. Student involvement in research may include participation in the design of experiments and controls, collection and analysis of data, execution and troubleshooting of experiments, presenting at meetings, drafting journal articles, collaborative interactions, participation in lab meetings to discuss results and future experiments, etc. The AREA program is a research grant program, not a training or fellowship program, and, as such, applications should not include training plans such as didactic training or non-research activities relating to professional development. Masters and doctoral candidates may be supported on these research projects, but their inclusion should be carefully considered. In all cases, the majority of students conducting research through the award must be undergraduates. Since diversity strengthens the research environment, AREA projects are encouraged to include students from diverse backgrounds, including those from groups underrepresented in the biomedical research workforce.

An AREA application submitted to this NOFO may include other investigators, such as technicians, collaborators or consultants, or other individuals such as high school students, post baccalaureate participants, graduate students, or postdoctoral fellows. However, involvement of such individuals does not fulfill the goal to engage undergraduate students in eligible environments to research. Due to the multi-disciplinary nature of data science research, the establishment of mutually beneficial partnerships to enhance the participation of researchers from diverse backgrounds and communities experiencing health disparities is expected.

Goals/Research Objectives

This NOFO seeks to provide drug addiction research experiences that applies data science, for undergraduate students to inspire a diverse cohort of future data science researchers to focus on solving public health problems related to drug addiction.

NIDA supports innovative research addressing critical issues of neuroscience, genetics, behavior, prevention, treatment,

epidemiology, etiology, health services, HIV/AIDS, and co-occurring opportunistic infections (e.g., viral hepatitis C, tuberculosis, sexually transmitted infections) associated consequences in substance using populations, medication development, or other research areas relevant to drug abuse. NIDA priorities are further described in the NIDA Strategic Plan (see <https://www.drugabuse.gov/about-nida/strategic-plan/directors-message>) and on the NIDA Notice of Special Interest webpage (see <https://www.drugabuse.gov/research/nida-research-programs-activities/nida-notice-special-interest-nosi>). Applicants are encouraged to contact a program official to discuss the proposed application.

Program elements of interest include, but are not limited to:

- Utilizing AI/ML for research specific to drug addiction.
- Forming partnerships/collaborations to provide infrastructure and resources for AI/ML applications and research conducted by diverse research teams with a focus on communities experiencing health disparities.
- Identifying resources and training needed for data science of addiction research, particularly AI/ML approaches and at institutions that provide baccalaureate and/or advanced degrees for a significant number of the Nation's research scientists, but that have not been major recipients of NIH support.

Applicants are strongly encouraged to consult with the NIDA Scientific/Research Contacts early in the application development process. Early contact provides an opportunity for IC staff to discuss the program scope and goals and to provide information and guidance.

Link to Additional Information: <https://grants.nih.gov/grants/guide/rfa-files/RFA-DA-24-026.html>

12. Improving Choice, Use, and Equitable Implementation of Biomedical HIV Prevention for Women (R34 Clinical Trial Optional), NIH

Application Deadlines:

- **Letter of Intent: October 22, 2023**
- **Full Proposal: November 22, 2023**

Award Information: direct costs are limited to \$450,000 for a project period of 3 years

The purpose of this Notice of Funding Opportunity (NOFO) is to support applications that focus on developing and evaluating pilot interventions and/or implementation strategies to encourage and support women's choice of an HIV prevention product, to improve uptake, adherence, and persistence on the chosen product, and to improve implementation and equitable access to biomedical HIV prevention for cisgender and transgender women. The intent of the NOFO is to understand factors that impact uptake and adherent and persistent use of biomedical HIV prevention options, to inform and advance approaches to support choice and use among these options, and to understand and advance equitable delivery of biomedical HIV prevention options for cisgender and transgender women in settings where multiple prevention options are available.

Research Objectives/Scope

New advances in biomedical HIV prevention may help to reduce disparities in HIV incidence. However, a thoughtful evidence-based approach is needed to ensure that these innovations are delivered in a way that reduces, rather than exacerbates, health disparities.

Currently, little is known about individual, interpersonal, and structural barriers and facilitators to HIV prevention in real-world settings where multiple HIV prevention options are available; further, little is known about how women weigh the pros and cons of each option to determine the best choice for themselves. Helping women choose among HIV prevention options may require new tools, interventions, and implementation strategies. In addition, there is a need to develop implementation strategies and models to ensure that these new innovations are implemented in an equitable way. The primary population being studied must include cisgender and/or transgender women. Note that cisgender and/or transgender men may be included in the research only as partners of women or as other stakeholders.

If the study proposes to use grant funds to purchase a product that has not received U.S. Food and Drug Administration (FDA) approval, the grant can only be awarded to a recipient in a country where the product has received in-country regulatory approval or is anticipated to receive in-country regulatory approval by the time the product is provided to participants.

Key Considerations

- Applications must propose research with a primary aim to understand and/or improve choice, use, or equitable implementation of biomedical HIV prevention for cisgender and/or transgender women.
- Applications must include at least two of the following biomedical HIV prevention options: oral PrEP, vaginal ring, and long-acting injectable PrEP.
- If HIV prevention product(s) will be provided to participants, the application must provide details on the status of regulatory approval of the product(s) being studied. In case the prevention option(s) has not received in-country regulatory approval by the time human subjects research with the product is proposed to start, the application must propose alternative strategies (including partnerships with Ministries of Health on formative research or demonstration projects).
- Studies are expected to include a plan for a Community Advisory Board (CAB). The CAB should reflect the target population of the grant. For clinical trials, the CAB should be involved prior to the launch of the trial, throughout the trial, and following the completion of the project to assist with data interpretation.
- Applicants are encouraged to leverage ongoing demonstration and implementation projects in the country in which they propose to conduct research.
- Applicants are encouraged to partner with organizations involved in the roll-out of novel biomedical HIV prevention options; applications should address how these partnerships will be mutually beneficial.
- Applicants should complement any self-report measures of product use with other objective measures of use, including in studies that use secondary data.
- For research that does not include an intervention or implementation strategy, there should be a clear plan for how the proposed research will inform future intervention or implementation research.
- For intervention and implementation of science research, applicants should articulate a clear plan for how the study findings will be implemented into practice and/or scaled up in the country where the research is being conducted.
- Studies that provide biomedical HIV prevention should provide a plan for how women will continue to have access to HIV prevention product(s) after study completion.
- Research is encouraged across the lifespan. Consideration should be given the unique developmental context, especially for adolescents and young women.

Specific Areas of Research Interest

- Development and pilot testing of decision aids or other innovative approaches to assist with patient-provider discussions around HIV prevention options, to help women choose and initiate their preferred HIV prevention option.
- Development and pilot testing of interventions promoting choice, to understand the impact of HIV prevention product choice on uptake, adherence to, and persistence with HIV prevention options.
- Development and pilot testing of communication strategies and behavioral interventions to support uptake, consistent use, and persistence on a woman's chosen biomedical HIV prevention option.
- Development and pilot testing of interventions to support women who want to switch from their initial choice of an HIV prevention product to a different HIV prevention product, or to facilitate change to a different HIV prevention product if use of a product is discontinued.
- Development and piloting of interventions to understand and address the unique HIV prevention needs among transgender women.
- Development and pilot testing of interventions to engage partners, family members, or other key influencers to

support women's HIV prevention use.

- Development and pilot testing of training programs for providers and clinics regarding biomedical HIV prevention delivery.
- Studies to develop and pilot implementation strategies to optimize delivery of biomedical HIV prevention in healthcare settings.

Investigators proposing NIH-defined clinical trials may refer to the Research Methods Resources website for information about developing statistical methods and study designs.

Link to Additional Information: <https://grants.nih.gov/grants/guide/rfa-files/RFA-MH-24-332.html>

13. Cancer Research Education Grants Program - Research Experiences (R25 Clinical Trial Not Allowed), NIH

Application Deadline: January 25, 2024

Award Information: up to \$300,000 direct costs per year for a maximum project period of five years

The NIH Research Education Program (R25) supports research educational activities that complement other formal training programs in the mission areas of the NIH Institutes and Centers. The overarching goals of the NIH R25 program are to: (1) complement and/or enhance the training of a workforce to meet the nation's biomedical, behavioral and clinical research needs; (2) encourage individuals from diverse backgrounds, including those from groups underrepresented in the biomedical and behavioral sciences, to pursue further studies or careers in research; (3) help recruit individuals with specific specialty or disciplinary backgrounds to research careers in biomedical, behavioral and clinical sciences; and (4) foster a better understanding of biomedical, behavioral and clinical research and its implications.

The over-arching goal of this NCI R25 program is to support educational activities that complement and/or enhance the training of a workforce to meet the nation's biomedical, behavioral and clinical research needs. Applications are encouraged that propose innovative, state-of-the-art programs that address the cause, diagnosis, prevention, or treatment of cancer, rehabilitation from cancer, or the continuing care of cancer patients and the families of cancer patients, in order to advance the NCI mission. To accomplish the stated over-arching goal, this NOFO will support creative educational activities with a primary focus on:

- **Research Experiences:** Proposed research experiences should involve an innovative approach to provide hands-on exposure to cancer research for a full-time (40 hours per week) period of 8 to 15 weeks in order to stimulate the interest and advance the knowledge base of participants to consider further education and training for future careers as cancer researchers. Ideally, the research experiences should provide opportunities for the participants to present their work at professional venues and/or earn co-authorship on peer-reviewed publications.
- **Complementary educational activities:** such as seminars, journal clubs, grand rounds, field trips, career development presentations, etc., are encouraged as part of the research experiences program, but should not exceed more than 8 hours per week (20% of the full-time effort) on average.
- The proposed programs should provide research experiences and related educational activities that are not available through formal NIH training mechanisms.
- It is expected that each participant will be integrated into the research setting of his/her assigned faculty mentor who will have direct oversight responsibility for the participant, which will include regular, in-person interaction.
- R25 programs that propose at least 8 weeks, but fewer than 15 weeks, of full-time research experiences are allowed to request continued part-time support for some or all of the participants to continue to work on their research projects, up to the equivalent of 15 weeks of full-time participation, as long as the entire research experience is completed within a 12-month period.

- It is expected that most individuals will only receive support one time to participate in the R25 research experiences program. However, at the discretion of the PD(s)/PI(s), up to 20% of the participants may receive support to participate a second time, if they play a peer-to-peer mentor role for the new participants.

Link to Additional Information: <https://grants.nih.gov/grants/guide/pa-files/PAR-23-277.html>

14. HEAL Initiative: Research to Increase Implementation of Substance Use Preventive Services (R01 Clinical Trial Optional), NIH

Application Due Date:

- **Letter of Intent: 30 days prior to application due date**
- **Full Proposal: January 17, 2024**

Award Budget: up to \$800,000 in direct costs per year for a maximum period of five years

The goal of this initiative is to support research that can improve public health and respond to the opioid crisis by increasing knowledge pertaining to the implementation and sustainability of prevention services. This notice of funding opportunity (NOFO) solicits applications to address understudied areas of opportunity that, if researched, could create the foundation needed to inform a prevention infrastructure for ongoing delivery and sustainment of interventions to prevent opioid and other substance misuse and use disorders.

Research Objectives

To ensure existing prevention intervention research efforts have a broad public health impact, research is needed to identify pathways for effective prevention strategies to be adopted and funded for wide-scale delivery. Thus, the goal of this initiative is to support research to address service delivery related questions. Projects submitted in response to this NOFO may define research to inform the establishment of a prevention infrastructure in one of two ways:

1. Research on strategies to implement and sustain evidence-based prevention services, so they are embedded within existing systems and settings (e.g., healthcare, child welfare, justice, education), facilitating the ongoing delivery of prevention services by adapting programs to setting, using natural providers and leveraging existing resources within the system or setting. OR
2. Research to understand how to best develop and maintain an independent prevention workforce and delivery system that the settings/systems noted above can utilize to ‘refer’ individuals or families to for the receipt of preventive services when they may be experiencing risk for opioid or other substance use.

Example areas of research interest include, but are not limited to:

- Developing and testing approaches to the implementation, scale-up and sustainability of effective interventions to prevent opioid and other substance misuse and use disorder, including the testing of strategies to build infrastructure and capacity to deliver prevention services within diverse systems and settings.
- Research to examine scientific solutions to prevention workforce capacity challenges, including developing and testing new approaches to training and retaining prevention workforce personnel (e.g., prevention practitioners, intervention implementers), task shifting and identifying opportunities to integrate prevention service delivery into a variety of staff positions, and strategies to build centralized, community-based prevention systems and workforces.
- Developing and testing innovative strategies and models for optimizing key implementation processes: identifying intervention core components, adaptation and customization, implementation fidelity, and organizational or system level strategies to enhance uptake and sustainability of evidence based preventive interventions.
- Research to leverage technology and/or ‘direct to consumer’ strategies to facilitate access to preventive care – this may include increased use of smartphone /mobile technology, use of social media for intervention delivery, or

other methods as appropriate.

- Research to test the cost benefits/offsets and cost-effectiveness of investment in prevention infrastructure and evidence-based interventions, including broad investment and benefits at the community or population level.
- Studies examining the impact of evidence-based practice registries and other decision-making tools on uptake of evidence-based interventions and the longer-term impact on preventing substance use and promoting public health.
- Strategies that seek to improve quality, availability, and utility of data that can be used to track the extent of program implementation and/or receipt of services within or between systems.

Applications should seek to develop and test systematic strategies for the implementation and sustainability of effective strategies to prevent opioid and other substance misuse and/or use disorder, and strategies to reduce risk for overdose among individuals who do not meet criteria for SUD. To ensure sustainability of service delivery strategies tested, applicants should partner with communities and localities who use existing funds (e.g., federal block grant and demonstration grants; settlement funds; private foundations) to support evidence-based prevention programs and leverage those resources as the foundation for building infrastructure. Research should be designed in such a way that there is a high probability that interventions delivered can be scaled and sustained after the study period ends.

Potential applicants are strongly encouraged to consult with appropriate NIH Program staff early in the application development process. This early contact will provide an opportunity to discuss and clarify NIH policies and guidelines, including the scope of the project relative to the HEAL initiative mission and intent of this NOFO.

Link to Additional Information: <https://grants.nih.gov/grants/guide/rfa-files/RFA-DA-24-067.html>

Fellowship Opportunities

1. Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship to Promote Diversity in Health-Related Research (Parent F31-Diversity), NIH

Application Deadline: December 08, 2023

Award Amount: budgets are composed of stipends, tuition and fees, and institutional allowance

The overall goal of the NIH Ruth L. Kirschstein National Research Service Award (NRSA) program is to help ensure that a diverse pool of highly trained scientists is available in appropriate scientific disciplines to address the Nation's biomedical, behavioral, and clinical research needs. NRSA fellowships support the training of pre-and postdoctoral scientists, dual-degree investigators, and senior researchers.

The purpose of the Kirschstein-NRSA Individual Predoctoral Fellowship to Promote Diversity in Health-Related Research (F31) is to provide support for mentored research training leading to the PhD or equivalent research degree, the combined MD/PhD degree, or another formally combined health professional degree and research doctoral degree in the biomedical, behavioral, or clinical sciences for individuals from diverse backgrounds. The goal of this program is to enhance the participation of scientists from diverse backgrounds in a scientific workforce that is well-prepared for research careers in the biomedical, behavioral, and clinical sciences. Institutions are encouraged to recruit potential candidates from diverse backgrounds to participate in the program, including those from underrepresented backgrounds, such as underrepresented racial and ethnic groups, persons with disabilities and those from disadvantaged backgrounds.

Candidates for this Kirschstein-NRSA F31 award are expected to propose a defined research project and training plan within the mission of the participating Institutes and Centers. The training plan should reflect the candidate's research project, which may be their dissertation research project, and facilitate and clearly enhance the individual's potential to develop into a productive, independent research scientist. The training plan should document the need for, and the anticipated value of, the proposed mentored research and training in relationship to the individual's research career goals.

Link to Additional Information: <https://grants.nih.gov/grants/guide/pa-files/PA-23-271.html>

Non-Scientific Forecasted Opportunities

1. Dialogues on the Experience of War, NEH

The Dialogues on the Experience of War program supports the study and discussion of humanities sources that address the experiences of military service and war from a wide variety of perspectives. In recognition of the importance of the humanities in helping Americans to understand the meaning and experiences of military service and war, Dialogues projects encourage veterans and nonveterans to reflect collectively on such topics as civic engagement, veteran identity, the legacies of war, service, and homecoming. Project teams should include humanities scholars, military veterans, and individuals with relevant experience.

Link to Additional Information: <https://www.neh.gov/grants/education/dialogues-the-experience-war>

2. Humanities Connections, NEH

The Humanities Connections program seeks to expand the role of the humanities in undergraduate education at two- and four-year institutions by encouraging partnerships between humanities faculty and their counterparts in other areas of study. Awards support the planning or implementation of curricular projects connecting the humanities to the physical and natural sciences; pre-service or professional programs, including law and business; computer science, data science, and other technology-driven fields; or other non-humanities departments or schools. Projects must incorporate the approaches and learning activities of both the humanities and the non-humanities disciplines involved.

Link to Additional Information: <https://www.neh.gov/grants/education/humanities-connections>

Proposals Accepted Anytime

1. Division of Environmental Biology, NSF
<https://www.nsf.gov/pubs/2022/nsf22541/nsf22541.pdf>
2. 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>
3. Condensed Matter and Materials Theory (CMMT), NSF
https://www.nsf.gov/pubs/2022/nsf22610/nsf22610.htm#pgm_desc_txt
4. Division of Materials Research: Topical Materials Research Programs (DMR: TMRP), NSF
<https://www.nsf.gov/pubs/2022/nsf22609/nsf22609.htm>
5. Research in the Formation of Engineers, NSF
<https://beta.nsf.gov/funding/opportunities/research-formation-engineers-rfe>
6. Computer and Information Science and Engineering (CISE): Core Programs, NSF – Small Projects
<https://www.nsf.gov/pubs/2022/nsf22631/nsf22631.htm>
7. Manufacturing Systems Integration (MSI), NSF
<https://beta.nsf.gov/funding/opportunities/manufacturing-systems-integration-msi>
8. Cybersecurity Innovation for Cyberinfrastructure (CICI), NSF
<https://www.nsf.gov/pubs/2023/nsf23532/nsf23532.htm>

9. Division of Molecular and Cellular Biosciences Core Programs (MCB), NSF
<https://www.nsf.gov/pubs/2023/nsf23548/nsf23548.htm>
10. Division of Integrative Organismal Systems Core Programs, NSF
<https://www.nsf.gov/pubs/2023/nsf23547/nsf23547.htm>
11. Electronics, Photonics and Magnetic Devices (EPMD), NSF
<https://beta.nsf.gov/funding/opportunities/electronics-photonics-magnetic-devices-epmd-0>
12. Plant Genome Research Program (PGRP), NSF
<https://www.nsf.gov/pubs/2023/nsf23559/nsf23559.htm#elig>
13. Communications, Circuits, and Sensing-Systems (CCSS), NSF
<https://beta.nsf.gov/funding/opportunities/communications-circuits-sensing-systems-ccss-0>
14. Fluid Dynamics, NSF
<https://beta.nsf.gov/funding/opportunities/fluid-dynamics-2>
15. Biophotonics, NSF
<https://beta.nsf.gov/funding/opportunities/biophotonics-2>
16. Environmental Sustainability, NSF
<https://beta.nsf.gov/funding/opportunities/environmental-sustainability-2>
17. Particulate and Multiphase Processes, NSF
<https://beta.nsf.gov/funding/opportunities/particulate-multiphase-processes-2>
18. Interfacial Engineering, NSF
<https://beta.nsf.gov/funding/opportunities/interfacial-engineering-0>
19. Nanoscale Interactions, NSF
<https://beta.nsf.gov/funding/opportunities/nanoscale-interactions-0>
20. Combustion and Fire Systems (CFS), NSF
<https://new.nsf.gov/funding/opportunities/combustion-fire-systems-cfs>
21. Infrastructure Innovation for Biological Research (Innovation), NSF
<https://www.nsf.gov/pubs/2023/nsf23578/nsf23578.htm>
22. Infrastructure Capacity for Biological Research (Capacity), NSF
<https://www.nsf.gov/pubs/2023/nsf23580/nsf23580.htm>
23. Energy, Power, Control, and Networks (EPCN), NSF
<https://new.nsf.gov/funding/opportunities/energy-power-control-networks-epcn-0>
24. Engineering of Biomedical Systems, NSF
<https://new.nsf.gov/funding/opportunities/engineering-biomedical-systems-0>
25. Catalysis, NSF
<https://new.nsf.gov/funding/opportunities/catalysis-2>

26. Process Systems, Reaction Engineering, and Molecular Thermodynamics, NSF
<https://new.nsf.gov/funding/opportunities/process-systems-reaction-engineering-molecular-2>
27. Disability and Rehabilitation Engineering (DARE), NSF
<https://new.nsf.gov/funding/opportunities/disability-rehabilitation-engineering-dare-2>
28. Cellular and Biochemical Engineering, NSF
<https://new.nsf.gov/funding/opportunities/cellular-biochemical-engineering-0>
29. Facility and Instrumentation Request Process (FIRP), NSF
<https://www.nsf.gov/pubs/2023/nsf23602/nsf23602.htm>

Announcing Previous Important Funding Opportunities

1. Fund for the Improvement of Postsecondary Education—Historically Black Colleges or Universities (HBCUs), Tribally Controlled Colleges or Universities (TCCUs), and Minority-Serving Institutions (MSIs) Research and Development Infrastructure Grant Program (RDI), Dept. of Education
Deadline: October 2, 2023
<https://www.govinfo.gov/content/pkg/FR-2023-08-02/pdf/2023-16402.pdf>
2. Advanced Technological Education (ATE), NSF
Deadline: October 5, 2023
<https://www.nsf.gov/pubs/2021/nsf21598/nsf21598.htm>
3. Research With Activities Related to Diversity (ReWARD) (R01 Clinical Trial Optional), NIH
Deadline: October 5, 2023
<https://grants.nih.gov/grants/guide/pa-files/PAR-23-122.html>
4. Racial Equity in STEM Education (EDU Racial Equity), NSF
Deadline: October 10, 2023
<https://www.nsf.gov/pubs/2022/nsf22634/nsf22634.htm>
5. Dangers and Opportunities of Technology: Perspectives from the Humanities, NEH
Deadline: October 11, 2023
<https://www.neh.gov/program/dangers-and-opportunities-technology-perspectives-humanities>
6. Major Research Instrumentation (MRI) Program: Instrument Acquisition or Development, NSF
Deadline Window Date(s): October 16, 2023 - November 15, 2023
<https://www.nsf.gov/pubs/2023/nsf23519/nsf23519.htm>
7. Spotlight on Humanities in Higher Education, NEH
Deadline: October 18, 2023
<https://www.neh.gov/program/spotlight-humanities-higher-education>
8. Precision HIV Health: Integrating Data and Implementation Science to Accelerate HIV Prevention and Treatment (R21/R33 Clinical Trial Not Allowed), NIH
Deadline: October 22, 2023
<https://grants.nih.gov/grants/guide/rfa-files/RFA-MH-24-100.html>
9. Academic Research Enhancement Award for Undergraduate-Focused Institutions (R15 Clinical Trial Required), NIH
Deadline: October 25, 2023
<https://grants.nih.gov/grants/guide/pa-files/PAR-21-154.html>

10. Research Enhancement Award Program (REAP) for Health Professional Schools and Graduate Schools (R15 Clinical Trial Not Allowed), NIH
Deadline: October 25, 2023
<https://grants.nih.gov/grants/guide/pa-files/PAR-22-060.html>
11. Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES), NSF
Deadline: October 30, 2023
<https://www.nsf.gov/pubs/2022/nsf22622/nsf22622.htm>
12. ADVANCE Predoctoral T32 Training Program to Promote Diversity in Health Disparities Research, Preventive Interventions, and Methodology (T32, Clinical Trial Not Allowed), NIH
Deadline: October 31, 2023
<https://grants.nih.gov/grants/guide/rfa-files/RFA-OD-23-018.html>
13. Discovery Research PreK-12 (DRK-12), NSF
Deadline: November 8, 2023
<https://www.nsf.gov/pubs/2023/nsf23596/nsf23596.htm#elig>
14. NIDA REI: Racial Equity Visionary Award Program for Research at Minority Serving Institutions on Substance Use and Racial Equity (DP1 Clinical Trial Optional), NIH
Deadline: November 14, 2023
<https://grants.nih.gov/grants/guide/rfa-files/RFA-DA-23-031.html>
15. Inspire! Grants for Small Museums, IMLS
Deadline: November 15, 2023
<https://imls.gov/grants/available/inspire-grants-small-museums>
16. Transformational Habitat Restoration and Coastal Resilience Grants Under the Bipartisan Infrastructure Law and Inflation Reduction Act, NOAA
Deadline: November 17, 2023
<https://www.grants.gov/web/grants/view-opportunity.html?oppId=349865>
17. Dynamics of Integrated Socio-Environmental Systems (DISES), NSF
Deadline: November 17, 2023
https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23609
18. EMpowering BRoader Academic Capacity and Education (EMBRACE), NSF
Deadline: November 20, 2023
<https://www.nsf.gov/pubs/2023/nsf23617/nsf23617.htm>
19. Division of Physics: Investigator-Initiated Research Projects (PHY), NSF
Deadlines: November 20 and 22, 2023; December 5 and 12, 2023
<https://www.nsf.gov/pubs/2023/nsf23615/nsf23615.htm>
20. Collaborative Research, NEH
Deadline: November 29, 2023
<https://www.neh.gov/grants/research/collaborative-research-grants>

21. Centers of Research Excellence in Science and Technology (CREST Centers), NSF
Deadline: December 1, 2023
<https://www.nsf.gov/pubs/2023/nsf23595/nsf23595.htm>
22. Food and Agricultural Non-Formal Education (FANE)
Deadline: December 7, 2023
<https://www.nifa.usda.gov/grants/funding-opportunities/agriculture-food-research-initiative-education-workforce-development>
23. Digital Humanities Advancement Grants, NEH
Deadline: January 11, 2024
<https://www.neh.gov/grants/odh/digital-humanities-advancement-grants>
24. Research and Mentoring for Postbaccalaureates in Biological Sciences (RaMP), NSF
Deadline: January 18, 2024
<https://www.nsf.gov/pubs/2023/nsf23514/nsf23514.htm>
25. Measures and Methods to Advance Research on Minority Health and Health Disparities-Related Constructs (R01 Clinical Trial Not Allowed), NIH
Deadline: February 5, 2024
<https://grants.nih.gov/grants/guide/pa-files/PAR-22-072.html>
26. Population Approaches to Reducing Alcohol-related Cancer Risk (R01 Clinical Trial Optional), NIH
Deadline: February 5, 2024
<https://grants.nih.gov/grants/guide/pa-files/PAR-23-244.html>
27. Blueprint and BRAIN Initiative Program for Enhancing Neuroscience Diversity through Undergraduate Research Education Experiences (BP BRAIN-ENDURE) (R25 Clinical Trial Not Allowed), NIH
Deadline: February 15, 2024
<https://grants.nih.gov/grants/guide/rfa-files/RFA-NS-24-014.html>
28. Summer Research Education Experience Program (R25 Clinical Trial Not Allowed), NIH
Deadline: February 18, 2024
<https://grants.nih.gov/grants/guide/pa-files/PAR-21-168.html#>
29. NLM Grants for Scholarly Works in Biomedicine and Health (G13 Clinical Trial Not Allowed), NIH
Deadline: February 26, 2024
<https://grants.nih.gov/grants/guide/pa-files/PAR-23-183.html>
30. Mathematical Sciences Research Institutes, NSF
Deadline: March 14, 2024
<https://www.nsf.gov/pubs/2023/nsf23606/nsf23606.htm>
31. Innovation Corps Pilot, NASA
Deadline: March 29, 2024
<https://nspires.nasaprs.com/external/solicitations/summary!init.do?solId=%7B214C3AE7-5428-D4C1-457A-E00CB2338777%7D&path=open>
32. STEM Program, Office of Naval Research
Deadline: April 2, 2024
<https://www.grants.gov/web/grants/view-opportunity.html?oppId=347274>

33. BRAIN Initiative: Development and Validation of Novel Tools to Probe Cell-Specific and Circuit-Specific Processes in the Brain (R01 Clinical Trial Not Allowed), NIH
Deadline: June 7, 2024
<https://grants.nih.gov/grants/guide/rfa-files/RFA-MH-24-280.html>
34. University Research & Development (R&D) Projects & Capstone Projects, Naval Surface Warfare Center Dahlgren Division
Deadline: July 17, 2024
<https://www.grants.gov/view-opportunity.html?oppId=349325>
35. Measurement Science and Engineering (MSE) Research Grant Programs, National Institute of Standards & Technology (NIST)
Deadline: Applications will be accepted and considered on a rolling basis as they are received.
<https://www.grants.gov/web/grants/view-opportunity.html?oppId=347512>



Universidad *de Puerto Rico*

LA MEJOR EDUCACIÓN A TU ALCANCE

VICEPRESIDENCIA DE RECURSOS EXTERNOS
ADMINISTRACIÓN CENTRAL