Oportunidades de Fondos Externos
Vicepresidencia de Recursos Externos
ACADEMIC YEAR 2022 - 23 / VOLUME IX
Universidad de Puerto Rico
LA MEJOR EDUCACIÓN A TU ALCANCE
FEBRUARY 22, 2023

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 02/22/2023 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.

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1. Accelerating Research Translation (ART), NSF

Application Deadline: May 9, 2023; September 18, 2024
Anticipated Funding Amount: up to $6,000,000 per award and a duration of 4 years

The ART program is intended for IHEs that clearly see the benefits of building capacity and actively seek the infrastructure necessary for scaling translational research activities. The program aims to increase such institutions' capacity to conduct and accelerate translational research activities with a clear emphasis on capturing the resultant societal and economic benefits to their surrounding communities and regions.

The program provides funding to build institutional capacity and the infrastructure needed to conduct translational research activities. The programmatic intent of ART is to support IHEs where the fundamental research activity is high, but the level of translational research activity is relatively low. NSF data on research expenditures can be used by the IHEs considering proposal submission for this program to determine whether their respective institutions are operating at high fundamental research levels. There are different research translation and entrepreneurship metrics (e.g., number of invention disclosures, patents issued, start-ups, licenses/options, revenue from royalties, the overall volume of industry-funded research, broad adoption of research outputs by communities or constituents, etc.) that can reflect the current capacity and the status of an infrastructure for translational research activities at an IHE. However, these metrics do not necessarily provide a complete picture. As a result, for this solicitation, each submitting IHE must provide data to justify their current capacity and infrastructure for translational research activities, using multiple evidence-based methods and metrics to determine such capacity. Most importantly, IHEs submitting a proposal to this program should clearly articulate why there is significant potential and an opportunity to build institutional capacity for translational research activities and its transition to practice.

A. Expected Outcomes:
    1. Develop institutional capacity and infrastructure for translational research activities in the short (during the four-year duration of the award) and long terms (beyond the duration of the award).
    2. Create and continually train new cohorts of graduate students and postdoctoral researchers versed in translational research to successfully create economic and/or societal impact through various career pathways, e.g., as entrepreneurs, in industry or public sectors.
    3. Support a nationwide network of 'ART Ambassadors' who will be the agents of change within their institutions and region to support equal importance for translational research and its ensuing impact.

B. Translation Projects – awardees will be required to identify and fund at least 2 (two) active Seed Translational Research Projects (STRPs) selected from across the full spectrum of research activities supported within the lead institution. None of the STRPs should be based in institutions that have high levels of translational research activity.

C. ART Ambassadors – in addition to the PI and co-PIs, NSF considers senior administrators, tech transfer office staff at an eligible institution, and entrepreneurs to be a vital part of an "ART Ambassadors" cohort. An institution can also designate anyone in a senior leadership position actively engaged in boosting the efforts related to translational research as an ambassador for this program. The leader of each STRP and its core team members, including the graduate students and/or postdoctoral researchers, are considered "ART Ambassadors."

D. Diversity, equity, inclusion, and accessibility – with the emphasis on promoting a range of translation pathways, all awardees need to ensure that the cohorts of faculty, postdoctoral trainees, and students trained under this program are broad, diverse, and inclusive, reflective of the Nation's demography and geography.

E. Partnerships with other IHEs – the program strongly encourages, but does not require, the lead institution (with a high volume of fundamental research but low translational activity) to partner with another institution with an established infrastructure and expertise in transitioning fundamental research into practice to create economic and/or societal impact.

F. Sustainability and engagement with external stakeholders – the IHE(s) will need to build relationships with external partners, including investors, industry, non-profit foundations, incubators, accelerators, state and local

governments such as economic development agencies, and small business development centers.

G. Proposal Core Components:
- Capacity building activities for longer-term impact
- Education and training
- Specific project-level activities in the short term
- Diversity, equity, inclusion, and accessibility

Link to Additional Information: https://www.nsf.gov/pubs/2023/nsf23558/nsf23558.htm#pgm_desc_txt

2. Research and Evaluation on Violence Against Women, National Institute of Justice (NIJ)

Application Deadline:
- **Letter of Intent: March 28, 2023**
- **Full Proposal:**
  - **Grants.gov: April 26, 2023**
  - **JustGrants: May 10, 2023**

Award Budget: up to $50,000 for up to one academic year

NIJ strives to support the development of objective and independent knowledge and validated tools to reduce violence against women (VAW), promote justice for victims of crime, and enhance criminal justice responses. For that reason, this solicitation seeks applications for grant funding to conduct research and evaluation projects examining a broad range of topics, including the crimes of domestic (DV) and family violence (FV), homicide and other forms of violent death, intimate partner violence (IPV), rape, sex trafficking, sexual assault, stalking, and teen dating violence (TDV), also known as adolescent relationship abuse (ARA), along with the associated criminal justice system response, procedures, and policies.

NIJ will give special consideration to proposals with methods that include meaningful engagement with the people with lived experience of the subject of study, including, but not limited to, justice practitioners, community members, crime victims, service providers, and individuals who have experienced justice system involvement.

Applicants are encouraged to propose multidisciplinary research teams to build on the complementary strengths of different methods and areas of subject matter expertise. NIJ also seeks proposals that include consideration and measurement of issues of diversity, discrimination, and bias across age, gender and gender identity, race, ethnicity, religion, and sexual orientation, as applicable.

Objectives
This solicitation seeks to support the rigorous development of objective and independent knowledge and validated tools, and to disseminate them to stakeholders and policymakers to formulate strategies and practices to reduce VAW.

Priority Areas
The Department of Justice is committed to advancing work that promotes civil rights and racial equity, increases access to justice, supports crime victims and individuals impacted by the justice system, strengthens community safety and protects the public from crime and evolving threats, and builds trust between law enforcement and the community.

1. Priority Considerations Supporting Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*. In support of Executive Order 13985, OJP will give priority consideration to:
   a. Applications that propose research project(s) that are designed to promote racial equity and the removal of barriers to access and opportunity for communities that have been historically underserved, marginalized, and adversely affected by inequality, when making award decisions.
   b. Applicants that demonstrate that their capabilities and competencies for implementing their proposed project(s) are enhanced because they (or at least one proposed subrecipient that will receive at least 40%

of the requested award funding, as demonstrated in the Budget Web-Based Form) identify as a culturally specific organization.

2. Minority Serving Institutions - NIJ will give special consideration in award decisions to proposals from Minority Serving Institutions (MSIs).

Link to Additional Information: https://nij.ojp.gov/funding/opportunities/o-nij-2023-171586

3. Electronics, Photonics and Magnetic Devices (EPMD), NSF

Application Deadline: Proposals Accepted Anytime
Award Budget: budgets are not limited but need to reflect the actual needs of the proposed project

The Electronics, Photonics and Magnetic Devices (EPMD) Program supports innovative research on novel devices based on the principles of electronics, optics and photonics, optoelectronics, magnetics, opto- and electromechanics, electromagnetics, and related physical phenomena. EPMD's goal is to advance the frontiers of micro-, nano- and quantum-based devices operating within the electromagnetic spectrum and contributing to a broad range of application domains including information and communications, imaging and sensing, healthcare, Internet of Things, energy, infrastructure, and manufacturing. The program encourages research based on emerging technologies for miniaturization, integration, and energy efficiency as well as novel material-based devices with new functionalities, improved efficiency, flexibility, tunability, wearability, and enhanced reliability.

Areas managed by Program Directors (please contact Program Directors listed in the EPMD staff directory for areas of interest):

- Electronic Devices
  - Nanoelectronics
  - Wide/Extreme- and Narrow-Bandgap, Semiconductor Devices
  - Devices with New Functionalities based on Material-Device Interactions and Reliability
  - Device-Related Electromagnetic Effects, Propagation and Scattering
  - Microwave/mm-Wave/THz Devices
  - Flexible, Printed Electronics
  - Carbon-based Electronics
  - Thermoelectric and Ferroelectric Devices

- Photonic Devices
  - Advanced Optical Emitters and Photodetectors, from Extreme UV to THz
  - Single-Photon Quantum Devices
  - Nonlinear and Ultrafast Photonics
  - Nanophotonics and Photonic Integration
  - Optical Imaging and Sensing Techniques
  - Opto-Mechanical Nanodevices
  - Optical Communication Components

- Magnetic Devices
  - Biomagnetic Devices
  - Nanomagnetic and Quantum Devices
  - Spin Electronics for Next Generation of Logic and Memories

- Cross-Cutting
  - 2D Material Devices and Circuits
  - Devices based on Paper Electronics
  - Bioelectronic Devices
  - Photovoltaic and Energy Harvesting Devices

- Metamaterial and Plasmonic-Based Devices
- Sensor Device Technologies

Link to Additional Information: https://beta.nsf.gov/funding/opportunities/electronics-photonics-magnetic-devices-epmd-0

4. Racial and Ethnic Approaches to Community Health (REACH), CDC

Application Deadline: April 11, 2023
Estimated Award Budget:

- **Component A: approximately $1722,000 one-year amount for a 5-year project**
- **Component B: approximately $390,000 one-year amount for a 5-year project**

The NOFO supports evidence-based, culturally tailored interventions and activities for nutrition, and physical activity, and tobacco collaborations that ultimately lead to reduced health disparities in chronic conditions of hypertension; heart disease; Type 2 diabetes; and obesity, as well as vaccination activities to support the prevention of infectious diseases such as flu, COVID-19 and other adult diseases.

Funding will support recipients that:

- Have a history of successfully working with established community coalitions to address issues relating to health.
- Select strategies that address the health disparities in the community based on results from a community health needs assessment.
- Have organizational capacity to effectively, efficiently, and immediately implement locally tailored evidence- and practice-based strategies.

This NOFO will fund two components.

- Component A (required): Nutrition, Physical Activity, and Other
  Applicants must propose work in three strategy areas, which include nutrition, physical activity plus one from the following options:
  - Continuity of care in breastfeeding support
  - Supporting national standards related to nutrition, physical activity, and breastfeeding in early care and education (ECE) programs
  - Supporting implementation of family healthy weight programs
  - Tobacco prevention and control policies

- Component B (optional): Adult Vaccinations
  As an optional component, applicants may propose work that focuses on flu, COVID-19, and other adult vaccination programs.

Evidence-based Strategies: This NOFO incorporates evidence-based nutrition and physical activity strategies from a variety of publications and expert recommendations. See Section H Other Information.

Outcomes:
Short-Term Outcomes:

- Component A:
  - Increased access to healthier foods.
  - Increased policies, plans, or community design changes that increase access to physical activity.
  - Increased access to programs that provide continuity of care for breastfeeding families.
  - Increased local level ECE policies and activities that improve nutrition, physical activity, and breastfeeding standards and Farm to ECE.
  - Increased support to implement family healthy weight programs.
  - Increased access to places that adopt or strengthen commercial tobacco prevention and control policies.

- Component B:
  - Increased demand and access to vaccination opportunities.

Long-Term Outcomes:

- Improved health behaviors and outcomes (e.g., increased healthier food consumption, increased percentage of individuals meeting physical activity guidelines, decreased tobacco use, decreased obesity and increased adult immunizations).
- Reduced health disparities in chronic conditions (e.g., hypertension, heart disease, type 2 diabetes, and obesity) as well as immunizations.

Collaborations

1. With other CDC projects and CDC-funded organizations:
   Recipients are required to collaborate and coordinate with other CDC-funded programs in selected geographic areas within the state to complement that work. State and/or local level CDC funded programs for chronic disease and vaccinations include, yet are not limited to, the following programs:

   - State Physical Activity and Nutrition Program
   - High Obesity Program
   - Scaling the National Diabetes Prevention Program in Underserved Areas; National Diabetes Prevention Program
   - National Comprehensive Cancer Control Program
   - Early Care and Education Obesity Prevention Program
   - Arthritis Program
   - Improving Student Health and Academic Achievement through Nutrition, Physical Activity and the Management of Chronic Conditions in Schools
   - Childhood Obesity Research Demonstration (CORD) Project
   - Disability and Health Program: Improving the Health of People with Mobility Limitation and Intellectual Disabilities through State-based Public Health Programs
   - Partnering for Vaccine Equity program

2. With organizations not funded by CDC:
   The applicant is required to identify and engage with a community coalition to create sustainable community-level change. For the purposes of this program, a community coalition is defined as a community-based formal arrangement of cooperation and collaboration among groups or sectors (e.g., food policy council, regional transportation, healthcare, education, parks, and recreation) in which each group retains its identity but agrees to work together toward a common goal.

Link to Additional Information: https://www.grants.gov/web/grants/view-opportunity.html?oppId=342940

5. Advanced Nursing Education Nurse Practitioner Residency and Fellowship (ANE-NPRF) Program, HRSA

Application Deadlines: April 11, 2023
Anticipated Total Award: up to $700,000 per award for a four-year period of performance

The purpose of this program is to prepare new Advanced Practice Registered Nurses (APRNs) to effectively provide primary care by supporting the establishment, expansion and/or enhancement of existing community-based Nurse Practitioner (NP) residency and fellowship training programs that are accredited or in the accreditation process. The program also focuses on the integration of behavioral health and/or maternal health into primary care by training new primary care providers (adult, family, adult gerontology, pediatric and women's health NPs), behavioral health providers (psychiatric/mental health NPs) and/or Certified Nurse Midwives (CNMs) to transition from education completion to practice, in community-based settings. The applicant must train these postgraduate APRNs who will serve in primary care

settings with a focus on improving access to quality healthcare for rural, urban, and tribal underserved populations.

Goals

1. Support expansion or enhancement of primary care NP residency programs.
2. Increase the number of new primary care, behavioral health and maternal health NPs serving in rural, urban, and tribal underserved community-based settings.
3. Integrate behavioral health and maternal health care into community-based primary care NP residency programs.

Objectives

- Support new primary care providers through the establishment, expansion, or enhancement of NP residency programs in community-based settings.
- Strengthen the clinical competency and readiness for practice of new primary care NPs through didactic and clinical training that equips participants with the skills and knowledge to provide care for the complex co-morbidities and multi-level chronic health and social needs of communities.
- Increase access to quality primary care providers through the placement of residency completers in rural, urban, and tribal underserved community-based settings.
- Expand academic practice partnerships to provide learning opportunities which integrate primary care, behavioral health and maternal health domains of practice. These partnerships should promote health equity, improve diversity of the workforce to address the needs of the populations they serve, and address workforce wellness and resiliency.

Link to Additional Information: https://www.grants.gov/web/grants/view-opportunity.html?oppId=342771

6. Educational Technology, Media, and Materials for Individuals With Disabilities Program—Development of Innovative Technology Tools or Approaches To Improve Outcomes for Individuals With Disabilities, Dept. of Education

Application Deadline: April 14, 2023
Award Amounts: a maximum of $500,000 for a single budget period of 12 months for projects up to 60 months

The purpose of the Educational Technology, Media, and Materials for Individuals with Disabilities program (ETechM2 Program) is to improve results for children with disabilities by:

1. promoting the development, demonstration, and use of technology
2. supporting educational activities designed to be of educational value in the classroom for children with disabilities
3. providing support for captioning and video description that is appropriate for use in the classroom
4. providing accessible educational materials to children with disabilities in a timely manner.

Priorities: This competition includes two absolute priorities. Absolute Priorities: For FY 2023 and any subsequent year in which we make awards from the list of unfunded applications from this competition, these priorities are absolute priorities. Under 34 CFR 75.105(c)(3), we consider only applications that meet either Absolute Priority 1 or Absolute Priority 2. The Department intends to fund at least one project under each absolute priority. Applicants may apply under both absolute priorities but must submit separate applications. Applicants must clearly identify if the proposed project addresses Absolute Priority 1 or Absolute Priority 2. These priorities are:

- **Absolute Priority 1:** Supporting Technology-Based Approaches to Transition Experiences for Secondary Students with Sensory Disabilities - The purpose of this priority is to fund projects to establish and operate evidence-based2 transition experience programs that integrate accessible technology-based tools and approaches to support secondary students with sensory disabilities.3 The projects must achieve, at a minimum, the following expected outcomes:
    - Increased accessibility and participation for secondary students with sensory disabilities in pre- vocational experiences (e.g., internships, early work experiences, apprenticeships) and early college experiences, especially in rural and remote4 areas.
    - Increased capacity of schools and State vocational rehabilitation agencies to provide transition services

(e.g., career awareness programming, transition programming, skills training, benefits counseling) for secondary students with sensory disabilities.
  - Increased collaboration among families, schools, employers, vocational rehabilitation agencies, and community colleges and universities to support successful implementation of transition goals and objectives for secondary students with disabilities.
  - Increased inclusion of students in grades 6 through 9 with sensory disabilities in accessible, impactful early career awareness and job skill- building experiences.
  - Increased acquisition of college and career-related self-determination, social and emotional, and assistive technology competencies by secondary students with sensory disabilities.
  - Increased numbers of secondary students with sensory disabilities earning college credits or completing vocational training courses while still in high school.

- **Absolute Priority 2:** Field-Initiated Projects to Develop Innovative Technology for Individuals with Disabilities - The purpose of this priority is to fund field-initiated projects to develop accessible innovative technology to increase outcomes for individuals with disabilities receiving early intervention under Part C of IDEA or special education under Part B of IDEA, including those with the highest support needs. The purpose of field- initiated projects is to develop innovative technology (e.g., devices, programs, tools, applications, systems, approaches, or intervention protocols) based on evidence that the technology would be beneficial to the target population.

  To be considered for this grant opportunity, applicants must propose projects to develop innovative technology to accomplish at least one of the following outcomes:
  - Increased student-centered learning approaches that leverage technology to address learner variability (e.g., universal design for learning, K–12 competency-based education, project- based learning, or hybrid/blended learning) and increased provision of high-quality learning content, applications, or tools that take into account race, ethnicity, culture, language, and disability to address students' social, emotional, mental health, or academic needs.
  - Increased engagement for individuals with disabilities and, where appropriate, families of individuals with disabilities in educational, functional, or supplemental activities that extend learning time or increase independence.
  - Increased use of technology to enable evidence-based approaches to personalized learning for students with disabilities in the classroom or support supplemental activities that extend learning time and increase student and, where appropriate, parent engagement.
  - Increased use of technology to expand the number and proportion of underserved students with disabilities who enroll in postsecondary readiness education programs, which may include strategies related to college or technical school preparation, awareness, application, selection, advising, counseling, and enrollment.

Link to Additional Information: OSERS: OSEP: Development of Innovative Technology Tools or Approaches to Improve Outcomes for Individuals with Disabilities, Assistance Listing Number 84.327R; Notice Inviting Applications for New Awards for Fiscal Year (FY) 2023

7. Plant Genome Research Program (PGRP), NSF

Application Deadline: Proposals Accepted Anytime
Award Amounts: approximately $30,000,000 for new and continuing awards; for 15 to 20 awards

The Plant Genome Research Program (PGRP) supports genome-scale research at the frontier of plant biology and of importance to society. Breakthroughs in tools, technologies and resources are still needed to understand how plant genomes, and their interactions with other genomes and with the environment, give rise to the myriad phenotypes of Earth's flora. Plants are also a critical part of solutions to global challenges from hunger and food insecurity to environmental change. Basic knowledge is an essential step toward improving plant health and agriculture and, by extension, national security and well-being. To achieve these goals, fundamental plant biology, novel methodologies and large-scale data sets need to be assimilated into a comprehensive framework. There remain pressing needs to refine the

questions being asked, and to generate new tools, resources, and capabilities to carry out functional and structural studies of plant genomes. The goals of PGRP are thus to provide tools and knowledge to solve intractable, challenging biological questions, revolutionize agriculture, address fundamental societal issues, advance the bioeconomy and build a scientifically engaged population. The program has a broad scope and supports studies of plants across the kingdom. Highly competitive proposals will describe interdisciplinary research on a genome-wide scale to provide new insights into plant processes that have the potential to advance food and national security and contribute to the bioeconomy.

PGRP accepts proposals into two tracks.

- **Track 1: Genome-scale research (RESEARCH-PGR):** Genome-scale plant research to address fundamental biological questions in plants and processes of societal importance. PGRP continues to support projects that emphasize hypothesis-driven research from a genome-wide perspective. Functional genomics and data synthesis are integral to PGRP-funded projects. Proposals should be innovative and explore new scientific territory, and should articulate the problem, question, hypothesis, or grand challenge of the omics-related topic. Holistic approaches, as well as transdisciplinary engagement, are highly encouraged. For this track, areas of interest could include, but are not limited to the study of:

    - Multi-genome/epigenome interactions with the environment,
    - Biotic and abiotic interactions among plants and partner organisms,
    - High throughput phenotyping to link genomes to phenomes,
    - Incorporation of engineering, machine learning and quantitative modeling into research activities,
    - Building bridges across scientific disciplines including plant physiology, ecology, evolution, and plant development or across agencies, the private sector or international borders, and
    - Linking basic research to applied outcomes relevant to agriculture.

- **Track 2: Tools, Resources and Technology Advances (TRTech-PGR):** Tools, resources and technology breakthroughs that further enable functional plant genomics. Capacity is needed to build functional genomics toolkits, advance -omic technologies and to synthesize large datasets into meaningful outcomes. Genome-enabled research requires improvement in large scale sequencing resources, assemblies and annotations in plants. Generation of sequence and other high throughput datasets often surpass the rate of data analysis. Therefore, large publicly available datasets often remain untapped resources that can be analyzed in new ways and re-purposed to yield new information. In the process, novel analytical tools and methods can be developed. For this track, areas of interest could include, but are not limited to generating:
    - New -omic datasets and the tools to improve and refine them, from single cell approaches to pan-genomes,
    - Functional genomic resources and toolkits, especially those that enable plant synthetic biology approaches (see the PlantSynBio Dear Colleague Letter, NSF 20-045),
    - New methods, tools, or techniques to overcome bottlenecks to plant transformation, especially those that improve plant regeneration, increase genotype independence or circumvent tissue culture, and facilitate ease of transformation in the public sector (see the Advancing Plant Transformation Dear Colleague Letter, NSF 23-019),
    - Technologies for advancing genome/epigenome editing technologies,
    - Data and analytical workflows that can be mined, re-used and potentially reconfigured from already available large datasets and machine learning methods and tools of artificial intelligence to generate and analyze datasets, and
    - Advances in imaging and data visualization that can be applied to existing or new datasets.

For both of the submission tracks, the following information should be considered:

- Participation can vary from single investigators to small groups to consortia of investigators,
- Budgets should be commensurate with the scientific problem and approach. It is expected that for large consortia budgets may rarely exceed $5 million. Many research projects that include functional genomics, mining existing

data or developing proof-of-concept technologies will be smaller grants rarely exceeding $2 million. PGRP expects to make awards covering the full range of budget requests commensurate with the scale and scope of each project and retains the ability to decrease budgets deemed out-sized relative to the scope of the project.

ADDITIONAL CONSIDERATIONS FOR PGRP PROPOSAL SUBMISSIONS

All proposals submitted under this solicitation should be aligned with the goals of PGRP, as articulated herein. Proposers are encouraged to contact PGRP Program Directors prior to submission with any questions about research ideas, budgets, and submissions. A one-page summary of proposal ideas to the Program Directors prior to submission to discuss program fit is highly encouraged. To facilitate proposal planning, the following Hallmarks of Successful PGRP Proposals may be useful:

1. The proposed research tackles questions of biological and societal importance.
2. Genome-wide research questions and approaches are used.
3. Transdisciplinary is included, when appropriate.
4. Investigative teams are optimally configured.
5. Public access and timely data release is routine.
6. International cooperation must be fully justified.
7. Broadening participation is inherent to the project.
8. Training, education, and communication are strong and fully integrated.

Link to Additional Information: https://www.nsf.gov/pubs/2023/nsf23559/nsf23559.htm#elig

8. Preservation and Access Education and Training, NEH

Application Deadline:

- **Optional Draft: April 17, 2023**
- **Full Proposal: May 16, 2023**

Award Budget: up to $350,000

This program supports projects that develop and implement educational programs for professionals who preserve and provide access to humanities collections. Such materials include but are not limited to paper-based, photographic, archaeological, ethnographic, artistic, audiovisual, digitized, and born-digital collections. Advancing long-term access to these materials for scholars, students, and the public requires skilled professionals from varied backgrounds and communities working in organizations large and small.

NEH makes awards in this program to organizations that offer national, regional, or statewide education and training programs across the pedagogical landscape for current or emerging professionals. Projects may be at any stage, from early curriculum development to advanced implementation, and projects may include partnerships with academic or non-academic institutions.

Project activities must support one or a combination of the following programmatic areas:

- **Field services, networks, or consortia** that offer training and educational resources and services to professionals.
- **Continuing education opportunities** that provide professionals with extended or specialized training in new or current preservation and access topics.
- **Student and early career programs** focused on building skills in preservation and access for cultural heritage collections. Programs may occur at either academic or nonacademic institutions, and programs must be for individuals preparing to pursue, attending, or recently graduating from master's programs. Such master's programs include, but are not limited to, art conservation, library and information science, archival administration, and museum studies.

To support one or more of these programmatic areas, you may propose activities that include but are not limited to:

educational programs, series, and sessions; educational services and resources; residencies, apprenticeships, internships, and mentorships.

You may offer financial support for students and participants, including stipends and travel costs. Support cannot include tuition for a master's program. You may offer scholarships for participants attending your continuing education, field services, networks, and consortia programs.

Preservation and Access Education and Training applicants are encouraged to address one or more of the following areas of special interest:

- **Audiovisual and Digital Heritage:** Activities that teach skills meant to address the preservation or access challenges faced by materials at risk of obsolescence.
- **Diverse Practitioners:** Activities that reach, encourage, or prioritize participation from people with backgrounds and identities that are underrepresented or underserved in the preservation and access field.
- **Diverse Collections:** Activities that teach culturally appropriate, equitable, inclusive, and community-engaged practices that serve collections from underrepresented communities.
- **Emergency Preparedness:** Activities that prepare professionals--particularly in areas of the U.S. and its jurisdictions at high risk for sea level rise, extreme weather, flooding, wildfires, or other natural disaster--to mitigate potential hazards and respond to and recover from disasters.
- **Environmental Sustainability:** Activities that teach techniques that limit collections stewards' impact on the environment.
- **Recent Developments:** Activities that teach new or recently updated preservation or access-related standards, methodologies, tools and equipment, or workflows.
- **Smaller Organizations:** Activities that reach and train staff from smaller libraries, museums, archives, and historical and cultural organizations.

Link to Additional Information: https://www.neh.gov/grants/preservation/preservation-and-access-education-and-training

9. Defense University Research Instrumentation Program (DURIP), DoD

Application Due Dates:

- **Inquiries and Questions: April 21, 2023**
- **Full Proposal: May 12, 2023**

Award Amount: research equipment or instrumentation costing between $50,000 and $3,000,000

This announcement seeks proposals from universities to purchase equipment and instrumentation in support of research in areas of interest to the Department of Defense (DoD).

Our areas of research interest are published at the following internet locations:

Administering Agency	How To Find Our Research Interests
Army Research Office; https://www.aro.army.mil	Select "Broad Agency Announcements" in the "For the Researcher" section to see the most recent ARL or ARO Core Broad Agency Announcement for Basic and Applied Scientific Research.
Office of Naval Research; https://www.onr.navy.mil	Select "Work With Us," then click "Announcements" under the "Funding Opportunities" heading.
Air Force Office of Scientific Research; https://www.afrl.af.mil/AFOSR/	Navigate to https://www.grants.gov/web/grants/view-opportunity.html?oppId=345653 to view the "Research Interests of the Air Force Office of Scientific Research," BAA FA9550-23-S-0001.

You must refer to the websites cited above for detailed technical information and our technical goals. We encourage you to contact the Program Managers listed in the cited announcements before submitting proposals to explore research areas of mutual interest to you and us.

You may submit a single DURIP proposal to more than one administering agency; however, only one administering agency will fund it, if selected. There is no limit on the total number of different proposals you can submit. There is no limit to the number of awards a single applicant organization can receive under this competition.

Concurrent with this FOA, is a stand-alone STEM supplement FOA titled Fiscal Year 2023 Lending Library - Defense University Research Instrumentation Program (LL-DURIP). The Lending Library seeks proposals from universities to create and implement an education and outreach program using DURIP-funded instrumentation. Proposals are accepted from entities who previously received a DURIP grant and currently have access to the DURIP-funded instrumentation. These could have been funded by the Army Research Office (ARO), the Office of Naval Research (ONR), and the Air Force Office of Scientific Research (AFOSR); however, this STEM supplement is a stand-alone opportunity that is only provided by the Air Force Office of Scientific Research (AFOSR). If interested in applying to the LL-DURIP FOA, please visit Grants.gov and search for announcement number FOA-AFRL-AFOSR-2023-0002 or go direct via this link: https://www.grants.gov/web/grants/view-opportunity.html?oppId=345430 .

Link to Additional Information: https://www.grants.gov/web/grants/view-opportunity.html?oppId=346064

10. Advanced Nursing Education Workforce (ANEW) Program, HRSA

Submission Deadlines: April 7, 2023
Anticipated Funding Amount: up to $650,000 for a period of performance of 4 years

The purpose of the Advanced Nursing Education Workforce (ANEW) Program is to increase the number of primary care nurse practitioners, clinical nurse specialists, and certified nurse midwives trained and prepared to provide primary care services, mental health and substance use disorder care, and/or maternal health care. Grants will support the training and graduation of advanced practice registered nursing (APRN) students/trainees in these disciplines. Awardees will provide tuition and other eligible supports to trainees, build academic-clinical partnerships to facilitate clinical training, and continue to develop and sustain clinical faculty and preceptors as needed. Applicants are strongly encouraged to recruit students/trainees and faculty from diverse populations. Funding preference will be given to eligible entities that train APRNs students to practice in underserved and rural communities or state and local health departments.

Goals

- Increase the number of nurse practitioners (NPs), clinical nurse specialists (CNSs) and certified nurse midwives (CNMs) trained to serve rural, urban, and tribal underserved populations.
- Increase the diversity of the nursing workforce to better address the needs of the populations they serve by recruiting and supporting students and faculty, including those from diverse populations such as students and faculty from disadvantaged backgrounds and underrepresented minorities in the nursing profession.
- Build/expand academic-clinical partnerships to create experiential learning opportunities that prepares trainees to efficiently address health equity and Social Determinants of Health (SDOH) for rural, urban, and tribal underserved populations.

Student Traineeships

- Awardees must dedicate a minimum of 70 percent of the total award funds for student traineeship support.
- Awardees may make traineeship awards of up to $25,000 per year per full-time student and $15,000 per year per part-time student. Part-time students can only be supported in their final 12 months of traineeship.

Technical Assistance: HRSA will hold a pre-application technical assistance (TA) webinar for applicants seeking funding through this opportunity. The webinar will provide an overview of pertinent information in the NOFO and an opportunity for applicants to ask questions. Visit the HRSA Bureau of Health Workforce's open opportunities website to learn more about the resources available for this funding opportunity.

Link to Additional Information: https://www.grants.gov/web/grants/view-opportunity.html?oppId=341229

11. Community Level Interventions to Improve Minority Health and Reduce Health Disparities (R01 - Clinical Trial Optional), NIH

Application Due Date:

- **Letter of Intent: 30 days prior to the application due date**
- **Full Proposal: July 7, 2023**

Award Budget: limited to $1,000,000 direct costs annually for a project period of 5 years

This initiative will emphasize research priorities that can be addressed through community-engaged research approaches and that utilize the NIMHD Research Framework to assess and intervene on health determinants beyond the individual level, at the interpersonal, family, organizational, neighborhood, community, and societal levels. Recommendations generated from the NIMHD Science Visioning process indicated the need for a shift from individual-level and researcher-derived interventions to more community- - derived, structural, multi-level, and multi-sectoral interventions to improve minority health effectively and sustainably and reduce and ultimately eliminate health disparities. Community-level interventions, in which interventions target determinants associated with the overall community, such as physical, built, or sociocultural environments; resources; or functioning, address many of these identified priorities, and by necessity, require community engagement to develop and/or evaluate them.

Research Objectives

This initiative will support research projects to develop and test prospective community-level interventions to improve minority health and decrease health disparities. Community-level intervention projects are expected to have the following features:

- Are led by or conducted in full partnership with appropriate community partners, such as community-based organizations, faith-based organizations, local businesses, neighborhood associations, labor unions, patient or consumer advocacy groups, public health departments, healthcare systems, school systems, law enforcement or criminal justice agencies, social service agencies, or departments of commerce, labor, transportation, housing, recreation. Multi-sectoral collaborations involving partnerships with multiple types of organizations in the public and private sector are strongly encouraged.
- Are focused on improving health outcomes or reducing health disparities in one or more NIH-designated health disparity populations in the US.
- Are focused on the entire population in communities (e.g., an intervention to increase the availability of fresh produce or walkable green spaces) or a specific population within communities (e.g., an intervention to improve physical activity among high school students or older adults within the community).
- Are guided by a conceptual model identifying hypothesized pathways between the community-level intervention, community-level determinants, and health outcomes.
- Collect or obtain data beyond individual self-report to determine how the intervention is impacting community-level determinants of health.
- Are supported by relevant preliminary data. It is not required for the community-level intervention to have been pilot tested in multiple communities.
- Prospectively test the impact of interventions on self-reported or measured health outcomes. Retrospective analysis of existing or past community-level interventions or initiatives are not responsive to this initiative.
- Include health outcomes at the individual, interpersonal/organizational, or community level, or a combination.
- Use appropriate measures and analytic methods appropriate for examining community-level mechanisms of action and health outcomes.
- Test interventions that have the potential to be sustainable in the community after project funding is over.

Specific Areas of Research Interest

Community-level intervention targets of special interest include but are not limited to the following:

- Increasing affordable healthy food options and opportunities for physical activity outside the home.
- Changing community norms and reducing structural barriers related to health promoting behaviors, such as breastfeeding, vaccination, physical activity, and preventive health screening.
- Improving community attitudes (e.g., reducing prejudice, stigma, or discrimination) towards sociodemographic groups (e.g., racial/ethnic minorities, sexual and gender minorities) or towards individuals with certain health conditions (e.g., HIV, mental illness) that are detrimental to the health and well-being of these populations.
- Promoting screening, detection, help-seeking, and self-management related to acute or chronic illnesses (e.g., COVID-19, cancer, HIV, stroke, diabetes, cardiovascular disease, depression, substance use disorders).
- Enhancing the ability of community-dwelling older adults to age in place or individuals with disabilities to live independently and maintain health and well-being.
- Promoting community re-integration and health of individuals returning to the community after incarceration or institutionalization.
- Promoting healthy transition of individuals returning to the community after acute or chronic hospitalization.
- Preventing accidental injury, interpersonal violence, or suicide and suicide thoughts and behaviors especially with use of firearms.

NIMHD also encourages the use of standardized measures for conducting health disparities research such as the Phenx tool kit. Investigators involved in human-subject studies are strongly encouraged to employ a common set of tools and resources that will promote the collection of comparable data on SDOH across studies. In particular, studies with human participants should incorporate SDOH measures from the Core and Specialty collections that are available in the Social Determinants of Health Collection of the PhenX Toolkit (www.phenxtoolkit.org).

Link to Additional Information: https://grants.nih.gov/grants/guide/rfa-files/RFA-MD-23-004.html

12. OJJDP FY 2023 Arts Programs for Justice-Involved Youth, Dept. of Justice

Application Deadlines:

- **Grants.gov: April 6, 2023**
- **JustGrants: April 20, 2023**

Anticipated Award Amounts: up to $50,000 for a performance period of 18 months

With this solicitation, OJJDP seeks to support high-quality arts programs for justice involved youth to reduce juvenile delinquency, recidivism, and/or other problems and high-risk behaviors. This project seeks to support and strengthen collaborations between arts-based organizations and juvenile justice systems to develop, expand, or enhance effective interventions, which may involve emphasizing the unique capability of the art interventions to enhance protective factors and reduce risk factors that lead to justice system involvement, including individual characteristics, social influences, and community conditions.

This project seeks to support and strengthen collaborations between arts-based organizations and juvenile justice systems to develop, expand, or enhance promising and effective interventions that provide access to high-quality arts programs with and for current or previous justice-involved youth to reduce juvenile delinquency, recidivism, and/or other problem and high-risk behaviors. OJJDP defines justice-involved youth as those participating in court-ordered diversion programs in detention, correctional, or other residential facilities, and/or are on probation due to a delinquency finding by juvenile court.

Possible points of engagement with justice-involved youth can occur across juvenile justice systems, ranging from arts education for youth in secure facilities such as juvenile detention and confinement, arts programs as alternatives to incarceration, and/ or as a strategy to support successful reentry into communities. High-quality arts programs provide opportunities for rigorous artistic exploration, skill building and culminating events, and that provide youth with mentorship from artists. Arts programs may include but are not limited to visual arts, performing arts, filmmaking, and literary arts.

Goals

- Goal 1: Reduce juvenile delinquency, recidivism, and/or other problem and high-risk behaviors of justice-involved youth through the development, enhancement, and/or expansion of high-quality, culturally relevant arts programs.
- Goal 2: Increase participation of justice-involved youth in high-quality arts programs that are in alignment with OJJDP's overarching priority areas and that integrate and sustain meaningful youth and family partnerships in their program design and budget.

Objectives

An applicant should address the objectives that are relevant to their proposed program/project in the Goals, Objectives, Deliverables, and Timeline web-based form.

- Objective 1: Increase collaboration between arts-based organizations and juvenile justice systems through the development, enhancement, or expansion of partnerships.
- Objective 2: Increase access to high-quality arts programs for justice-involved youth.
- Objective 3: Increase the number of current or previous justice-involved youth participating in high-quality arts programs that seek to reduce risk factors and increase protective factors.
- Objective 4: Reduce risk factors and increase protective factors of justice-involved youth through participation in high-quality arts programs.

Deliverables

- Collaborative partnerships between juvenile courts and arts-based resources to provide justice-involved youth with high-quality arts programs for diversion and probation.
- Collaborative partnerships between juvenile detention, correctional, and other residential facilities and arts-based resources to provide high-quality arts programs for justice-involved youth.
- High-quality community-based arts programs for current or previous justice-involved youth.
- Culturally relevant and responsive community-based programs for racial and ethnic minority justice-involved youth.

Link to Additional Information: https://ojjdp.ojp.gov/media/document/34361

13. Partnerships for Research Innovation in the Mathematical Sciences (PRIMES), NSF

Application Deadline: May 26, 2023
Anticipated Total Amount to be Awarded: up to $400,000 for two years

The DMS Partnerships for Research Innovation in the Mathematical Sciences (PRIMES) program aims to enable, build, and grow formal partnerships between minority-serving institutions (MSI) and DMS-supported research institutes. The PRIMES activity increases diversity through building and growing research capacity and output in the mathematical sciences at minority serving institutions by supporting members of a math/stat department at an MSI through year-long research leaves, during which time participants visit one of the DMS-supported research institutes (for a thematic program, for workshops of any length, or for a long-term stay).

A PRIMES award is a two-year grant that will defray the costs of:

a) a one-year replacement at the MSI for each faculty member participating.
b) the institute's cost of the faculty participation in the institute program
c) up to 2-months' salary per year for the participating faculty member
d) the costs of additional travel and lodging for the faculty members.

The activities are to be scheduled so that the faculty member first participates in programs at the research institute and subsequently has an opportunity to complete and write up the resulting work. Additionally, during the second year of the award, the faculty member receives support for travel to work with collaborators as well as for up to 2-months' salary. The award also allows the possibility to defray the costs for a postdoctoral associate, graduate student, or undergraduate

student from the MSI to participate in (parts of) the programs at the research institute.

A PRIMES proposal will encompass a research thrust that involves typically one faculty member from the MSI and one co-PI from the partnering research institute. Collaborative projects involving multiple faculty members from one or two MSIs or for partnering with one or two research institutes will be considered, provided there is a sound scientific rationale for such collaboration. Successful PRIMES projects are expected to include a vision for the partnership that simultaneously promotes inclusiveness and research excellence; the proposed research should be aligned with research supported by DMS and in line with the thematic program at the research institute the faculty member plans to attend. Successful PRIMES projects should also address how the award will advance research capacity and output at the MSI as well as the potential, if relevant, to involve undergraduate students, graduate students, or postdoctoral associates in research. Successful PRIMES projects should further address how the award will contribute to the overarching goal of increasing workforce diversity in the mathematical sciences. Importantly, anticipated challenges and expected outcomes toward increasing diversity and research output must be identified and addressed in PRIMES proposals.

Link to Additional Information: https://www.nsf.gov/pubs/2023/nsf23560/nsf23560.htm

14. Computer and Information Science and Engineering: Core Programs, NSF

Application Deadline Window:

- **Small Projects: Proposals Accepted Anytime**
- **Medium Projects: October 1 to October 23, 2023**
- **OAC Core Projects: October 01, 2023 - October 23, 2023**

Award Amount:

- **Small Projects: up to $600,000 total budget with durations up to three years**
- **Medium Projects: between $600,001 to $1,200,000 total budget with durations up to four years**
- **OAC Core Projects: up to $600,000 total budget with durations up to three years**

The NSF CISE Directorate supports research and education projects that develop new knowledge in all aspects of computing, communications, and information science and engineering, as well as advanced cyberinfrastructure, through the following core programs:

- Division of Computing and Communication Foundations (CCF): supports research that studies the foundations of computing and communication.
  - Algorithmic Foundations (AF) program
  - Communications and Information Foundations (CIF) program
  - Foundations of Emerging Technologies (FET) program
  - Software and Hardware Foundations (SHF) program

- Division of Computer and Network Systems (CNS): supports research that studies novel or enhanced computing and/or networking, including using new technologies or new ways to apply existing technologies, with a focus on systems.
  - Computer Systems Research (CSR) program
  - Networking Technology and Systems (NeTS) program

- Division of Information and Intelligent Systems (IIS): supports research that studies the inter-related roles of people, computers, and information.
  - Human-Centered Computing (HCC) program
  - Information Integration and Informatics (III) program
  - Robust Intelligence (RI) program

- Office of Advanced Cyberinfrastructure (OAC): supports translational research and education activities in all aspects of advanced cyberinfrastructure that lead to systems capable of transforming science and engineering research.

- OAC Core Research (OAC Core) program

Proposers are invited to submit proposals in several project classes, which are defined as follows:

- **Small Projects:** projects in this class may be submitted to CCF, CNS, and IIS only. Well suited to one or two investigators (PI and one co-PI or other Senior Personnel) and at least one student and/or postdoctoral researcher.
- **Medium Projects:** projects in this class may be submitted to CCF, CNS, and IIS only. Well suited to one or more investigators (PI, co-PI and/or other Senior Personnel) and several students and/or postdoctoral researchers.
- **OAC Core Projects:** projects in this class may be submitted to OAC only. Well suited to one or two investigators (PI and one co-PI or other Senior Personnel) and at least one student and/or postdoctoral researcher.

Link to Additional Information: https://www.nsf.gov/pubs/2023/nsf23561/nsf23561.htm

15. Research and Development in Forensic Science for Criminal Justice Purposes, Dept. of Justice

Application Deadline:

- **Grants.gov: April 19, 2023**
- **JustGrants: April 26, 2023**

Anticipated Funding Amount to be Awarded: $12,000,000 for up to 45 anticipated awards

OJP is committed to advancing work that promotes civil rights and racial equity, increases access to justice, supports crime victims and individuals impacted by the justice system, strengthens community safety and protects the public from crime and evolving threats, and builds trust between law enforcement and the community. With this solicitation, NIJ seeks proposals for rigorous basic or applied research and development projects. An NIJ forensic science research and development grant supports a discrete, specified, circumscribed project that will:

1. Increase the body of knowledge to guide and inform forensic science policy and practice.
2. Lead to the production of useful material(s), device(s), system(s), or method(s) that have the potential for forensic application.

Specific Information

This solicitation seeks applications for funding to support basic or applied research and development forensic science projects. For the purposes of this solicitation, the following definitions apply:

- **Forensic** — Of, relating to, or used in legal proceedings or argumentation.
- **Science** — The observation, identification, description, experimental investigations, and theoretical explanation of natural phenomena.
- **Basic research** — A systematic study directed toward fuller knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind. Basic research may include activities with broad applications in mind. For the purposes of this solicitation, foundational/basic research must include activities with broad application to forensic sciences related to the criminal justice system.
- **Applied research** — A systematic study to gain knowledge or understanding necessary to determine how a recognized and specific need may be met.[4] For the purposes of this solicitation, the specific need(s) being met must relate to the improvement of forensic science services for criminal justice purposes.
- **Development** — The systematic application of knowledge or understanding, directed toward the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes and new processes to meet specific requirements. For the purposes of this solicitation, the development of forensic technologies and methods should assist in answering questions posed in criminal investigations or increase crime laboratory capacity to meet the demand for forensic science services.

Funding priorities for this program are expected to align with the Department of Justice's mission. Proposed projects should address the current technology challenges encountered by forensic scientists by generating new knowledge or tools

that will lead to better methods, move the state-of-the-art forward, or otherwise resolve identified issues so as to assist law enforcement, enhance public safety, prevent and reduce crime, and ensure the fair and impartial administration of justice. Although the goals and deliverables of proposed projects are not required to result in immediate solutions to the posted challenges and needs, proposals should, at a minimum, address the foundational work that will lead to eventual solutions.

Goals

Proposals should address at least one of the goals specified below. Proposed projects that address more than one goal should be separated into discrete phases that clearly identify the goal to be addressed by each phase (additional information regarding the phasing of proposals can be found in Federal Award Information). Proposed projects should include goals that speak to specific forensic science needs and challenges which, if resolved, will aid the criminal justice community to enforce the law, enhance public safety, prevent and reduce crime, and ensure fair and impartial administration of justice. Although some late-stage applied research and development projects may be able to propose tangible or direct solutions, early-stage research projects are not required to result in immediate solutions; however, these early-stage research projects should clearly explain how the proposed objectives, once achieved, will produce knowledge that contributes to eventual solutions.

- **Foundational/Basic Research Goal:** Improve the understanding of the accuracy, reliability, and measurement validity of forensic science disciplines. Applicants may refer to Strengthening Forensic Science in the United States: A Path Forward by the National Research Council of the National Academies of Sciences, Engineering, and Medicine to review historical material relevant to this goal. If addressing this goal, projects should meet at least one of the following objectives:
    - Conduct basic scientific research in the physical, life, and cognitive sciences that is designed to increase the knowledge underlying forensic science disciplines intended for use in the criminal justice system. For the purposes of this objective, basic research studies proposed must include activities with broad application to forensic sciences related to the criminal justice system. Proposals should describe the anticipated impact of the study on one or more forensic science disciplines.
    - Perform studies that examine the degree of accuracy and reliability of methods used by forensic scientists to achieve a more complete understanding of the scientific basis of forensic evidence and the interpretation of that evidence. Studies may also examine various processes within forensic methods, from the initial acceptance and examination of evidence for its probative value and quality, to the final interpretation of forensic results, including assessment of error rate.
    - Conduct foundational research studies designed to further the understanding of quantifiable measures of uncertainty in the conclusions of forensic analyses, regardless of the sources of uncertainty. Studies should seek to establish limits of reliability and accuracy that forensic methods can achieve with respect to varying conditions of forensic evidence.
    - Develop new approaches to forensic analysis, including quantitation of analyses that are currently qualitative in nature.

- **Applied Research Goal:** Increase knowledge or understanding necessary to guide criminal justice policy and practice related to the forensic sciences. To achieve this goal, projects should meet at least one of the following objectives:
    - Perform applied research to increase knowledge of physical evidence and/or its behavior. Examples include, but are not limited to, the study of fluid transfer and fluid dynamics of certain biological fluids (e.g., blood) to increase understanding of patterns deposited at crime scenes; the examination of chemical properties of evidence for the purpose of identifying source materials; studies of the behavior of chemical compounds of forensic interest in biological systems; research to better understand aged, degraded, limited, damaged, inhibited, or otherwise compromised physical evidence.
    - Perform evaluation studies of technologies that are expected to have application to forensic sciences in criminal justice settings. The purpose of an evaluation must be to test a new, modified, or previously untested technology to determine whether it is effective for forensic science application. Proposals for evaluation studies should systematically use scientific methods to measure efficiency, implementation, and utility of the technology being evaluated. The primary intent of a proposed evaluation study must be to generate new knowledge or contribute to the knowledge in forensic scientific literature. Furthermore,

knowledge gained from an evaluation study should be applicable to sites other than the one(s) being evaluated. An evaluation study should result in a report suitable for publication and dissemination to guide criminal justice policy and/or practice related to the forensic sciences. The results of an evaluation study should contribute to generalizable knowledge that can be applied beyond a particular program/ geography, and can inform other researchers, practitioners, and/or policymakers.

- **Development Goal:** Produce novel and useful materials, devices, systems, or methods that have the potential for forensic application for criminal justice purposes. For development projects, proposals should demonstrate potential for increased quality of result and/or decreased time/cost for forensic analyses as compared to current standard practices. In order to achieve this goal, projects should meet at least one of the following objectives:
    - Improve the "front end" of the forensic analysis processes. Examples include, but are not limited to, the development of improved methods for detection and identification of evidence at crime scenes; the development of improved screening methods to help assess the probative value of forensic evidence (i.e., onsite presumptive and/or confirmatory analysis of evidence); the development of improved means to remotely detect forensic evidence at a crime scene in order to overcome scene hazards and prevent evidence contamination; the development of nondestructive or minimally destructive methods for evidentiary sample identification and/or collection; the development of improved tools or methods for evidence preservation and/or storage.
    - Develop instrumental systems to improve analysis throughput and the reliability, reproducibility, selectivity, and/or sensitivity of current methods used in crime laboratories for forensic analysis.
    - Develop tools or methods that can separate the various components of a mixture. The separation method must be successful on typical forensic samples (limited in yield, etc.) and must not reduce the efficiency of downstream forensic methods. Examples of mixtures include, but are not limited to, cells from different sources (e.g., sperm cells from female epithelial cells, epithelial cells from different sources), products of DNA processes (e.g., polymerase chain reaction [PCR] products in mixtures from two or more individuals), and trace materials.
    - Develop improved tools for examining aged, degraded, limited, damaged, inhibited, or otherwise compromised physical evidence. Examples include, but are not limited to, the development of tools to determine the condition of the evidence to assist crime laboratory analysts in selecting the appropriate analytical approach, the development of methods to repair damaged evidence (without compromising sample integrity) to increase the likelihood of obtaining an analytical result, improvements to the methods for detection and/or removal or remediation of substances that inhibit the success of analysis, or other methods that will maximize the success rate of the analysis of compromised evidence.
    - Develop novel approaches to forensic science methods for analysis and interpretation. Examples include streamlined, portable, high-throughput, more informative, more sensitive, less susceptible to inhibition, and other novel methods for analysis of forensic evidence for criminal justice purposes.
    - Develop novel approaches and/or enhance current approaches to interpret forensic data derived from physical evidence, including an assessment of the significance of association. This may include development of databases (comprehensive, searchable, easily accessible, secure databases for use in determining the statistical strength of analytical results obtained from evidence found at crime scenes), and/or analyses that provide quantitative measures and statistical evaluation of forensic evidence.

Priority Areas

Research and Development Priority Opportunities - NIJ is interested in funding innovative research that aligns with administration R&D priorities.

- Catalyze Research and Innovation in Critical and Emerging Technologies: NIJ supports technologies that power the industries of the future, to include industries which support the forensic sciences that may: (1) increase the body of knowledge to guide and inform forensic science policy and practice; or (2) lead to the production of useful material(s), device(s), system(s), or method(s) that have the potential for forensic application.
- STEM Education and Engagement: NIJ supports the improvement of technical training of future forensic scientists through science, technology, engineering, and math (STEM) training through hands-on laboratory and research experience. NIJ encourages applicants to include the employment of students in their research proposals.

Furthermore, NIJ supports building capacity at institutions that serve high proportions of underrepresented or underserved groups.

New Investigator Opportunities - NIJ is interested in funding new investigators engaging in forensic science research. Proposals whose principal investigator and all co-investigator(s) are defined as "new investigators" may, in appropriate circumstances, be given special consideration in award decisions. To be considered a "new investigator" for the purposes of this solicitation, one of the two criteria below must be demonstrated.

1. The investigator must have received — no earlier than April 1, 2019 — an initial appointment in the United States to a full-time junior faculty position at a university or to an equivalent full-time staff scientist position in a research institution; hold such a full-time appointment at the time of application submission; and must never have received NIJ funding for a research project — other than a Graduate Research Fellowship program grant.
2. The investigator must be an established researcher who has not successfully competed for NIJ funding as a principal investigator or co-principal investigator in the past 10 years. The investigator must hold a full-time appointment in the United States to a faculty position at a university or an equivalent position as a full-time staff scientist at a research institution at the time of application.

Link to Additional Information: https://nij.ojp.gov/funding/opportunities/o-nij-2023-171606

16. Communications, Circuits, and Sensing-Systems (CCSS), NSF

Application Deadline: Proposals Accepted Anytime
Award Amount: budgets are not limited but need to reflect the actual needs of the proposed project

The Communications, Circuits, and Sensing-Systems (CCSS) Program supports innovative research in circuit and system hardware and signal processing techniques. CCSS also supports system and network architectures for communications and sensing to enable the next-generation cyber-physical systems (CPS) that leverage computation, communication, and sensing integrated with physical domains. CCSS invests in micro- and nano-electromechanical systems (MEMS/NEMS), physical, chemical, and biological sensing systems, neurotechnologies, and communication & sensing circuits and systems. The goal is to create new complex and hybrid systems ranging from nano- to macro-scale with innovative engineering principles and solutions for a variety of applications including but not limited to healthcare, medicine, environmental and biological monitoring, communications, disaster mitigation, homeland security, intelligent transportation, manufacturing, energy, and smart buildings. CCSS encourages research proposals based on emerging technologies and applications for communications and sensing such as high-speed communications of terabits per second and beyond, sensing and imaging covering microwave to terahertz frequencies, personalized health monitoring and assistance, secured wireless connectivity and sensing for the Internet of Things, and dynamic-data-enabled autonomous systems through real-time sensing and learning.

Areas managed by CCSS Program Directors (please contact Program Directors listed in the CCSS staff directory for areas of interest):

- RF Circuits and Antennas for Communications and Sensing
  - RF Communications and Sensing Technologies from kHz to THz
  - Antennas and Wave Propagation for Communications and Sensing
  - Circuits and Systems for Secured Communications and Sensing
  - Trusted Microelectronic Circuits
  - RF Biomedical Applications and Remote Sensing
  - Bio-mimetic Circuits and Systems
  - Dynamic-data-enabled Reconfigurable RF Subsystems through Sensing and Machine Learning
  - Wireless Energy Transfer and RF Energy Harvesting

- Communication Systems and Signal Processing
  - Wireless, Optical, and Hybrid Communications and Networking
  - Full-duplex, massive MIMO, mm-Wave, and THz communications

- Spectrum Access and Sharing
- Integrated Sensing, Communication, and Computational Systems
- Signal Processing, image processing, and Compressive Sampling
- Cyber Physical Systems and Hardware-controlled Secured Communications
- Dynamic-data-enabled Communication Systems through Sensing and Machine Learning
- Quantum Communication Systems

- Dynamic Bio-Sensing Systems
  - Micro, Nano, and Bio Systems (MEMS/NEMS)
  - Chemical, Biological, and Physical Diagnostics
  - Sensors, Actuators, and Electronic Interfaces
  - Ultra-Low Power Wearable and Implantable Sensing Systems
  - Dynamic-data-enabled Reconfigurable Sensing Systems
  - Personalized Health Monitoring Systems through Sensing and Machine Learning
  - Neuroengineering and Brain-Inspired Concepts and Designs

Link to Additional Information: https://beta.nsf.gov/funding/opportunities/communications-circuits-sensing-systems-ccss-0

17. Early Career Faculty Appendix, NASA

Application Deadline:

- **Notice of Intent: March 16, 2023**
- **Full Proposal: April 13, 2023**

Anticipated Funding Amount: up to $200,000 for a project period of up to 3 years

The National Aeronautics and Space Administration (NASA) Headquarters has released a solicitation, titled Early Career Faculty (ECF), as an appendix to the Space Technology Mission Directorate (STMD) umbrella NASA Research Announcement (NRA) titled "Space Technology Research, Development, Demonstration, and Infusion 2023 (SpaceTech-REDDI-2023), on February 16, 2023.

The Space Technology Research Grants (STRG) Program within STMD seeks proposals from accredited U.S. universities on behalf of their outstanding new faculty members who intend to develop academic careers related to space technology.

Our Nation's universities couple fundamental research with education, encouraging a culture of innovation based on the discovery of knowledge. Universities are, therefore, ideally positioned to both conduct fundamental space technology research and diffuse newly found knowledge into society at large through graduate students and industry, government, and other partnerships. STMD investments in space technology research at U.S. universities promote the continued leadership of our universities as an international symbol of the country's scientific innovation, engineering creativity, and technological skill. These investments also create, fortify, and nurture the talent base of highly skilled engineers, scientists, and technologists to improve America's technological and economic competitiveness.

The following topics are anticipated for the final appendix:

- **Topic 1 – Novel Fluids for Spacecraft Thermal Control -** The goal of this topic is to develop advanced fluids that provide performance improvements in active thermal control systems to meet NASA exploration needs via development and characterization of novel heat transfer fluids such as ionic liquids.

  This research area specifically seeks novel heat transfer fluids that offer thermophysical properties better than those currently provided by state-of-the-art external fluids (such as HFE 7200), reduce the pour point to preclude freezing during lunar night/low power periods, and minimize risks associated to potential crew exposure.

  Proposed approaches may include but are not limited to tailored ionic liquids. The ideal coolant for active thermal control systems would provide thermophysical and hazard control properties of water but never freeze.

- **Topic 2 – Hypersonic Transition and Turbulence for NASA Entry, Descent and Landing Applications** - The goal of this topic is to develop and validate higher-order/higher-fidelity computational models for transition and turbulent heating modeling relevant to NASA Entry, Descent and Landing (EDL) Vehicle Configurations and Mission Trajectories.

  This solicitation topic specifically seeks proposals that will develop robust and validated computational models for the prediction of boundary-layer transition and turbulent heating for NASA EDL vehicle configurations.

- **Topic 3 – Non-Traditional Orbit Debris Remediation** - The goal of this topic is to advance enabling technologies for remediation and repurposing of orbital debris.

  For this solicitation topic, "traditional" active debris removal (ADR) systems have the following features:
  - physically capture and remove large (>10cm) legacy debris via atmospheric entry or relocation to a disposal orbit
  - capture "prepared" or legacy spacecraft and remove them via atmospheric entry or relocation to a disposal orbit (end-of-life services).

Link to Additional Information: https://www.grants.gov/web/grants/view-opportunity.html?oppId=346238

Non-Scientific Forecasted Opportunities

1. **Media Projects, NEH**

The Media Projects program supports the development, production, and distribution of radio programs, podcasts, documentary films, and documentary film series that engage general audiences with humanities ideas in creative and appealing ways. Projects must be grounded in humanities scholarship and demonstrate an approach that is thoughtful, balanced, and analytical. Media Projects offers two levels of funding: Development and Production.
NEH makes Preservation and Access Education and Training awards to organizations that offer national, regional, or statewide education and training programs across the pedagogical landscape. Projects may be at any stage of development, from early curriculum development to advanced implementation. Awards help the staff of cultural institutions, large and small, obtain the knowledge and skills they need to serve as effective stewards of humanities collections. Awards support projects that prepare the next generation of preservation professionals, as well as projects that introduce heritage practitioners to new information and advances in preservation and access practices.

Link to Additional Information: https://www.neh.gov/program/media-projects

Scientific Forecasted Opportunities

1. **Nurse Education Practice Quality and Retention Program- Simulation Education Training, HRSA IH**

The Nurse Education, Practice, Quality and Retention (NEPQR)-Simulation Education Training (SET) program aims to enhance nursing education and practice with the use of simulation-based technology to advance the health of patients and families in the acute care setting to improve health outcomes. This program also intends to increase and strengthen the capacity student nurses from diverse backgrounds, (including underrepresented racial and ethnic minorities) to address the complex health care needs of populations for patient safety outcomes and improve health equity and health literacy of vulnerable and underserved populations.

Link to Additional Information: https://www.grants.gov/web/grants/view-opportunity.html?oppId=346097

2. **Behavioral Health Workforce Education and Training-Children Adolescents and transitional aged Youth**

Program for Professionals, HRSA

The purpose of BHWET-CAY Program for Professionals is to increase the number of behavioral health providers prepared to address the needs of children, adolescents, and transitional aged youth in high need high demand areas.

Link to Additional Information: https://www.grants.gov/web/grants/view-opportunity.html?oppId=346098

3. **Building Capacity for Chronic Disease Education and Awareness, CDC**

The purpose of this 4-year NOFO is to fund approximately 4 applicants to expand and advance CDC's work with stakeholders on education, outreach, and public awareness activities to strengthen the science base for prevention, education, and public health awareness for a variety of chronic diseases that do not currently have dedicated resources that would lead to meaningful patient outcomes. Stakeholders will focus on data dissemination, education, and public awareness activities that will support effective, evidence-based clinical and population-level approaches to improve health and health equity.

Link to Additional Information: https://www.grants.gov/web/grants/view-opportunity.html?oppId=346199

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

Announcing Previous Important Funding Opportunities

1. Cybersecurity Innovation for Cyberinfrastructure (CICI), NSF
   Deadline: Type I and II: March 17, 2023
   https://www.nsf.gov/pubs/2023/nsf23532/nsf23532.htm

2. Justice and Mental Health Collaboration Program, Bureau of Justice Assistance
   Deadline: March 21, 2023
   https://bja.ojp.gov/funding/opportunities/o-bja-2023-171522

3. Emerging Mathematics in Biology (eMB), NSF
   Deadline: March 22, 2023
   https://www.nsf.gov/pubs/2023/nsf23537/nsf23537.htm

4. Hispanic-Serving Institutions Education Grants Program, USDA / NIFA
   Deadlines: March 29, 30 and 31, 2023
   https://www.nifa.usda.gov/grants/funding-opportunities/hispanic-serving-institutions-education-grants-program?utm_content=&utm_medium=email&utm_name=&utm_source=govdelivery&utm_term=

5. Secondary Education, Two-Year Postsecondary Education, and Agriculture in the K-12 Classroom Challenge Grants Program, USDA
   Deadline: April 5, 2023
   https://www.nifa.usda.gov/grants/funding-opportunities/secondary-education-two-year-postsecondary-education-agriculture-k-12

6. Science, Technology, Engineering and Mathematics (STEM) Program, Air Force Office of Scientific Research (AFOSR)
   Deadline: April 14, 2023
   https://www.grants.gov/web/grants/view-opportunity.html?oppId=345510

7. MUREP Women's Colleges and Universities, NASA
   Deadline: April 17, 2023
   https://nspires.nasaprs.com/external/solicitations/summary.do?solId=%7b24C75229-3484-CD60-01AF-ABCC04E059F5%7d&path=&method=init

8. Future Manufacturing (FM), NSF
   Deadline: April 19, 2023
   https://www.nsf.gov/pubs/2023/nsf23550/nsf23550.htm#pgm_desc_txt

9. W.E.B. Du Bois Program of Research on Reducing Racial and Ethnic Disparities in the Justice System, Dept. of Justice / National Institute of Justice
   Deadline: April 24, 2023
   https://nij.ojp.gov/funding/opportunities/o-nij-2023-171519

10. Humanities Initiatives at Hispanic-Serving Institutions, NEH
    Deadline: May 9, 2023
    https://www.neh.gov/program/humanities-initiatives-colleges-and-universities

11. IUSE / Professional Formation of Engineers: Revolutionizing Engineering Departments (IUSE/PFE: RED), NSF
    Deadline: May 10, 2023
    https://www.nsf.gov/pubs/2023/nsf23553/nsf23553.htm

12. Research and Development, NEH

Deadline: May 16, 2023
https://www.nsf.gov/pubs/2023/nsf23537/nsf23537.htm

13. Ruth L. Kirschstein National Research Service Award (NRSA) Short-Term Institutional Research Training Grant (Parent T35), NIH
Deadline: May 25, 2023
https://grants.nih.gov/grants/guide/pa-files/PA-23-080.html

14. NHPRC-Mellon Planning Grants for Collaborative Digital Editions in African American, Asian American, Hispanic American, and Native American History and Ethnic Studies, National Archives
Deadline: June 7, 2023
https://www.archives.gov/nhprc/announcement/digitaleditions

15. 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

16. Research and Mentoring for Postbaccalaureates in Biological Sciences (RaMP), NSF
Deadline: January 18, 2024
https://www.nsf.gov/pubs/2023/nsf23514/nsf23514.htm

Fellowships and Scholarships Funding Opportunities

1. **Fulbright-Hays Doctoral Dissertation Research Abroad Fellowship Program, Dept. of Education**
Deadline: April 11, 2023
Estimated Average Award Size: $37,876 for a funding period of no less than 6 months and no more than 12 months

The Fulbright- Hays DDRA Fellowship Program provides opportunities for doctoral students to engage in dissertation research abroad in modern foreign languages and area studies. The program is designed to contribute to the development and improvement of the study of modern foreign languages and area studies in the United States.

Pre-Application Webinar Information: The Department will hold a pre- application meeting via webinar for prospective applicants. Detailed information regarding this webinar will be provided on the Doctoral Dissertation Research Abroad website at https://www2.ed.gov/programs/iegpsddrap/applicant.html.

Link to Additional Information: Office of Postsecondary Education (OPE): International Foreign Language Education (IFLE): Fulbright-Hays Doctoral Dissertation Research Abroad (DDRA) Fellowship Program, Assistance Listing Number 84.022A; Notice Inviting Applications for New Awards

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