Oportunidades de Fondos Externos
Vicepresidencia de Recursos Externos
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LA MEJOR EDUCACIÓN A TU ALCANCE
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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 1/26/2024 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

Page

1. Distance Education Grants Program for Institutions of Higher Education in Insular Areas, USDA/NIFA

Application Deadline: March 20, 2024
Award Information: budgets are not limited but need to reflect the actual needs of the proposed project

The purpose of the DEG program is to strengthen the capacity of institutions of higher education in insular areas to carry out resident instruction, curriculum, and teaching programs in the food and agricultural sciences through distance education technology. Projects funded by the DEG program support the creation, adaptation, and adoption of learning materials and teaching strategies to operationalize what we know about how students learn. DEG-funded projects must also focus on imparting both technical knowledge as well employability skills such as communication, teamwork, and problem solving.

NIFA is soliciting applications for the DEG program that support:

1. Acquisition of equipment, instrumentation, networking capability, hardware and software, digital network technology, and infrastructure necessary to teach students and teachers about technology to support distance education.
2. Development and enhancement of educational services (including faculty development) to prepare students or faculty seeking a degree or certificate that is approved by the state or a regional accrediting body recognized by the Secretary of Education.
3. Providing teacher education, library and media specialist training, and preschool and teacher aid certification to individuals who seek to acquire or enhance technology skills in order to use technology in the classroom or instructional process.
4. Implementation of a joint project to provide education regarding technology in the classroom with a local educational agency, community-based organization, national nonprofit organization, or business; or provide leadership development to administrators, board members, and faculty of eligible institutions with institutional responsibility for technology education.

Leadership Skills Development

The development of leadership skills, knowledge, and qualities are necessary to prepare students for agricultural and related careers in the private sector, government, and academia. DEG teaching applications must demonstrably incorporate a leadership development component to equip students with technical and leadership abilities upon graduation. Specific activities may include:

1. Developing practical applications to increase understanding of leadership roles, including critical thinking, problem solving, and communication skills; ethics and professionalism; and working in teams.
2. Connecting the academic classroom experience with daily leadership roles and organizational activities.
3. Providing opportunities for mentoring and shadowing
4. Organizing academies, workshops, and trainings for professional development opportunities that develop leadership skills.

Incorporation of Social Sciences and Enhancing Impacts.
The DEG program supports social and behavioral science disciplines. DEG projects that integrate social and behavioral sciences to provide experiential learning opportunities for students in applied research, and related community development programs are encouraged. Incorporation of social and behavioral sciences is important for addressing many of the challenges facing agriculture and rural communities, such as increasing global demand for food production in the face of limited natural resources; improving health and reducing obesity by engaging in heathy lifestyles and consuming heathy diets; and alleviating poverty by fostering economic opportunity.

Link to Additional Information: https://grants.nih.gov/grants/guide/pa-files/PAR-24-075.html

2. Research Initiative for Vaccine and Antibiotic Allergy (UG3/UH3 Clinical Trial Not Allowed), NIH

Application Deadlines:

- **Letter of Intent: 30 days prior to the application due date**
- **Full Proposal: June 21, 2024**

Anticipated Funding Amount: up to $250,000 direct cost per year for a total of five years (UG3-two years and UH3-three years)

Allergic reactions to drugs and vaccines are a serious public health concern. For the purpose of this notice of funding opportunity (NOFO), allergic reactions include not only IgE-mediated reactions, but other immune-mediated and largely unpredictable drug and vaccine reactions. Based on data from 2013-2014, each year in the United States there are an estimated 200,000 emergency department visits for adverse events related to antibiotics. In children 5 or younger, antibiotics cause more than half (56%) of estimated emergency department visits for adverse drug events and 82% of these visits are due to allergic reactions. Allergic reactions to antibiotics include immediate life-threatening reactions such as anaphylaxis, severe cutaneous reactions including Toxic Epidermal Necrolysis and Drug Reaction with Eosinophilia and Systemic Symptoms, and less severe reactions that still limit further use of the drugs. A label of antibiotic allergy leads to the use of alternative, frequently more expensive antibiotics, often with lower efficacy, which may contribute to antibiotic resistance as well as increased mortality and morbidity in hospitalized patients. While allergic reactions to vaccines are less common, the inability to receive a vaccine due to an allergy is problematic to the individual, and the perceived risk of allergic reactions to vaccines contributes to vaccine hesitancy creating a public health issue.

Objectives

The objective of this NOFO is to solicit innovative projects to study the mechanisms and management of vaccine or antibiotic drug allergy (research on allergic responses to anti-viral, anti-fungal and anti-parasitic drugs will also be considered).

The scope of research into antibiotic or vaccine allergic reactions includes, but is not limited to, the following:

- IgE-mediated and other mechanisms of immediate allergic antibiotic or vaccine reactions
- Non-IgE-mediated urticarial reactions to antibiotics or vaccines
- Delayed-type hypersensitivity reactions to antibiotics or vaccines
- Severe cutaneous adverse antibiotic or vaccine reactions
- Biomarkers to identify people at risk for reaction or to confirm reactions to specific antibiotics or vaccines
- Host factors that may predispose to allergic reactions including, but not limited to, host microbiome, genetics, or inflammatory conditions
- Mechanisms by which specific infections may increase the risk of an allergic reaction to an antibiotic or vaccine
- Immunomodulatory approaches to treating or preventing immunologic adverse antibiotic or vaccine reactions

A secondary objective of this NOFO is to expand the number of investigators working in the field of vaccine and antibiotic drug allergy. Early-stage investigators are encouraged to apply.

UG3/UH3 phase transition and Milestones

This funding opportunity is designed as a two-stage cooperative agreement in which Project Scientists from NIAID will work with the investigative team. It will support projects that are organized into a two-year UG3 phase followed by a three-year UH3 phase. The UG3 phase may include pilot, observational, or hypothesis-generating high-risk projects. Preliminary data may be helpful but are not required. The use of electronic health records to identify potential participants for mechanistic studies is allowed. The use of human samples such as those related to clinically indicated and routinely used interventions or tests is encouraged. The UG3 must include milestones to determine the success of the project at the end of this phase. Milestones may be negotiated or re-negotiated after award as this program includes the flexibility to quickly revise milestones and/or aims within the scope of the original peer-reviewed application. Following the completion of the UG3 phase, NIAID staff will review the progress made and make the determination on whether the

project will continue to the UH3 phase. NIAID support for the UH3 is contingent upon progress made during the UG3 phase, meeting the milestones, programmatic priorities, the original UG3/UH3 peer review recommendations, and the availability of funds. Some projects might not transition from the UG3 to the UH3 phase. Projects supported by the UH3 phase are required to be hypothesis driven, mechanistic, and extend the work initiated by the UG3 phase.

Link to Additional Information: https://grants.nih.gov/grants/guide/rfa-files/RFA-AI-24-002.html

3. EPSCoR Research Infrastructure Improvement (RII): EPSCoR Research Fellows, NSF

Application Deadlines: April 22, 2024
Anticipated Funding Amount:

- **EPSCoR Research Fellows: NSF: $300,000 for a project period of 24 months**
- **EPSCoR Research Fellows: @NASA: $300,000 plus $60K provided by NASA for a project period of 24 months**

Developing the full potential of EPSCoR jurisdictions' science and engineering research workforce is critical to the long-term competitiveness of the jurisdictions and the nation overall. To realize this potential, it is often worthwhile for researchers to spend periods of time at other institutions, forming deep collaborative connections that can be sustained for many years throughout their careers. The benefits of such an experience may be particularly valuable to those researchers who are not yet firmly established in their careers or who have had a pause in research activity and are looking to relaunch back into active research.

This EPSCoR Research Infrastructure Improvement: EPSCoR Research Fellows solicitation provides an opportunity for early career and non-tenured and tenured assistant/associate professor faculty to establish strong collaborations with the option to spend extended or periodic time (e.g., one, two, or three-month summer extended visit) at the nation's premier research facilities. The fellowship period may be used to initiate new collaborative relationships, to expand existing partnerships in ambitious new directions, or to make use of unique equipment not available at the PI's home institution. Successful fellowships will positively impact and potentially transform the recipient's research career trajectory. This fellowship support is intended to provide opportunities for PIs to establish collaborations and work at facilities of national prominence that would not otherwise be possible without the fellowship.

EPSCoR Research Infrastructure Improvement: EPSCoR Research Fellows Tracks. This solicitation offers two tracks:

1. **EPSCoR Research Fellows: NSF** - open to a broad community
   Provides support to further develop the individual research potential of early career, non-tenured, and tenured faculty and researchers, including those at the assistant or associate (or equivalent) professor rank through collaborative activities, including extended or periodic visits to the nation's premier private, governmental, or academic research centers. Any research topic that is supported by NSF is eligible for consideration. The fellowship host site may be any academic institution of higher education, governmental, commercial, or non-profit research facility within the United States or its territories. This includes but is not limited to, NSF-funded research sites for EPSCoR RII Track-1, EPSCoR RII Track-2, Center for Research Excellence in Science and Technology, Engineering Research Center, Materials Research Science and Engineering Center, Physics Frontier Center, Science and Technology Center, and NSF INCLUDES Alliances. A NASA Center may also be a fellowship host site for the EPSCoR Research Fellows: NSF track.

2. **EPSCoR Research Fellows: @NASA** - focuses on PIs from specific institutions of higher education with high enrollments of students from underrepresented populations in STEM
   Provides support to further develop the individual research potential of early career, non-tenured, and tenured faculty and researchers, including those at the assistant or associate (or equivalent) professor rank through collaborative activities, including extended or periodic visits (e.g., one, two, or three-month summer extended visit) to the selected NASA Center.

   This initiative is a joint effort coordinated by NSF EPSCoR and NASA EPSCoR specifically focusing on

Institutions of Higher Education (IHEs) that primarily serve students from groups traditionally underrepresented in STEM. In addition to minority-serving institutions, two-year colleges and Primarily Undergraduate Institutions (PUIs) are encouraged to submit.

Through this opportunity, EPSCoR Research Fellows: @NASA recipients will receive an additional $60,000 from NASA to support their research at the home institution and should help to build the recipients' research infrastructure and capacity.

Successful EPSCoR Research Fellows: NSF and EPSCoR Research Fellows: @NASA proposals are expected to discuss exciting, vibrant fellowship ideas that will positively impact and potentially transform the PI's individual career trajectory. Proposals will be evaluated for the extent to which a fellowship has the potential to positively transform the PI's individual career trajectory. Fellowships are also expected to impact the PI's research field, potential scientific discoveries, institution, and jurisdiction. All proposals should include well-defined, reasoned, and organized research objectives that could be driven by specific research questions or hypotheses, motivation, and context for the work to be conducted, the PI's specific research activities at the host site, and a discussion of how the benefits gained from the fellowship will be sustained beyond the award period. Note that clear specifications of research goals, activities, expected outcomes, and a project timetable are requirements for successful proposals. It is also crucial that the proposal explain clearly how the PI's research program would specifically benefit from the fellowship mechanism – identifying what specific opportunities will be made possible via the PI's collaborations and visit(s) to the host site.

Link to Additional Information: https://www.nsf.gov/pubs/2024/nsf24528/nsf24528.htm

4. Fulbright-Hays Group Projects Abroad (GPA) Program, Department of Education

Application Deadlines: March 18, 2024
Estimated Range of Awards:

- **GPA short-term projects: $50,000 - $180,000 up to 18 months**
- **GPA long-term projects: $50,000 - $300,000 up to 24 months**

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

This competition invites applicants to submit an application to request support for either a Fulbright-Hays GPA short-term project (GPA short-term project 84.021A) or a Fulbright-Hays GPA long- term project (GPA long-term project 84.021B).

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

- **GPA long-term projects**: are advanced overseas intensive language programs designed by the applicant that may be carried out during a full year, an academic year, a semester, a trimester, a quarter, or a summer. GPA long-term projects provide participants an opportunity to use and strengthen their advanced language training while experiencing the culture in the foreign country. Participants should have successfully completed at least 2 academic years of training in the language to be studied to be eligible to participate in a GPA intensive advanced

language training program. In addition, the language to be studied must be indigenous to the host country and maximum use must be made of local institutions and personnel (34 CFR 664.14).

Absolute Priority: Specific Geographic Regions of the World - A group project that focuses on one or more of the following geographic regions of the world: Africa, East Asia, South Asia, Southeast Asia and the Pacific, the Western Hemisphere (Central and South America, Mexico, and the Caribbean), Eastern and Central Europe and Eurasia, and the Near East.

Competitive Preference Priorities: For FY 2024, there are five competitive preference priorities. Under 34 CFR 75.105(c)(2)(i), we award 3 additional points to an application that meets Competitive Preference Priority 1; 2 additional points to an application that meets Competitive Preference Priority 2; 2 additional points for short-term projects or 4 additional points for long- term projects to an application that meets Competitive Preference Priority 3; 2 additional points to an application that meets Competitive Preference Priority 4; and 2 additional points to an application that meets Competitive Preference Priority 5. Applicants for GPA short-term projects may address Competitive Preference Priorities 1, 3, 4, and 5. Applicants for GPA long-term projects may address Competitive Preference Priorities 2 and 3. In the application narrative, an applicant must indicate the priority or priorities being addressed, provide a substantive description of how the proposed activities support the applicant's selected priority or priorities, and provide documentation supporting such claims.

These priorities are:

- Competitive Preference Priority 1—Applications for GPA Short-Term Projects from Selected Institutions and Organizations (3 Points).
- Competitive Preference Priority 2— Applications for GPA Long-Term Projects from MSIs (2 Points).
- Competitive Preference Priority 3— Substantive Training and Thematic Focus on Less Commonly Taught Languages (2 Points for short-term projects or 4 Points for long-term projects).
- Competitive Preference Priority 4— Inclusion of K–12 Educators (2 Points). Applications that propose short-term projects abroad that develop and improve foreign language studies, area studies, or both at elementary and secondary schools by including K–12 teachers or K–12 administrators as at least 50 percent of the project participants.
- Competitive Preference Priority 5— Thematic Focus on Academic Fields (2 Points). Applications that propose short-term projects abroad in modern foreign languages and area studies with an academic focus on any of the following academic fields: science, technology, engineering, mathematics, computer science, education (comparative or international), international development, political science, public health, or economics.

Link to Additional Information: https://www.grants.gov/search-results-detail/351704

5. Modular R01s in Cancer Control and Population Sciences (R01 Clinical Trial Optional), NIH

Application Deadlines: June 05, 2024
Award Amount: up to $250,000 (excluding consortium F&A costs) for a duration up to five years

This notice of funding opportunity (NOFO) calls for research on a broad range of scientific areas within NCI's Division of Cancer Control and Populations Sciences' (DCCPS) mission and portfolio, including but not limited to research in statistical and analytic methods, epidemiology and genomics, cancer survivorship, cancer-related behaviors, healthcare delivery, digital health and data science, and implementation science.

The mission of NCI's Division of Cancer Control and Population Sciences (DCCPS) is to reduce risk, incidence, and deaths from cancer, as well as enhance the quality of life for cancer survivors. The division conducts and supports an integrated program of the highest quality genetic, epidemiologic, behavioral, social, applied, and surveillance cancer research. DCCPS-funded research aims to understand the causes and distribution of cancer in populations, support the development and delivery of effective interventions, and monitor and explain cancer trends in all segments of the

population.

Through this NOFO, NCI encourages applications that address a variety of topics that are a high priority for DCCPS, including, but not limited to the following:

- **Statistical and Analytic Methods**
  - Decision modeling using simulation or other methods to determine efficient or cost-effective strategies for the prevention, early detection, or treatment of cancer.
  - New methods and tools for determining geographic and temporal scales that are most relevant for research of different cancers.
  - Spatial and temporal methodology that detects new patterns and trends in cancer burden, disparity, and cancer care delivery.
  - Innovative tools and approaches for the analysis, reporting, visualization, and interpretation of cancer surveillance data.
  - Statistical methods for generating new data and integrating existing data on the determinants of cancer-related risk factors in the general population and among subgroups, to assist in formulating clinical and public policies that address these factors.
  - Statistical methods for using, harmonizing, and integrating data from surveys, large population-based databases, or research networks to monitor trends, patterns, and variations in cancer-related modifiable risk factors.
  - Statistical methods for developing and validating tools for measuring the range of cancer-related risk factors such as diet, physical activity, sedentary behavior, sleep, weight management, and post-acute sequelae of COVID or long-COVID across the lifespan, sociocultural subgroups, and socioecological contexts.

- **Applied Informatics Methods for Cancer Surveillance**
  - Methods and processes for developing, evaluating, and analyzing data linkage to expand and enhance the scope of cancer surveillance research across the cancer continuum using traditional cancer registry data [SEER] and novel data sources. Examples include, development and evaluation of novel data linkages, including methods to provide population-representative data, identification of gaps and biases and solutions for answering specific questions.
  - Developing and testing semantic tools (e.g., ontologies, metadata repositories) to facilitate mapping and querying of cancer registry data with other linked data sources (e.g., claims, pharmacy data, genomic data, electronic medical record (EMR) data).

- **Environmental Epidemiology**
  - Studies investigating cancer risk associated with multiple exposures combined and/or exposures over time; geographic factors in multilevel analyses of cancer, such as neighborhood and social environments, as determinants of cancer risk.
  - Evaluation of cancer risk associated with exogenous (e.g., chemical agents, infectious agents, radiation, medication, nutrition, tobacco, and drug use) and endogenous (e.g., metabolome, microbiome, adductome) factors, mixtures and interaction of these factors, and effects during early life and critical periods across the life course.
  - Studies to investigate variation in profiling of epigenetic components with exposure to social-contextual factors; conduct epigenomic profiling to evaluate early-life experiences that contribute to social inadequacies in cancer risk; evaluate epigenetic changes during different developmental stages in response to social adversities; investigate interaction between socio-economic factors, environmental exposure, and epigenetic modifications.
  - Studies on report back of environmental health research results and non-genomic data to study participants and key partners.

- **Genomic Epidemiology**
  - Studies investigating the role of both common and rare genetic variation in cancer susceptibility,

particularly among those affected by rare cancers, cancer in high-risk families and across diverse and understudied populations, or those with cancer health disparities.
    - Use of existing data sets to develop new methods and models for genetic epidemiologic research, especially methods to examine gene-gene and gene-environment interactions, integration with other -omics data (metabolomics, proteomics, transcriptomics, epigenomics, etc.), and interplay between the inherited and somatic genomes. In addition, studies to address the ethical, legal, and social issues (ELSI) of genomics research and cancer-related bioethics in general are of interest.

- **Systems Modeling in Cancer Epidemiology**
    - Studies examining the complex interplay of genetic, environmental, host, and societal factors operating over a prolonged time.
    - Longitudinal measures and development of more sophisticated analytical methods that support comprehensive (e.g., systems or computational modeling) approaches to address combined contribution of risk factors to disease in populations.

- **Behavioral Research**
    - Research examining cancer-related behaviors and biobehavioral risk factors, as well as interventions and influences addressing biological, psychological, behavioral, social, environmental, and/or policy targets to promote healthy lifestyle behaviors in the general population, high-risk and underserved populations, and among cancer survivors.
    - Development and/or evaluation of multilevel interventions that aim to influence combinations of biological, psychological, cognitive, behavioral, social, communication literacy, environmental, and/or policy targets on behavioral and cancer-related outcomes across the continuum of care.
    - Use of conventional, social, and mobile media for cancer control and prevention observational studies and interventions.
    - Investigate methods, measurements, and/or modeling of tobacco-related behavior patterns, trends, and determinants of tobacco use behaviors. Examples include novel product use and poly-tobacco product use behaviors, and the effects of diverse tobacco control interventions to improve public knowledge, prevent smoking initiation, or promote cessation among tobacco product users.
    - Examine the effects of built, sociocultural, communication, and policy environments on cancer risk and behavioral risk factors.
    - Psychological, biobehavioral, social, and other psychological characteristics (e.g., emotion, vision, attention, sensation, perception) that shape cancer risk and preventive behaviors or responses to cancer control strategies (e.g., policies, interventions, health communication).
    - Integration of independent data sets to answer novel cancer control and prevention questions, including behavioral risk factors for cancer, such as tobacco use, sedentary behavior, poor weight management, and lack of medical adherence to screening and vaccine uptake.

- **Healthcare Delivery Research**
    - Patient-, clinician-, health care system-, and community-level factors that shape care access, quality, utilization, and outcomes of health care services across the cancer continuum.
    - Overuse and underuse of guideline-recommended care across the cancer continuum and patterns of care among high-risk and underserved populations.
    - Financial hardship due to drug costs and other direct and indirect costs of cancer treatment and the effects of federal or state policy on cancer-related care, insurance coverage, and financial hardship.
    - Effects of cancer and its treatment on acute and long-term patient symptoms, functioning, and health outcomes and approaches to enhance the integration of palliative care during cancer treatment and post-treatment.
    - Use of information technology and digital health approaches to improve cancer care delivery and patient health outcomes.
    - Strategies to enhance prognostic awareness, goals of care, and advanced care planning to optimize end-of-life care.

- Understanding clinical pathways to cancer diagnosis (i.e., due to screening, surveillance or symptoms), and developing interventions to reduce time to diagnosis, particularly among people with limited access to care.
- Enhancing cancer care delivery resilience to climate-related disasters and public health emergencies.
- Studies advancing measures, measurement approaches, or novel methods to improve the design, implementation, and evaluation of multilevel cancer control interventions (e.g., symptoms and other patient-reported outcomes, measures of organizational characteristics, teaming and care coordination, burden of treatment).

- **Cancer Survivorship**
  - Identifying acute, late- and long-term effects of cancer and cancer treatment.
  - Examining approaches to enhance care coordination (e.g., patient-provider and provider-provider), particularly among those with multiple chronic conditions.
  - Research that explores transitions in care from oncology providers to primary care providers, and from pediatric to adult providers.
  - Research that explores aging-related consequences of cancer and cancer treatment; and identifies aging phenotypes in cancer survivors.
  - Observational or interventional studies of clinical, genomic, and lifestyle factors that influence cancer outcomes.
  - Studies that investigate approaches to integrate cancer caregivers into the delivery of care for patients and survivors.
  - Research to examine trends in adolescent and young adult survivors.
  - Time series analysis/forecasting techniques, using relative survival estimates as data points, for projecting cancer death burden.

- **Digital Health and Data Science**
  - Develop and evaluate digital health tools, technologies, and platforms that:
    - Address unmet needs of high-risk, understudied, and/or underserved cancer populations.
    - Assess cancer risk factors and/or improve behavioral and clinical outcomes (e.g., physical activity, UV radiation/sun exposure, cannabis/tobacco and alcohol use, sleep and circadian disruption, treatment adherence) and social determinants of health (e.g., built environment, social context, connectedness).
    - Provide continuous personalized monitoring of physiological status, including technologies for monitoring social-emotional well-being, environmental contexts and exposures, and behavioral patterns for the prevention, early detection, and treatment of cancer.
    - Capture clinically relevant patient-generated health data (e.g., use of wearable technologies and mobile apps to capture and intervene on cancer symptoms and treatment side effects).
    - Test integration of and interventions using patient-generated health data in clinical settings.
  - Leverage novel artificial intelligence, deep learning, and other data science tools supporting:
    - Implementation and adoption of digital health technologies in oncology.
    - Improved curation, integration, and meaningful clinical interpretation of cancer-related data.
    - Mitigation of algorithmic bias and reduction of cancer disparities.
    - Identification, development, and evaluation of digital phenotypes for improved cancer care and outcomes.
  - Optimize engagement and performance of cancer survivors, caregivers, and healthcare providers through innovative technologies and resources that:
    - Enhance patient-provider communication, shared decision-making, and care coordination.
    - Facilitate accessible, equitable, and cost-effective decentralized clinical trials.
    - Improve surveillance, reporting, and management of symptoms, adverse events, and late effects of cancer and its treatments.
    - Implement novel asynchronous and synchronous telehealth models of cancer care delivery.

- **Implementation Science**
  - Valid, reliable, and, where possible, pragmatic measures to assess the implementation of interventions, including adaptation, feasibility, fidelity, maintenance, penetration, sustainability, and scale-up of a given intervention or set of implementation strategies, as well as implementation context and climate.
  - Effectiveness and implementation of existing guidelines and best practices that are based on expert opinion or case studies only (and not based on experimental, quasi-experimental, or large observational studies), to help identify strategies that may reduce or modify the use of these guidelines, as needed.
  - Developing and testing patient-provider communication strategies to encourage use of appropriate care in cancer delivery settings.
  - Evaluating natural experiments of implementation of evidence-based interventions in cancer care delivery 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/pa-files/PAR-24-122.html

6. Science, Technology, Engineering and Mathematics (STEM) Program, DoD

Application Deadlines:

- **Inquiries and Questions: March 29, 2024**
- **Full Proposal: April 12, 2024**

Award Amount: up to $150,000 per year for a period of performance of three years

The Air Force Office of Scientific Research (AFOSR) seeks a broad range of applications for augmenting existing and/or developing innovative solutions that directly maintain and/or cultivate a diverse, world-class Science, Technology, Engineering and Mathematics (STEM) workforce to maintain the U.S. Air Force and Space Force's technological superiority. The goal of proposed efforts must provide solutions that establish, build, and/or maintain STEM educational pathways and workforce opportunities for diverse U.S. citizens directly relevant to AFOSR science and technology areas.

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

AFOSR STEM topic areas include:

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

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

- Internships for veterans and underrepresented groups in STEM
- Professional development opportunities
- Programs to stimulate analytical/thinking skills
- Development of educational resources
- STEM education outreach activities
- Education and community engagement workshops

- Target age groups may require different levels of educational tools
- Coordinating and partnering with activities and organizations that support DAF research areas

DoD STEM goals are as follows:

- **Goal 1.0:** Inspire community engagement in DoD STEM education programs and activities to provide meaningful STEM learning opportunities for students and educators.

- **Goal 2.0:** Attract the Nation's and DoD's current and future STEM workforce through multiple pathways to educational and career opportunities.

- **Goal 3.0:** Increase participation of underserved and underrepresented groups in STEM education.

- **Goal 4.0:** Advance the efficiency and effectiveness of STEM education and workforce development programs, activities, and outreach through evaluation and assessment. Relevant information includes, but is not limited to, details of any other Federal funds to be used, and any funds to be contributed by non-Federal sources toward STEM outreach and education.

Link to Additional Information: https://www.grants.gov/search-results-detail/351854

7. Campus Cyberinfrastructure (CC*), NSF

Application Deadline: April 22, 2024
Award Amount:

- **Area (1):**
  - **Data Driven Networking Infrastructure for the Campus: up to $700,000 for up to 2 years**
  - **Data Driven Networking Infrastructure for the Region: up to $1,400,000 for up to 2years**
- **Area (2):**
  - **Computing and the Computing Continuum for the Campus: up to $700,000 total for up to 2 years**
  - **Computing and the Computing Continuum for the Region: up to $1,400,000 total for up to 2 years**
- **Area (3):**
  - **Network Integration and Applied Innovation - Small projects: up to $500,000 for up to 2 years**
  - **Network Integration and Applied Innovation - Large projects: up to $1,000,000 for up to 2 years**
- **Area (4):**
  - **Data Storage and Digital Archives for the Campus: up to $700,000 total for up to 2 years**
  - **Data Storage and Digital Archives for the Region: up to $1,400,000 total for up to 2 years**
- **Area (5):**
  - **Strategy for the Campus: up to $100,000 total for up to 1 year**
  - **Strategy for the Region: up to $200,000 total for up to 2 years**

NSF addresses the growing requirements of the NSF community, and opportunities to innovate, in cyberinfrastructure through the CC* program, which invests in innovative, coordinated, and secure campus, multi-campus and multi-institution CI components. The CC* solicitation invests in coordinated cyberinfrastructure improvements at both the campus and regional levels, including campus network upgrades and re-architecting, innovative development and integration of new networking capabilities, computing, storage, multi-institution integrated CI, and learning and workforce development.

CC* Program-wide Criteria

Science-driven requirements are the primary motivation for any proposed activity. Proposals will be evaluated on the strength of the science enabled (including research and education) as drivers for proposed investment and innovation in cyberinfrastructure. Institutions whose missions are primarily education-focused may choose to present their scientific

needs in the context of cyberinfrastructure-enabled education activities and distance education.

A common theme across all aspects of the CC* program is the critical importance of the partnership among campus-level CI experts, including the campus Information Technology (IT)/networking/data organization, contributing domain scientists, research groups, and educators necessary to engage in, and drive, new cyberinfrastructure capabilities and approaches in support of scientific discovery. Proposals across the program should reflect and demonstrate this partnership on campus. Proposals will be evaluated on the strength of institutional partnerships, as they should play a central role in developing and implementing the eventual network and data infrastructure upgrades. Campus IT leadership involvement is a critical element in CC*.

All proposals in Areas (1), (2), (3), and (4) should document explicit partnerships or collaborations with the campus IT/networking organization, as well as one or more domain scientists, research groups, and educators in need of the new cyberinfrastructure capabilities. Partnership documentation from personnel not included in the proposal as PI, co-PI, or Senior/Key Personnel should be in the form of a letter of collaboration located in the Supplementary Documents section of the proposal. A letter of support from a campus leader is strongly encouraged and should address sustainability and commitment from the institution.

A proposal focusing on a single science domain or project use will not be considered for funding.

Program Areas

CC* awards will be supported in five program areas and at two levels of funding in most areas (Campus/Small or Region/Large) pursuant to the following budget and duration. Areas include:

1. **Area (1) Data-Driven Networking Infrastructure for the Campus or Region** - Proposals submitted to this area address network infrastructure improvements to enable national and global high-performance end-to-end access to dynamic network services that in turn enable rapid, unimpeded movement of diverse and distributed scientific data sets and advanced computing. Proposals may target either the Campus or the Region. Proposals in this area should focus on supporting their institutions' science research and education needs and aspirations and discuss how these needs and aspirations translate to the need for greater connectedness and investment in network capacity. Access to research and education resources external to the campus, including cloud computing resources, is also within scope.

2. **Area (2) Computing and the Computing Continuum for the Campus or Region -** Local campus computing resources have emerged as an important aggregated and shared layer of scientific computing. This program area promotes coordinated approaches in scientific computing at the campus or regional level and invests in the seeding of new and shared computing resources through investments in capacity computing. The program area promotes a coordinated approach incentivizing multi-campus and national resource sharing as enabled by the OSG Consortium, an NSF-supported fabric of distributed scientific computing services that federate computing capacity across more than 150 institutions that delivered 2.6 billion CPU hours of scientific computing in calendar year 2023.

3. **Area (3) Network Integration and Applied Innovation -** This program area supports end-to-end network CI through integration of existing and new technologies and applied innovation. The goal is to take advantage of research results, prototypes, and emerging innovations to use them to enable specified researchers in a networking context. Proposals in this area may leverage new and existing investments in network infrastructure, services, and tools by combining or extending capabilities to work as part of the CI environment used by scientific applications and users.

   Proposals in this area support the development and integration of innovative networking capabilities and network-related software development, and deployment activities resulting in an operational environment prototype are expected to be part of the proposed activities.

4. **Area (4) Data Storage and Digital Archives for the Campus or Region -** A significant challenge, if not bottleneck, to CI-enabled research and education is the limited access to data storage and associated services across campuses. While cloud services continue to provide data services for parts of the research community, data restrictions on some datasets often combined with expensive egress data movement charges do not allow this to be a complete solution. Meanwhile, the ability of research projects across disciplines to gather ever more data and increased tools to analyze data puts increasing pressure on storage and management.

   This program area promotes coordinated approaches in scientific storage, data management, and digital archives and incentivizes multi-campus and national resource sharing.

5. **Area (5) Strategy Awards for the Campus or the Region -** For institutions, groups of institutions, and other entities, the task of assembling a complete CC* proposal can be a daunting challenge. CC* PI teams may require planning and effort related to their proposal ideas, for example, for compiling and understanding the science environments, applications and drivers motivating the proposed CI investments.

   Strategy Awards support PIs and teams requiring resources and time to coordinate and develop an approach to CC*-related activities. Proposals in this area will be reviewed and evaluated the same as other CC* proposals. Strategy proposals should define a clear set of goals and a set of coordination and planning activities to meet those goals. Equipment costs are not allowed as part of a Strategy award, and proposed costs should include support for community coordination and planning activities. Strategy proposals are welcome for areas (1), (2), and (4) in CC*.

Link to Additional Information: https://www.nsf.gov/pubs/2024/nsf24530/nsf24530.htm

8. Field Initiated Projects Program: Minority-Serving Institution (MSI) - Development, Adm. for Community Living (ACL)

Application Deadline:

- **Letter of Intent: February 20, 2024**
- **Full Proposal: March 18, 2024**

Award Information: up to $200,000 for a period of performance of 36 months

The purpose of the Field Initiated (FI) Projects program is to develop knowledge, methods, procedures, and rehabilitation technology that maximize the full inclusion and integration into society, employment, independent living, family support, and economic and social self-sufficiency of individuals with disabilities, especially individuals with the most severe disabilities. Another purpose of the FI Projects program is to improve the effectiveness of services authorized under the Rehabilitation Act of 1973, as amended (Act).

The purpose of this competition is to improve the capacity of minority entities to conduct high-quality disability and rehabilitation research. NIDILRR will accomplish this by limiting eligibility for this competition to minority entities and Indian tribes in a manner consistent with section 21(b)(2)(A) of the Act, which authorizes NIDILRR to make awards to minority entities and Indian tribes to carry out activities authorized under Title II of the Act. NIDILRR makes two types of awards under the FI Projects program: research grants and development grants.

An applicant must demonstrate, in its original application, that people with disabilities from diverse racial and ethnic communities will be included in proposed samples in sufficient numbers to generate knowledge and products that are relevant to the racial and ethnic diversity of the population of people with disabilities being studied. The applicant must describe and justify, in its original application, the planned racial and ethnic distribution of people with disabilities who will participate in the proposed research or development activities.

Invitational Priority: In FY 2024, there are seven invitational priorities of interest to the agency:

1. Research or development projects that address the needs, experiences, or outcomes of people with disabilities from underserved communities. People with disabilities from underserved communities include those from communities or populations defined in Section 2 of the Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, including: people with disabilities who are racial and ethnic minorities; people with disabilities who are members ofreligious minorities; people with disabilities who are lesbian, gay, bisexual, transgender, or queer; people with disabilities who live in rural areas; or people with disabilities otherwise adversely affected by persistent poverty or inequality.

2. Research or development projects to explore or address the relationship between climate change and the needs, experiences, and outcomes of people with disabilities.

3. Research or development projects related to oral health among people with disabilities.

4. Research or development projects that focus on making airline travel accessible for people with disabilities.

5. Research or development projects that focus on improving the extent to which emergency and disaster preparedness plans and systems are accessible to, and responsive to the needs of, people with disabilities.

6. Research or development projects that focus on improving the experience and outcomes of people with disabilities as they interact with one or more components of the criminal justice system (e.g., police, courts, jails and prisons).

7. Research or development projects that focus on services, supports, or interventions for people with disabilities who experience Long COVID.

Projects development applicants must define the stage or stages of development that they propose to conduct. Any rigorous development activities can be appropriate, depending on the development aims being addressed by the applicant. NIDILRR does not have an absolute preference for any one development stage over others. If the FI Projects grant is to conduct development that can be categorized under more than one stage, those stages must be clearly specified.

Link to Additional Information: https://www.grants.gov/search-results-detail/349383

9. Algorithms for Threat Detection (ATD), NSF

Application Deadline: April 10, 2024
Award Information: estimated funding amounts are subject to the availability of funds

The Algorithms for Threat Detection (ATD) program supports research on new approaches to leveraging massive spatiotemporal datasets to analyze and understand spatiotemporally distributed phenomena. Program objectives include improved representation of complex spatiotemporal dynamics and the development of advanced computational algorithms that can process massive data in near real-time to rapidly, reliably, and securely identify aberrant phenomena and render actionable predictions about potential threats indicated by such phenomena.

The ATD program will support research projects in two topical areas:

1. Projects that aim to develop novel mathematical, statistical and computational algorithms for rapid, reliable and secure analysis of massive spatiotemporal datasets, at scale. Research that effectively leverages spatiotemporal features of source data are of particular interest, e.g., project proposals developing new insights into characterizing human activities and impacts on the Earth's surface, made possible by new data sources.

2. Projects that develop mathematical theory to guide the application of advanced artificial intelligence to processing

massive spatiotemporal data (e.g., to problems in computer vision, large language models, natural language processing).

Topics of specific interest include, but are not limited to:

- Effective application of advanced neural networks, including (but not limited to) graph neural networks, liquid (liquid time-constant) neural networks and neuromorphic computing.
- Improving reliability of large language models for algorithmically-informed reasoning and sense-making of spatiotemporal data.
- Independently identifying novel phenomena.
- Techniques for discovering hidden phenomena.
- Quantifying aleatory and systemic uncertainty in model findings.
- Assessing degrees of confidence in model performance.
- Enhancing model reliability, at run-time.
- Techniques for improving reliability of transfer learning, including few-shot and single-shot ("you-only-look-once') learning.
- Novel approaches to distributed sensing and edge computing; resolution of orchestration problems, including (but not limited to) securing algorithmic chain-of-custody and multimodal data fusion.
- Change detection across time for cross-modal data sources.
- Algorithmic solutions to cybersecurity challenges.

DMS and NGA recognize the opportunities for the mathematical, statistical and computational sciences community to develop methodology for identifying and mitigating threats arising from a variety of sources. Accordingly, this program seeks ambitious and creative research proposals from individual investigators and collaborative groups in the mathematical, statistical and computational sciences community. Special consideration will be afforded to high-risk, high-reward proposals. Trans-disciplinary research collaborations with colleagues from across the natural and socio-behavioral sciences and engineering disciplines are strongly encouraged.

Link to Additional Information: https://www.nsf.gov/pubs/2024/nsf24526/nsf24526.htm

10. Distance Education Grants Program for Institutions of Higher Education in Insular Areas, USDA/NIFA

Application Deadline: March 20, 2024
Award Amounts:

- **Standard Grant: up to $200,000 for up to 36 to 48 months**
- **Planning Activity: up to $30,000 for up to 24 months**

The purpose of the DEG program, under assistance listing number 10.322, is to strengthen the capacity of institutions of higher education in insular areas to carry out resident instruction, curriculum, and teaching programs in the food and agricultural sciences through distance education technology. Projects funded by the DEG program support the creation, adaptation, and adoption of learning materials and teaching strategies to operationalize what we know about how students learn. DEG-funded projects must also focus on imparting both technical knowledge as well employability skills such as communication, teamwork, and problem solving.

NIFA is soliciting applications for the DEG program that support:

1. Acquisition of equipment, instrumentation, networking capability, hardware and software, digital network technology, and infrastructure necessary to teach students and teachers about technology to support distance education.
2. Development and enhancement of educational services (including faculty development) to prepare students or faculty seeking a degree or certificate that is approved by the state or a regional accrediting body recognized by

the Secretary of Education.

3. Providing teacher education, library and media specialist training, and preschool and teacher aid certification to individuals who seek to acquire or enhance technology skills in order to use technology in the classroom or instructional process.
4. Implementation of a joint project to provide education regarding technology in the classroom with a local educational agency, community-based organization, national nonprofit organization, or business; or provide leadership development to administrators, board members, and faculty of eligible institutions with institutional responsibility for technology education.

Leadership Skills Development

The development of leadership skills, knowledge, and qualities are necessary to prepare students for agricultural and related careers in the private sector, government, and academia. DEG teaching applications must demonstrably incorporate a leadership development component to equip students with technical and leadership abilities upon graduation. Specific activities may include:

1. Developing practical applications to increase understanding of leadership roles, including critical thinking, problem solving, and communication skills; ethics and professionalism; and working in teams.
2. Connecting the academic classroom experience with daily leadership roles and organizational activities.
3. Providing opportunities for mentoring and shadowing
4. Organizing academies, workshops, and trainings for professional development opportunities that develop leadership skills.

Need areas for FY 2024 include the following:

1. **Curricula Design, Materials Development, and Library Resources.** To promote the development of distance education courses of study and degree programs, new and improved curricula, and instructional materials and technology. Also, to promote the acquisition of digital library resources including books and journals relating to the food and agricultural sciences; and stimulate the use of new approaches to the study of traditional subjects, new research on teaching and learning theory, and new applications of knowledge.

2. **Faculty Preparation and Enhancement for Teaching.** To advance faculty development in the areas of teaching competency and leadership, subject matter expertise, or student recruitment and advising skills. Each faculty recipient of support for developmental activities must be an "eligible participant" please refer to: 7 CFR 3430, Competitive and Noncompetitive Non-Formula Federal Assistance Programs-General Award Administrative Provisions, for applicable definitions for this NIFA grant program.

3. **Instruction Delivery Systems.** The purpose of this initiative is to encourage the use of alternative methods of delivering instruction to enhance the quality, effectiveness, and cost efficiency of teaching programs. Focus should be on ways to maximize program quality, reduce duplication, and implementation of innovative instructional techniques, methodologies, and delivery systems in response to advances in knowledge and technology.

4. **Student Experiential Learning.** To develop scientific and professional competencies that provide students with opportunities to solve complex problems in the context of real-world situations using distance education. Examples include preparing future graduates to advance knowledge and technology; enhancing quality of life; conserving resources; and addressing community and economic development issues. Activities include internships, practicum experiences, and participation with faculty on applied research and related community development projects.

5. **Student Recruitment, Retention, and Educational Equity.** To enhance educational equity for under-represented students and strengthen student recruitment and retention programs in the food and agricultural

sciences in programs utilizing distance education. Examples include initiating new projects or supplementing current efforts to attract increased numbers of students from under-represented groups to enroll in food and agricultural degree programs; mentoring programs and other initiatives for student retention; and the provision of student financial support to attend college.

6. **Additional Information.** The use of students for only routine office, laboratory, or fieldwork is not considered education for the purposes of this program. To be considered as education related, students will need to be actively engaged in the scholarship of research activities.

Grant Types. Applicants may submit applications for one of the following grant types:

1. **Standard Grant.** This is an award instrument by which NIFA agrees to support a specified level of effort for a predetermined project period without the announced intention of providing additional support at a future date. An eligible institution may submit a standard project application for project activities undertaken principally on behalf of its own students or faculty, and faculty managed primarily by its own personnel. In a standard grant, the applicant executes the project without the requirement of sharing grant funds with other project partners.

2. **Planning Activity Grants** support scientific meetings that bring together educators to identify education/teaching needs, update information, or advance an area of education/teaching. Support for a limited number of meetings covering subject matter encompassed by this solicitation will be considered for support.

Link to Additional Information: https://www.nifa.usda.gov/grants/funding-opportunities/distance-education-grants-institutions-higher-education-insular-areas

11. Higher Education Challenge Grants Program, USDA/NIFA

Application Deadline: March 5, 2024
Award Information:

- **Planning Activity: approximately $30,000 for a period of up to 36 months**
- **Standard: approximately $150,000 for a period of 36 to 48 months**
- **Collaborative 1 (CG1): approximately $300,000 for a period of 36 to 48 months**
- **Collaborative 2 (CG2): approximately $750,000 for a period of 36 to 48 months**

The purpose of the Higher Education Challenge Grants Program is to strengthen institutional capacities, including curriculum, faculty, scientific instrumentation, instruction delivery systems, and student recruitment and retention, to respond to identified state, regional, national, or international educational needs in the food and agricultural sciences, or in rural economic, community, and business development.

Specifically, applications submitted to this grants program must state how the funded project will address the HEC Program Goals:

1. To strengthen institutional capacities, including curriculum, faculty, scientific instrumentation, instruction delivery systems, and student recruitment and retention, to respond to identified State, regional, national, or international educational needs in the food and agricultural sciences, or in rural economic, community, and business development.

2. To attract and support undergraduate and graduate students in order to educate the students in national need areas of the food and agricultural sciences or in rural economic, community, and business development.

3. To facilitate cooperative initiatives between two or more eligible institutions, or between eligible institutions and units of State government or organizations in the private sector, to maximize the development and use of

resources such as faculty, facilities, and equipment to improve food and agricultural sciences teaching programs, or teaching programs emphasizing rural economic, community, and business development.

4. To design and implement food and agricultural sciences programs, or programs emphasizing rural, economic, community, and business development, to build teaching, research, and extension capacity at colleges and universities having significant minority enrollments.

5. To conduct undergraduate scholarship programs to meet national and international needs for training food and agricultural sciences scientists and professionals, or professionals in rural economic, community, and business development.
6. To increase the number and diversity of students who will pursue and complete a postsecondary degree in the food and agricultural sciences.

7. To enhance the quality of instruction for baccalaureate degrees, master's degrees, and first professional degrees in veterinary sciences, to help meet current and future workforce needs in the food and agricultural sciences.

8. To conduct graduate and postdoctoral fellowship programs to attract highly promising individuals to research or teaching careers in the food and agricultural sciences.

HEC is a NIFA-administered competitive grants program focused on improving formal, baccalaureate, or master's degree level food and agricultural sciences education, and first professional degree-level education in veterinary medicine such as a Doctor of Veterinary Medicine (DVM). HEC projects provide funding to eligible applicants to help ensure a competent, qualified, and diverse workforce will exist to serve the food and agricultural sciences system. At the same time, HEC-funded projects improve the economic health and viability of communities through the development of degree programs emphasizing new and emerging employment opportunities. Finally, HEC projects address the national challenge to increase the number and diversity of students entering the food and agricultural sciences (i.e., having a food and agricultural sciences workforce representative of the nation's population).

The HEC projects are expected to: (a) produce measurable impacts aligned with HEC program goals, (b) promote innovative educational practices within the food and agricultural sciences that improve how students learn, and (c) include a rigorous evaluation component to assess that project outcomes are met. Institutions must demonstrate capacity for, and a significant ongoing commitment to the teaching of the food and agricultural sciences generally, and to the specific need and/or discipline(s) for which a grant is requested. Projects should encourage academic institutions, in partnership with organizations and employers, to work collectively to identify and address a state or regional challenge or opportunity facing the food and agricultural sciences education and workforce community. Additionally, projects should encourage broad participation of students traditionally underrepresented in the food and agricultural sciences.

Applicants must propose Education/Teaching Projects. An education or teaching project must develop human capital in order to help meet current and future national food and agricultural sciences workplace needs. HEC projects must focus on one or more of the Need Areas listed below.

Educational Need Areas: Projects must engage more than a single course or an individual instructor when addressing at least one of the three Educational Need Areas listed below. The rationale for selecting the Educational Need Area(s) must be explained in the context of how the project can contribute to the development of a cadre of students who will either pursue higher degrees in the food and agricultural sciences or be prepared to enter the food and agricultural sciences workforce.

1. **Curriculum Development, Instructional Delivery Systems, and Expanding Student Career Opportunities:** Projects should promote new and improved curricula and materials to increase the quality of, and continuously renew, the nation's academic programs in the food and agricultural sciences. Additionally, projects should stimulate the development, and facilitate the use, of exemplary education models and materials that incorporate the most recent advances in subject matter research, research on teaching and learning theory, and instructional

technology.

2. **Faculty Preparation and Enhancement for Teaching:** Projects should advance faculty development in the areas of teaching competency, subject matter expertise, pedagogy, responsiveness to changes in student demographic composition and learning styles, and student recruitment and advising skills. Training of faculty must be relevant to the identified educational needs of students.

3. **Facilitating Interaction with Other Academic Institutions.** This need area promotes linkages between baccalaureate degree-granting institutions to maximize the use of resources supporting outstanding education in food and agricultural sciences. Additionally, this need area supports linkages between baccalaureate degree-granting institutions, secondary, and/or 2-year postsecondary institutions to make instruction targeted at undergraduate students available to secondary students as advanced placement credit or as transfer credit from associate-degree programs into baccalaureate-level programs. Faculty research sabbaticals at other academic institutions that will enhance teaching and advising are also supported.

Grant Types

1. Planning Activity Grants - support meetings that bring together food and agricultural sciences educators to identify education/teaching needs, update information, or advance an area of education/teaching.

2. Standard Grants - support targeted original education/teaching projects.

3. Collaborative Grants - support projects with at least one additional partner or a multiparter approach to enhance education/teaching programs. Collaborative Grants should build linkages to generate a critical mass of expertise, skill, and technology to address education/teaching programs related to the food and agricultural sciences. Grants can reduce duplication of efforts and/or build capacity and should be organized and led by a strong applicant with documented project management knowledge and skills to organize and carry out the initiative.
    a. Collaborative Grant Type 1 (CG1) - applicant plus one partner
    b. Collaborative Grant Type 2 (CG2) - applicant plus two or more partners

Link to Additional Information: https://www.nifa.usda.gov/grants/funding-opportunities/higher-education-challenge-grants-program

12. Transformative Research to Address Health Disparities and Advance Health Equity (U01 Clinical Trial Optional), NIH

Application Deadline:

- **Letter of Intent: February 22, 2024**
- **Full Proposal: March 22, 2024**

Award Amounts: up to $500,000 in direct costs per year for a maximum period of five years

This funding opportunity supports unusually innovative intervention research which, if successful, would have a major impact on preventing, reducing, or eliminating health disparities and advancing health equity. Interventions addressing research questions that target social determinants of health (SDOH), which include structural factors and conditions of daily life, are required for this initiative (https://www.ninr.nih.gov/researchandfunding/nih-sdohrcc#tabs2). SDOH can be addressed alone or in combination with other determinants of health and as part of a single or multilevel intervention approach. Although a formative research phase may be necessary for some projects, an intervention research component is required for each proposed project. Applicants may propose interventions addressing disparities in any health condition, disease, or health behavior that align with the priority research areas of listed NIH Institutes, Centers, and Offices.

Research Objectives

Projects are expected to propose exceptionally innovative and transformative activities that are urgently needed to prevent, reduce, or eliminate health disparities and advance health equity. Projects may prospectively test new or adapted

interventions (referred to as prospective interventions), evaluate existing or upcoming novel or unusual policy, programmatic, or environmental changes to generate significantly novel insights, or conduct innovative dissemination and implementation research. Research projects must address one or more SDOH as conceptualized by the NIH (https://www.ninr.nih.gov/researchandfunding/nih-sdohrcc#tabs2). SDOH can be addressed alone or in combination with other determinants of health and as part of a single or multilevel intervention approach. Studies should be guided by a conceptual framework identifying hypothesized pathways between the intervention or program and outcome(s). All projects should examine the mechanisms by which the intervention alters health and health disparities.

Projects must include a focus on one or more NIH-designated populations that experience health disparities in the US, which includes racial and ethnic minority populations, people with lower socioeconomic status, underserved rural populations, sexual and gender minority populations, people with disabilities, and any subpopulations that can be characterized by the intersection of two or more of these descriptors. As appropriate, studies are encouraged to explicitly examine whether the intervention mitigates differences in health outcomes between health disparity and non-health disparity populations. Given the heterogeneity within health disparity populations, within-group comparisons of intervention effects that allow for discovery of health risk and resilience factors are also encouraged.

Innovative approaches to identifying, understanding, and developing strategies for overcoming barriers to the adoption, adaptation, integration, scale-up and sustainability of evidence-based interventions, tools, policies, and guidelines are of interest. Projects that focus on elimination of interventions that are ineffective, unproven, low-value, or harmful in advancing health equity are also invited. Implementation research aims should be guided by equity-oriented theoretical models and frameworks. Modeling studies that evaluate the impact of specific interventions and implementation strategies to identify leverage points on costs and prioritizing strategies, particularly across the broad multi-sector nature of SDOH to inform scale up of interventions across communities and contexts, would also be responsive. Research that directly tests the effectiveness of SDOH interventions in narrowing health gaps between health disparity and non-health disparity populations is also strongly encouraged.

Community Partnerships: Projects must document or demonstrate throughout the research process meaningful community partnerships to foster the development of feasible and acceptable approaches as well as acceptance, uptake, and sustainability of proposed interventions and strategies. Community partners can include, but are not limited to, those in the housing, transportation, food system, economic development, education, social services, and criminal legal system sectors. Applicants should provide details on the nature and extent of the partnerships by clearly describing the roles of partners and providing evidence of support from partners.

Prospective Interventions to Address SDOH may develop and test the effectiveness of new or adapted interventions in a variety of settings in the U.S., such as neighborhoods, community-based organizations, child welfare and human service settings, workplaces, businesses, stores and restaurants, schools, criminal justice settings, faith-based organizations, public works and facilities, healthcare systems, and recreational settings. Approaches may include group or cluster randomized controlled trial (RCT), stepped wedge RCT, stepped wedge group or cluster RCT, pragmatic RCT, pragmatic trials, adaptive designs (e.g., multiphase optimization strategy [MOST], sequential multiple assignment randomized trials [SMART]), implementation trials (including hybrid effectiveness/implementation designs), and rigorous quasi-experimental designs.

Examples of projects supported in this category include, but are not limited to, studies that develop and evaluate the effectiveness of interventions to improve health or reduce health disparities by:

- Improving community conditions through community revitalization investment projects
- Improving economic stability, such as through increased job opportunities or quality employment
- Improving housing access, quality, or affordability
- Improving education quality
- Reducing community-level violence, including firearm violence
- Improving the availability or quality of green spaces or recreational spaces
- Improving community childcare availability together with providing access to parental support groups

- Improving nutritious food availability in the community in addition to providing primary care-based nutritional counseling to individuals

Evaluation of Existing or Upcoming Interventions may examine policies, programs, interventions, or environmental changes that are existing or upcoming in the U.S. to address SDOH (structural factors or conditions of daily life) (regardless of NIH funding) by states/territories, cities, counties, tribal communities, healthcare systems, public health departments, school systems, employers, or other organizations. Projects including multiple sites, locations, or settings are strongly encouraged to allow for the analysis of variability across and within settings. Studies that compare outcomes across populations in the U.S. with other countries are also allowed, if the comparison elucidates intervention mechanisms to reduce health disparities in the U.S. In addition to examination of individual level impacts as primary outcomes, examination of secondary outcomes that address unintended consequences of a policy or program, degree of implementation (including acceptance, uptake, spread, and sustainability), and implementation barriers and facilitators, are encouraged.

Examples of projects supported in this category include, but are not limited to studies that evaluate impacts on health and health disparities of:

- Federal, tribal, state, local, or organizational demonstration projects aimed at addressing SDOH
- Tribal policies or programs aimed to address SDOH among American Indian/Alaska Native populations
- New standards of care, changes in health insurance coverage, expansion of access to social services, and other factors that influence SDOH
- Programs or policies designed to improve access, quality, or affordability of housing, transportation, and food on health within communities
- Infrastructure changes related to housing, transportation, the food environment, or the built environment
- Programs, policies, or environmental changes targeting SDOH in addition to factors targeting individual or family circumstances such as housing instability, transportation access, nutrition insecurity
- Community economic development policy or program in addition to job training for individuals
- Program or policy to increase community availability of affordable housing, while also implementing screening and referrals for housing insecurity in healthcare settings

Areas of Interest of Participating Institutes, Centers, and Offices (ICOs)

- National Heart, Lung, and Blood Institute (NHLBI)
- National Institute on Aging (NIA)
- National Institute on Alcohol Abuse and Alcoholism (NIAAA)
- National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)
- National Institute of Dental and Craniofacial Research (NIDCR)
- National Institute on Drug Abuse (NIDA)
- National Institute of Environmental Health Sciences (NIEHS)
- National Institute of Mental Health (NIMH)
- National Institute of Neurological Disorders and Stroke (NINDS)
- National Center for Complementary and Integrative Health (NCCIH)
- Office of Disease Prevention (ODP)
- Office of Research on Women's Health (ORWH)

Link to Additional Information: https://grants.nih.gov/grants/guide/rfa-files/RFA-NR-24-004.html

13. Equipment Grants Program, USDA/NIFA

Application Deadline: May 3, 2024
Award Amount: up to $500,000 for a period of performance of 48 months

The Equipment Grants Program (EGP), serves to increase access to shared special purpose equipment/instruments for scientific research for use in the food and agricultural sciences programs in our Nation's institutions of higher education, including State Cooperative Extension Services. The program seeks to improve the quality and expand the scope of fundamental and applied research at eligible institutions, by providing organizations with opportunities to acquire equipment/instruments that supports the research, research training, and extension goals of the organization. The program emphasizes shared-use instrumentation that will enhance the capabilities of researchers and extension agents both within and outside the proposing organization.

EGP is designed to strengthen the fundamental and/ or applied research capacity (extension) of institutions by funding the purchase of one shared-use piece of equipment that may be too costly and/or not appropriate for support through other NIFA grant programs. An instrument acquired with support from EGP is expected to be fully operational by the conclusion of the first year of the project. Proposals to the EGP are for the acquisition of a single, well-integrated piece of equipment/instrument. Well-integrated research instrument means that the ensemble of equipment that defines the instrument enables specific fundamental or applied research experiments in the food and agricultural sciences, including data science and data systems. It also means that separating or removing an element or component of such an integrated instrument would preclude any experiments from occurring or succeeding. Requests for computer equipment are allowed only if the equipment is part of a well-integrated instrument.

In FY 2024, EGP will support the installation of equipment (but not the costs associated with building or modifying facilities to house the equipment), an extended equipment warranty for the duration of the award (48 months), and one-time equipment use training.

EGP provides funding for purchase of equipment used in research or produces data used in research, but:

1. **does not** fund research, education, or extension project costs or personnel salaries or wages, including research or personnel that use equipment acquired with support from the program.

2. **does not** fund common, general purpose ancillary equipment that would normally be found in a laboratory or is relatively easily procured by other funding sources (for the purposes of this program, General Purpose Equipment is defined in 2 CFR 200.48).

3. **does not** support the operation, consumable supplies, or maintenance of facilities, equipment, or research laboratories, or building, modifying or renovating facilities that house the acquired equipment.

4. **does not** support the acquisition of a suite of instruments to outfit research laboratories/facilities.

EGP grants are not intended to replace requests for equipment in individual project applications. The EGP emphasizes shared-use instrumentation that will enhance the capabilities of researchers and extension agents both within and outside the proposing organization.

Link to Additional Information: https://www.nifa.usda.gov/grants/funding-opportunities/equipment-grant-program

14. Growing Convergence Research (GCR), NSF

Application Deadline: April 12, 2024
Anticipated Funding Amount: $16,000,000 for 6 to 10 awards to support Phase 1

This GCR solicitation is a call for proposals addressing complex problems that require convergence paradigms to catalyze

scientific discovery and innovation at the nexus of disciplines, but in areas for which research communities and integrated approaches have not yet developed. Consistent with the two primary characteristics of convergence research, the problem motivating the research should be rooted in a specific societal and/or scientific challenge and the research strategy should embrace deep integration across multiple disciplines. Of particular interest are those problems and research strategies that have potential to grow new scientific areas and catalyze sustained interactions across research communities beyond the period of the award.

This GCR solicitation targets integrated team research that crosses NSF Directorate or Division boundaries and disciplines and is currently not supported by other NSF programs or solicitations. Proposers must clearly identify which elements of different disciplines will be contributing to the convergence project and how the team plans to deeply integrate those elements. They must also make a convincing case that the research to be conducted cannot be supported by other NSF programs and solicitations, innovates at interdisciplinary intersections beyond existing approaches, and has potential to transform foundational scientific understanding. Proposals involving convergence in areas already covered by existing programs and solicitations will be returned without review. In determining the relationship between submitted proposals and existing programs, NSF will employ text analysis software and technical expertise of program directors across the foundation.

The proposing team should be comprised of researchers from different disciplines that do not typically work together in the proposed research areas and are crucial to catalyze the proposed scientific discovery and innovation. Involvement as leads or partners is especially encouraged from investigators and institutions that would benefit from greater participation in the national research enterprise, such as primarily undergraduate institutions (PUIs), non-R1 IHEs, two-year colleges, minority-serving institutions (MSIs), and institutions within EPSCoR jurisdictions. Engagement of other stakeholders important for addressing the problem being studied is also encouraged. Depending on the specific problem, stakeholders may be from industry, non-profit, community, and governmental organizations; schools; and/or other non-academic entities. Each of the team members should demonstrate a readiness to engage in convergent science by committing time, effort, and intellectual expertise throughout the project.

Important Program Characteristics

Project funds should be used to grow new forms of deep integration across disciplines and conduct transformative research with high-impact potential. The proposed activities should be designed to fit the five-year timeframe. The proposal should explain how the project team will advance progress in developing the fundamental scientific or engineering understanding needed to address the specific societal and/or scientific problem that inspired the proposal. It should articulate what scientific and convergent outcomes are anticipated on two- and five-year time scales. It should also explain how the project may catalyze novel interactions beyond the project duration and new forms of scientific discovery within and across disciplines.

Proposals must include the following:

- A description of a long-term scientific vision motivated by a specific societal and/or scientific problem.
- A rationale explaining proposal suitability for this solicitation and why the stated problem requires growing a new convergence research approach.
- Clear description of scientific or technical challenges and bottlenecks which if resolved have the potential to transform our foundational scientific understanding.
- A five-year research plan, divided into two phases (years 1-2 and years 3-5), that employs a novel convergence paradigm comprising deep integration across disciplines.
- A convergence management plan that outlines strategies and procedures for growing convergent science during the project and beyond and that articulates how progress will be assessed.

Link to Additional Information: https://www.nsf.gov/pubs/2024/nsf24527/nsf24527.htm

15. Understanding Mechanisms and Outcomes of Trained Immunity (R21 Clinical Trial Not Allowed), NIH

Application Deadline:

- **Letter of Intent: 30 days prior to the application due date**
- **Full Proposal: June 16, 2024**

Award Amount: up to $275,000 for a period of performance of two years

While immunological memory is an integral feature of the immune system, it has traditionally been viewed as a unique aspect of adaptive immunity in which T cells and B cells remember specific antigens associated with pathogens or vaccines that have been encountered in the past. The idea of immune memory in the innate arm of the immune system, however, is a relatively recent concept within mammalian immunology. The term "trained immunity" refers to a nonspecific form of immune memory in innate immune cells in which an initial exposure to a pathogen, commensal, or vaccine "trains" innate immune cells so that their response to a variety of subsequent immune challenges differs from that of their naïve counterparts.

In support of this observation, investigators have identified epigenetic and metabolic changes that occur in innate immune cells following antigenic exposure and are preserved in daughter cells. A full mechanistic description of how exposure to immune training agents leads to epigenetic changes remains to be determined, as do functional characterizations of duration and plasticity of trained immunity phenotypes. Furthermore, the characteristics and mechanisms of trained immunity are likely distinct for different training agents. While trained immunity effects were originally described for myeloid-derived innate immune cells (i.e., macrophages, neutrophils, and dendritic cells), recent findings demonstrate trained immunity in lymphoid derived innate immune cells, such as Natural Killer cells and Innate Lymphoid Cells.

Additional observations of non-specific forms of immune memory have existed for decades – predating the current concept of trained immunity. Post-hoc analyses of various vaccine trials and campaigns in countries with high rates of child mortality have shown that the administration of some vaccines caused a decrease in all-cause child mortality beyond what would be expected for protection against the vaccine-targeted disease alone. The biological mechanisms underlying these observations have yet to be uncovered and recent clinical trials directly testing the heterologous protection offered by vaccines such as BCG and MMR have failed to recapitulate the epidemiological observations. Further research into the basic immunological features and mechanisms underlying heterologous immunity is needed to advance this field. At present, the concept of trained immunity offers the most compelling explanation for how heterologous immunity could be broadly induced by vaccines or infections; however, there is still much to be uncovered.

While the concept of trained immunity holds much promise for improving human health, many questions must be answered before it can be properly harnessed. An improved understanding of the molecular and cellular mechanisms, biomarkers, and functional significance of trained immunity is needed to advance understanding and future applications of this field.

Research Objectives and Scope

This Notice of Funding Opportunity (NOFO) solicits research projects that explore fundamental aspects of trained immunity. Such projects must align with NIAID's mission to advance knowledge of immune system development and function, and better understand, treat, and prevent infectious and immune-mediated (i.e., allergic, autoimmune, cell/tissue/organ transplant rejection) diseases. Areas of high priority include, but are not limited to, the following:

- Identification of novel biomarkers associated with trained immunity induced by vaccines, vaccine adjuvants, and/or infectious pathogens
- Basic studies of trained immunity in immune-mediated diseases
- Elucidation of molecular and cellular mechanisms responsible for innate immune memory
- Characterization of the functional implications of trained immunity, including impact on adaptive immune responses and/or disease outcomes

- Determination of the duration and/or plasticity of trained immunity effects

Because basic characterizations of trained immunity are currently lacking, descriptive studies seeking to define immune signatures and phenotypes associated with trained immunity are allowed for applications submitted to this funding opportunity.

Link to Additional Information: https://grants.nih.gov/grants/guide/pa-files/PAR-24-111.html

Internships and Fellowships Opportunities

1. **Fellowships, NEH**
   Application Deadline: April 10, 2024
   Award Information: $30,000 to $60,000 for six to 12 months

NEH Fellowships are granted to individual scholars pursuing projects that embody exceptional humanistic research, rigorous analysis, and clear writing. Applications must clearly articulate a project's value to humanities scholars, general audiences, or both. Fellowships provide recipients time to write, to travel, and to conduct research and other project-related activities. Projects may be based on original research or provide a synthesis of ideas. They may be at any stage of development. NEH invites research applications from scholars in all disciplines, regardless of geographic or chronological focus, and encourages submissions from independent scholars and junior scholars.

Link to Additional Information: https://www.neh.gov/grants/research/fellowships

2. **Graduate Research Fellowship, National Institute of Justice, Dept. of Justice**
   Application Deadline: April 10, 2024
   Award Information: up to $180,000 for up to 60 months

The Graduate Research Fellowship (GRF) program provides grants to accredited academic institutions to support outstanding doctoral students whose dissertation research is relevant to criminal or juvenile justice. Applicant academic institutions are eligible to apply only if:

- The student is currently enrolled in a Ph.D. program in the sciences or engineering.
- The student's proposed dissertation research has demonstrable relevance to preventing and controlling crime, advancing knowledge of victimization and effective victim services, or ensuring the fair and impartial administration of criminal or juvenile justice, in the United States.

Link to Additional Information: https://nij.ojp.gov/funding/opportunities/o-nij-2024-171946

Forecasted Opportunities

1. **Access to Infant and Toddler Care and Education: Research and Evaluation Grants, Adm. of Children and Family, OPRE**

The early care and education (ECE) landscape has shifted in recent years due to a number of factors, including but not limited to increasing state and local investments in public pre-kindergarten, a declining supply of home-based ECE settings, changing ECE workforce qualification or educational requirements, and ECE workforce shortages and provider instability exacerbated by the COVID-19 pandemic. This shifting landscape has implications, including unintended consequences, for access to infant and toddler care and education (i.e., the extent to which families are able to secure care with reasonable effort, the affordability of care, care that meets parents' needs, care that supports children's development).This grant opportunity will provide funding to address key research and evaluation questions related to care and education access for infants and toddlers at the national, state, or local level. Specifically, these awards will support

either: descriptive research studies to document current access, shifts in access over time, or the characteristics of specific policies, practices, or other efforts that may be affecting access; or evaluations to explore the implementation or effects of specific policies, practices, or other efforts that may be affecting access. Proposed projects can include primary data collection and/or leverage secondary data sources. Proposed projects can use quantitative, qualitative, or mixed- methods data at the national, state or territory, or local level. For further information about OPRE, see http://acf.hhs.gov/opre .

Link to Additional Information: https://www.grants.gov/search-results-detail/351880

2. **National Digital Newspaper Program, NEH**

This program creates a national digital resource of historically significant newspapers published between 1690 and 1963 from all 56 states and U.S. jurisdictions. The Library of Congress (LOC) maintains this freely accessible, searchable online database.

Link to Additional Information: https://www.grants.gov/search-results-detail/351940

3. **Preservation Assistance Grants for Smaller Institutions, NEH**

The purpose of this program is to help small and mid-sized institutions improve their ability to preserve and care for their humanities collections. The program encourages applications from small and mid-sized institutions that have never received an NEH grant.

Link to Additional Information: https://www.grants.gov/search-results-detail/351936

4. **Sustaining Cultural Heritage Collections, NEH**

This program helps cultural institutions meet the complex challenge of preserving large and diverse holdings of humanities materials for future generations by supporting environmentally sustainable preventive care measures that mitigate deterioration, prolong the useful life of collections, reduce energy consumption, and strengthen institutions' ability to anticipate and respond to disasters.

Link to Additional Information: https://www.grants.gov/search-results-detail/351939

5. **Media Projects, NEH**

The Media Projects program supports collaboration between media producers and scholars to develop content grounded in humanities scholarship and prepare documentary films, radio, and podcasts that engage public audiences with humanities ideas in creative and appealing ways.

Link to Additional Information: https://www.grants.gov/search-results-detail/351944

6. **Public Humanities Projects, NEH**

The Public Humanities Projects program supports projects that bring the ideas and insights of the humanities to life for general audiences through in-person, hybrid, or virtual programming. Projects must engage humanities scholarship to analyze significant themes in disciplines such as history, literature, ethics, and art history.

Link to Additional Information: https://www.grants.gov/search-results-detail/351945

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

30. Research Infrastructure in the Social and Behavioral Sciences (RISBS), NSF
https://new.nsf.gov/funding/opportunities/research-infrastructure-social-behavioral-sciences

31. Secure and Trustworthy Cyberspace (SaTC), NSF
https://www.nsf.gov/pubs/2024/nsf24504/nsf24504.htm

32. Mind, Machine and Motor Nexus (M3X), NSF
https://new.nsf.gov/funding/opportunities/mind-machine-motor-nexus-m3x

Announcing Previous Important Funding Opportunities

1. Cognitive Neuroscience (CogNeuro), NSF
Deadline: February 1, 2024
https://new.nsf.gov/funding/opportunities/cognitive-neuroscience-cogneuro-0

2. Incorporating Human Behavior in Epidemiological Models (IHBEM), NSF
   Deadline: February 1, 2024
   https://www.nsf.gov/pubs/2024/nsf24507/nsf24507.htm

3. Bidirectional Influences Between Adolescent Social Media Use and Mental Health (R01 Clinical Trial Optional), NIH
   Deadline: February 1, 2024
   https://science.osti.gov/ber

4. Designing Synthetic Cells Beyond the Bounds of Evolution (Designer Cells), NSF
   Deadline: February 1, 2024
   https://www.nsf.gov/pubs/2024/nsf24505/nsf24505.htm

5. 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

6. 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

7. International Research Experiences for Students (IRES), NSF
   Deadline: February 5, 2024
   https://www.nsf.gov/pubs/2024/nsf24506/nsf24506.htm

8. Hispanic-Serving Institutions Education Grants Program, USDA/NIFA
   Deadlines: February 6-8, 2024
   https://www.nifa.usda.gov/grants/funding-opportunities/hispanic-serving-institutions-education-grants-program

9. Leveraging Extant Data to Understand Developmental Trajectories of Late Talking Children (R21 Clinical Trial Not Allowed), NIH
   Deadline: February 7, 2024
   https://grants.nih.gov/grants/guide/pa-files/PAR-24-045.html

10. Information and Practice Needs Relevant to Late Talking Children (R21 Clinical Trial Not Allowed), NIH
    Deadline: February 7, 2024
    https://grants.nih.gov/grants/guide/pa-files/PAR-24-046.html

11. Research in Basic Plasma Science and Engineering, DOE
    Deadline: February 9, 2024 (Pre-App); March 29, 2024 (FP)
    https://www.grants.gov/search-results-detail/351743

12. Food Safety Outreach Program, USDA / NIFA
    Deadline: February 13, 2024
    https://www.nifa.usda.gov/grants/funding-opportunities/food-safety-outreach-program

13. Institutes for Higher Education Faculty Institutes for K-12 Educators, NEH
    Deadline: February 14, 2024
    https://www.neh.gov/grants/education/institutes-k-12-educators

14. Landmarks of American History and Culture, NEH
    Deadline: February 14, 2024
    https://www.neh.gov/grants/education/landmarks/highered

15. Humanities Research Centers on Artificial Intelligence, NEH
    Deadline: February 14, 2024
    https://www.neh.gov/program/humanities-research-centers-artificial-intelligence

16. 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

17. Organic Agriculture Research and Extension Initiative, USDA/NIFA
    Deadline: February 15, 2024
    https://www.nifa.usda.gov/grants/funding-opportunities/organic-agriculture-research-extension-initiative

18. Crop Protection and Pest Management Competitive Grants Program, USDA/NIFA
    Deadline: February 15, 2024
    https://www.nifa.usda.gov/grants/funding-opportunities/crop-protection-pest-management

19. 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#

20. Ethical, Legal and Social Implications (ELSI) Research (R01 Clinical Trial Optional), NIH
    Deadline: February 20, 2024
    https://grants.nih.gov/grants/guide/pa-files/PAR-23-293.html

21. Formal Methods in the Field (FMitF), NSF
    Deadline: February 20, 2024
    https://www.nsf.gov/pubs/2024/nsf24509/nsf24509.htm

22. Personnel Development To Improve Services and Results for Children With Disabilities—Personnel Preparation of Special Education, Early Intervention, and Related Services Personnel at Historically Black Colleges and Universities, Tribally Controlled Colleges and Universities, and Other Minority Serving Institutions, Department of Education
    Deadline: February 20, 2024
    https://www.govinfo.gov/content/pkg/FR-2023-12-07/pdf/2023-26855.pdf

23. 21st Annual P3 Awards: A National Student Design Competition Focusing on People, Prosperity, and the Planet, EPA
    Deadline: February 21, 2024
    https://www.grants.gov/search-results-detail/351629

24. Clinical-Community Linkages to Address Unmet Social Needs and Adverse Social Determinants of Health to Advance Health Equity among Populations Experiencing Health Disparities: The Bridge-to-Care Initiative (R01 Clinical Trial Optional), NIH
    Deadline: February 21, 2024 (LOI); March 22, 2024 (FP)
    https://www.nsf.gov/pubs/2024/nsf24513/nsf24513.htm

25. 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

26. Resident Instruction Grants for Institutions of Higher Education in Insular Areas (RIIA), USDA/NIFA
Deadline: February 28, 2024
https://www.nifa.usda.gov/grants/funding-opportunities/resident-instruction-grants-program-institutions-higher-education

27. Personnel Development To Improve Services and Results for Children With Disabilities—Doctoral Training Consortia Associated With High- Intensity Needs, Department of Education
Deadline: March 4, 2024
https://www.govinfo.gov/content/pkg/FR-2024-01-03/pdf/2023-28896.pdf

28. Education Research and Development Center Program, Department of Education
Deadline: March 7, 2024
https://www.govinfo.gov/content/pkg/FR-2023-11-27/pdf/2023-26008.pdf

29. Collaborative Research in Computational Neuroscience (CRCNS), NSF
Deadline: March 7, 2024
https://www.nsf.gov/pubs/2024/nsf24510/nsf24510.htm

30. Secondary Education, Two-Year Postsecondary Education, and Agriculture in the K-12 Classroom Challenge Grants Program, USDA / NIFA
Deadline: March 8, 2024
https://www.nifa.usda.gov/grants/funding-opportunities/secondary-education-two-year-postsecondary-education-agriculture-k-12

31. Expanding Capacity in Quantum Information Science and Engineering (ExpandQISE), NSF
Deadline: March 8, 2024 (LOI); April 1, 2024 (FP)
https://www.nsf.gov/pubs/2024/nsf24523/nsf24523.htm

32. Secondary Education, Two-Year Postsecondary Education, and Agriculture in the K-12 Classroom Challenge Grants Program, USDA/NIFA
Deadline: March 8, 2024
https://www.nifa.usda.gov/grants/funding-opportunities/secondary-education-two-year-postsecondary-education-agriculture-k-12

33. Emerging Mathematics in Biology (eMB), NSF
Deadline: March 11, 2024
https://www.nsf.gov/pubs/2024/nsf24513/nsf24513.htm

34. Partnerships for Research Innovation in the Mathematical Sciences (PRIMES), NSF
Deadline: March 11, 2024
https://www.nsf.gov/pubs/2024/nsf24517/nsf24517.htm

35. Partnerships for Research and Education in Materials (PREM), NSF
Deadline: March 12, 2024
https://www.nsf.gov/pubs/2024/nsf24512/nsf24512.htm

36. Partnerships for Research and Education in Physics (PREP), NSF
Deadline: March 12, 2024
https://www.nsf.gov/pubs/2024/nsf24514/nsf24514.htm

37. Strengthening American Infrastructure (SAI), NSF
Deadline: March 12, 2024
https://www.nsf.gov/pubs/2024/nsf24519/nsf24519.htm

38. Partnerships in Astronomy & Astrophysics Research and Education (PAARE), NSF
Deadline: March 12, 2024
https://www.nsf.gov/pubs/2024/nsf24516/nsf24516.htm

39. Mathematical Sciences Research Institutes, NSF
Deadline: March 14, 2024
https://www.nsf.gov/pubs/2023/nsf23606/nsf23606.htm

40. Future of Semiconductors (FuSe2), NSF
Deadline: March 14, 2024
https://www.nsf.gov/pubs/2024/nsf24521/nsf24521.htm

41. Collaborations in Artificial Intelligence and Geosciences (CAIG), NSF
Deadline: March 15, 2024
https://www.nsf.gov/pubs/2024/nsf24518/nsf24518.htm

42. 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

43. STEM Program, Office of Naval Research
Deadline: April 2, 2024
https://www.grants.gov/web/grants/view-opportunity.html?oppId=347274

44. Responsible Design, Development, and Deployment of Technologies (ReDDDoT), NSF
Deadline: April 08, 2024 (Phase 1); April 22, 2024 (Phase 2)
https://new.nsf.gov/funding/opportunities/responsible-design-development-deployment

45. Future Manufacturing (FM), NSF
Deadline: April 11, 2024
https://www.nsf.gov/pubs/2024/nsf24525/nsf24525.htm

46. Stephen I. Katz Early-Stage Investigator Research Project Grant (R01 Clinical Trial Not Allowed), NIH
Deadline: May 29, 2024
https://grants.nih.gov/grants/guide/pa-files/PAR-24-075.html

47. Coastal Program - FY24, U.S. Fish and Wildlife Service
Deadline: May 30, 2024
https://www.grants.gov/web/grants/view-opportunity.html?oppId=350418

48. Assessment of Climate at Institutions (ACt) Award (RC2 - Clinical Trial Not Allowed), NIH
Deadline: June 3, 2024 (LOI); July 1, 2024 (FP)
https://grants.nih.gov/grants/guide/pa-files/PAR-24-038.html

49. NINR Areas of Emphasis for Research to Optimize Health and Advance Health Equity (R01 Clinical Trial Optional), NIH
Deadline: June 5, 2024
https://grants.nih.gov/grants/guide/pa-files/PAR-22-230.html

50. 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

51. Exploratory Grant Award to Promote Workforce Diversity in Basic Cancer Research (R21 Clinical Trial Not Allowed), NIH
Deadline: June 18, 2024
https://grants.nih.gov/grants/guide/pa-files/PAR-24-039.html

52. Environmental Education Local Grants Program for Region 2, EPA
Deadline: July 1, 2024
https://www.grants.gov/web/grants/view-opportunity.html?oppId=350204

53. Advancing Genomic Medicine Research (R21 Clinical Trial Optional), NIH
Deadline: July 8, 2024
https://grants.nih.gov/grants/guide/rfa-files/RFA-HG-23-033.html

54. 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

55. 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

56. ECosystem for Leading Innovation in Plasma Science and Engineering (ECLIPSE), NSF
Deadline: August 13, 2024
https://new.nsf.gov/funding/opportunities/ecosystem-leading-innovation-plasma-science

57. Advanced Scientific Computing Research (ASCR), Department of Energy
Deadline: September 30, 2024
https://science.osti.gov/ascr

58. Biological and Environmental Research (BER), Department of Energy
Deadline: September 30, 2024
https://science.osti.gov/ber

59. F24AS00431 FY24 Recovery Implementation, Fish and Wildlife Service
Deadline: September 30, 2024
https://www.grants.gov/web/grants/view-opportunity.html?oppId=350612

60. Basic Energy Sciences (BES), Department of Energy
Deadline: September 30, 2024
https://science.osti.gov/bes/

61. Fusion Energy Sciences (FES), Department of Energy
    Deadline: September 30, 2024
    https://science.osti.gov/fes/

Universidad *de* Puerto Rico

LA MEJOR EDUCACIÓN A TU ALCANCE

VICEPRESIDENCIA DE RECURSOS EXTERNOS
ADMINISTRACIÓN CENTRAL