Strategic Resources
University of Puerto Rico
YEAR 2020 - VOLUME VII
JUNE 19, 2020
AUTORIZADO POR LA COMISIÓN ESTATAL DE ELECCIONES
CEE-SA-2020-7751

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 06/19/2020 and is in no way all-inclusive of funding opportunities available. Further information has been shared with External Resource Coordinators and Research Coordinators at each UPR campus by e-mail or MS Teams.

1. New Community-Driven Disaster Resilience Research, National Science Foundation

Application Deadline: July 1, 2020

Eligible applicants are universities and nonprofits, but it's a requirement to have "civic partners" as senior personnel on the project. They're going to fund 24 planning grants at $50K, and then 8 will be selected for a full award (up to $1M to be spent in 12 months.)

The Civic Innovation Challenge (CIVIC) is a research and action competition in the Smart and Connected Communities (S&CC) domain designed to build a more cohesive research-to-innovation pipeline and foster a collaborative spirit. Building on the NSF S&CC program and the extensive S&CC ecosystem, CIVIC aims to accelerate the impact of S&CC research, and deepen cooperation and information sharing across sectors and regions. CIVIC will lay a foundation for a broader and more fluid exchange of research interests and civic priorities that will create new instances of collaboration and introduce new areas of technical and social scientific discovery. CIVIC will fund projects that can produce significant community impact within 12 months (following a four-month planning phase) — in contrast to many community-university partnerships that take years to provide tangible benefits to communities — and have the potential for lasting impact beyond the period of the CIVIC award.

National Science Foundation (NSF) launched CIVIC earlier this Spring with the goals of (i) flipping the community-university dynamic, with **communities** identifying civic priorities ripe for innovation and then partnering with researchers to address those priorities; (ii) accelerating the impact of S&CC research; and (iii) deepening cooperation and information sharing across sectors and regions. NSF's directorates for Computer and Information Science and Engineering (CISE) and Social, Behavioral and Economic Sciences (SBE) have partnered with the U.S. Department of Energy's Vehicles Technologies Program and U.S. Department of Homeland Security's Science and Technology Directorate to support CIVIC.

CIVIC is organized as a two-stage competition with two tracks. **One track is centered on resilience to natural disasters and calls for research that equips communities with greater preparedness and resilience to natural disasters.** The other track is centered on communities and mobility and calls for research that addresses better mobility options to solve the spatial mismatch between housing affordability and jobs.

Link to Additional Information: https://www.nsf.gov/pubs/2020/nsf20562/nsf20562.pdf

2. Emergency Awards: Research Projects in SARS-CoV-2 Serological Sciences, Department of Health and Human Services, National Institutes of Health

Application Deadline: July 22, 2020

This Funding Opportunity Announcement (FOA) is associated with the COVID-19 Supplement funded through the Paycheck Protection Program and Health Care Enhancement Act (P.L. 116-139) which directs the National Cancer Institute of the NIH to develop, validate, improve, and implement serological testing and associated technologies. The purpose of the FOA is to establish Serological Sciences Research Projects with the goals of: identifying and advancing research opportunities to characterize the immune responses elicited by SARS-CoV-2 viral infection; understanding the mechanisms driving the serological, humoral and cellular immune responses; determining host, genetic, and environmental modifiers of the immune response; and determining the serological correlates of disease pathogenesis and protection against future infection; defining access, communication, and implementation barriers related to SARS-CoV-2 serological testing. These U01 Research Projects will be part of a Serological Sciences Network (SeroNet). Other components of the Network will include Serological Sciences Centers of Excellence (U54), the FNLCR Serology Laboratory, Serological Capacity Building Centers (CBC), and a Serological Sciences Network Coordinating Center (SSNCC), which will be managed through the Frederick National Lab for Cancer Research (FNLCR), a Federally Funded Research and Development Center. It may also include SBIR grants and other grants and contracts related to serology associated with SARS-CoV-2. All components are expected to collaborate across the entire Network, sharing data, results, and reagents. This FOA solicits U01 research project applications, whereas the companion FOA, RFA-CA-20-038, solicits multi-component U54 Centers applications. Successful applicants from both FOAs will become members of the Serological Sciences Network.

Each proposed Serological Sciences Research Project must be focused on research related to the serological response to SARS-CoV-2, characterization of the innate or adaptive immune response to SARS-CoV-2, other correlates of immunity, patient outcome and/or disease pathogenesis and the development of novel serological assays for SARS-CoV-2, or definition of access, communication and implementation barriers. Proposals with cancer relevance are encouraged.

Applications spanning the full range of research and research designs, from basic research to population science research, will be considered responsive.

Potential areas of investigation include but are not limited to:

- Developing novel assays, and preclinical and computational model systems to test adaptive and innate immune responses to SARS-CoV-2 infection that inform immune parameters and serological markers associated with asymptomatic vs. symptomatic infection, disease severity, risk of re-infection, or vaccine efficacy.
- Understanding the mechanisms underlying innate, cell-mediated, and humoral immune responses to SARS-CoV-2 – including macrophage activating syndrome and cytokine storm - as well as how disease severity differs as a function of immune health status.
- Determine if therapeutics (e.g., remdesivir, antivirals) and passive antibody therapies used to treat COVID-19 modulate serologic and immune responses to SARS-CoV-2 (e.g., antibody-dependent enhancement).
- Characterizing the serologic differences resulting from natural infection vs. vaccination against SARS-CoV-2, and how they correlate with the persistence or longevity of the response.
- Identifying genetic and epigenetic determinants (e.g., HLA types) that modulate the development and durability of immune responses against SARS-CoV-2 infection and associated serological correlates.
- Understanding what factors affect the SARS-CoV-2 immune response or pathogenesis including SARS-CoV-2 viral load, health conditions (e.g., diabetes, obesity, cardiovascular disease, precancerous conditions), co-infection with other viruses (e.g., HIV, HPV, CMV), or the presence of endemic coronavirus antibodies.
- Understanding how precancerous conditions, cancer, and/or cancer therapies (i.e., chemotherapy, radiation, immunotherapy, hormonal therapy, combinations) affect serologic and immune responses to SARS-CoV-2 infection and the clinical course of infection, and conversely how the immune response to SARS-CoV-2 affects precancerous conditions, cancers, and responses to cancer therapies.
- Understanding how patient demographic factors (e.g., age, sex, ethnicity), behavioral (e.g., smoking, physical activity), and environmental factors affect immune or serological responses to SARS-CoV-2 infection.
- Researching the clinical and public health implementation of validated serologic assays, their interpretation, and follow-up for health outcomes.
- Approaches to promoting and ensuring equitable access to serologic testing, identification of contextual factors associated with the uptake of SARS-CoV-2 serologic testing, and whether differential access further exacerbates health disparities and health outcomes.

- Determining the ethical, legal and social implications of serologic testing for SARS-CoV-2 in diverse populations and the best methods for appropriate communication of results and interpretation at the individual, provider, and population level; for example, the impact of serologic testing on employment, housing, health insurance, access to federal benefits.

This is an emergency FOA due to the SARS-CoV-2 global pandemic; therefore, applicants do not need to provide extensive background information or preliminary data in this application. Intervention trials addressing behavioral, health care delivery, or implementation research related to serologic testing and serologic outcomes are appropriate for this RFA. These research efforts should include a broad and diverse population, including consideration of age, sex, gender, race, socioeconomic status, rural populations, ethnicity, as well as specific vulnerable populations (e.g., individuals with comorbidities such as autoimmune disease, immunosuppression, and obesity, medically underserved, and cancer populations – across all age groups – childhood, adolescent and young adult, and older populations). Leveraging ongoing cohort studies and registry data is encouraged.

Non-Responsive Applications (out of scope)

Applications proposing the following topic areas would be considered nonresponsive to this FOA and will be returned without review:

- Interventional clinical trials of vaccines and other therapeutics;
- Fundamental virology studies; and
- The long-term impact of SARS-CoV-2 infection on co-morbidities, unrelated to cancer or precancers.

Link to Additional Information: http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-20-039.html

3. Emergency Awards: SARS-CoV-2 Serological Sciences Centers of Excellence, Department of Health and Human Services, National Institutes of Health

Application Deadline: July 22, 2020

This Funding Opportunity Announcement (FOA) is associated with the COVID-19 Supplement funded through the Paycheck Protection Program and Health Care Enhancement Act (P.L. 116-139) which directs the National Cancer Institute of the NIH to develop, validate, improve, and implement serological testing and associated technologies. The purpose of the FOA is to establish Serological Sciences Centers of Excellence with the goal of identifying and advancing research opportunities to characterize the immune responses elicited by SARS-CoV-2 viral infection; understanding the mechanisms driving the serological, humoral and cellular immune responses; determining host, genetic, and environmental modifiers of the immune response; determining the serological correlates of disease pathogenesis and protection against future infection; defining access, communication, and implementation barriers related to SARS-CoV-2 serological testing. These U54 Centers will be part of a Serological Sciences Network (SeroNet). Other components of the Network will include Serological Sciences Research Projects (U01), the FNLCR Serology Laboratory, Serological Capacity Building Centers (CBC) and a Serological Sciences Network Coordinating Center (SSNCC) which will be managed through Frederick National Lab for Cancer Research (FNLCR), a Federally Funded Research and Development Center. It may also include SBIR grants and other grants and contracts related to serology associated with SARS-CoV-2. All components are expected to collaborate across the entire Network, sharing data, results, and reagents. This FOA solicits multi-component U54 Center applications, whereas the companion FOA, RFA-CA-20-039, solicits applications for discrete U01 research projects. Successful applicants from both FOAs will become members of the Serological Sciences Network.

Each proposed Serological Sciences Research Project must be focused on research related to the serological response to SARS-CoV-2, characterization of the innate or adaptive immune response to SARS-CoV-2, other correlates of immunity, patient outcome and/or disease pathogenesis and the development of novel serological assays for SARS-CoV-2, or definition of access, communication and implementation barriers. Proposals with cancer relevance are encouraged.
Applications spanning the full range of research and research designs, from basic research to population science research, will be considered responsive.

Potential areas of investigation include but are not limited to:

- Developing novel assays, and preclinical and computational model systems to test adaptive and innate immune responses to SARS-CoV-2 infection that inform immune parameters and serological markers associated with asymptomatic vs symptomatic infection, disease severity, risk of re-infection or vaccine efficacy.
- Understanding the mechanisms underlying innate, cell-mediated, and humoral immune responses to SARS-CoV-2 – including macrophage activating syndrome and cytokine storm - as well as how disease severity differs as a function of immune health status.

- Determine if therapeutics (e.g. remdesivir, antivirals) and passive antibody therapies used to treat COVID-19 modulate serologic and immune responses to SARS-CoV-2 (e.g. antibody-dependent enhancement).
- Characterizing the serologic differences resulting from natural infection vs. vaccination against SARS-CoV-2, and how they correlate with the persistence or longevity of the response.
- Identifying genetic and epigenetic determinants (e.g. HLA types) that modulate the development and durability of immune responses against SARS-CoV-2 infection and associated serological correlates.
- Understanding what factors affect the SARS-CoV-2 immune response or pathogenesis including SARS-CoV-2 viral load, health conditions (e.g., diabetes, obesity, cardiovascular disease, precancerous conditions), co-infection with other viruses (e.g., HIV, HPV, CMV), or the presence of endemic coronavirus antibodies.
- Understanding how precancerous conditions, cancer, and/or cancer therapies (i.e., chemotherapy, radiation, immunotherapy, hormonal therapy, combinations) affect serologic and immune responses to SARS-CoV-2 infection and the clinical course of infection, and conversely how the immune response to SARS-CoV-2 affects precancerous conditions, cancers, and responses to cancer therapies.
- Understanding how patient demographic factors (e.g., age, sex, ethnicity), behavioral (e.g., smoking, physical activity), and environmental factors affect immune or serological responses to SARS-CoV-2 infection.
- Researching the clinical and public health implementation of validated serologic assays, their interpretation, and follow-up for health outcomes.
- Approaches to promoting and ensuring equitable access to serologic testing, identification of contextual factors associated with the uptake of SARS-CoV-2 serologic testing, and whether differential access further exacerbates health disparities and health outcomes.
- Determining the ethical, legal and social implications of serologic testing for SARS-CoV-2 in diverse populations and the best methods for appropriate communication of results and interpretation at the individual, provider, and population level; for example, the impact of serologic testing on employment, housing, health insurance, access to federal benefits.

This is an emergency FOA due to the SARS-CoV-2 global pandemic; therefore, applicants do not need to provide extensive background information or preliminary data in this application.

Intervention trials addressing behavioral, health care delivery, or implementation research related to serologic testing and serologic outcomes are appropriate for this RFA. These research efforts should include a broad and diverse population, including consideration of age, sex, gender, race, socioeconomic status, rural populations, ethnicity, as well as specific vulnerable populations (e.g., individuals with comorbidities such as autoimmune disease, immunosuppression, and obesity, medically underserved, and cancer populations – across all age groups – childhood, adolescent and young adult, and older populations). Leveraging ongoing cohort studies and registry data is encouraged.

Center Organization

Applications for Serological Sciences Centers of Excellence should have the following structure:

- **Administrative Core** to manage and coordinate all Center research and activities and serve as the liaisons between the Centers and the other components of SeroNet. Responsibilities of the Administrative Core include ensuring the data collected conform with the agreed practice and principles of the SeroNet Standard Operating Procedures (SOPs), Common Data Elements (CDEs) and data sharing plan as approved by the SeroNet Steering Committee.
- **Research Projects** should be well developed research programs. Each Center should include 2-3 Research Projects that closely integrate into the organizing framework and together constitute a multifaceted approach to the serological response to SARS-CoV-2. Leaders and senior investigators of the team will be expected to participate in trans-SeroNet initiatives such as those focused on antibody detection, sample preservation, clinical/epidemiological data collection, and clinical utilization of serological testing.
- **Shared Resource Cores** should provide technical, experimental, or computational expertise that is essential to more than one Research Project within the Center. Each Center may propose up to 2 Shared Resource Cores.

Non-Responsive Applications (out of scope):

Applications proposing the following topic areas would be considered non-responsive to this FOA, and will be returned without review:

- Interventional clinical trials of vaccines and other therapeutics
- Fundamental virology studies

The long-term impact of SARS-CoV-2 infection on co-morbidities, unrelated to cancer or precancers.

Link to Additional Information: http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-20-038.html

4. Advancing Genomic Medicine Research, Department of Health and Human Services, National Institutes of Health

Application Deadlines: August 3, 2020; March 8, 2021; November 2, 2021; August 1, 2022; and March 13, 2023

This Funding Opportunity Announcement (FOA) encourages applications that stimulate innovation and advance understanding of when, where, and how best to implement the use of genomic information and technologies in clinical care, irrespective of participants ancestral origins or sociodemographic status. Proposed projects should be broadly applicable to genomic medicine as a field, and yield findings of significance beyond a single disease, gene, or setting.

Scope and Objectives

This FOA centers on addressing research gaps related to advancing the application of genomics to medical science and clinical care. Genomic medicine research is a multidisciplinary field, and research teams may include experts from multiple disciplines, including but not limited to the fields of clinical genetics, genetic epidemiology, biostatistics, data science, public health informatics, implementation science, health outcomes research, health economics, health equity and disparities, health policy, molecular genetics, genetic counseling, pharmacology, and nursing. Investigators new to the field of genomic medicine are encouraged to apply. NHGRI is committed to funding research inclusive of diverse populations (https://www.genome.gov/news/news-release/Putting-diversity-front-and-center). Applications encompassing diversity are encouraged, such as those that include participants from racial or ethnic minority populations, underserved populations, or populations who experience poorer medical outcomes, as well as studies that take place outside major academic research settings or can demonstrate the feasibility and outline plans to transfer findings to such settings.

The following are some examples of the types of genomic medicine research studies that would be appropriate for these FOAs, grouped by category:

Implementing genomic medicine

Implementation research projects should elucidate whether use of genomic information about an individual improves clinical care and/or health outcomes, and/or how genomic medicine can be implemented most effectively.

- Understanding clinical barriers and bottlenecks in implementation of genomic medicine and pharmacogenomics across broad settings, especially their diffusion and sustainability in diverse clinical settings.
- Identifying and assessing implementation science frameworks that can be used to study genomic medicine in academic clinical settings, non-academic clinical settings, or both.
- Developing computational, health-economic, or other analytical approaches that identify characteristics of participants likely to derive the greatest (or conversely, the least) value from incorporating various types of genomic data into clinical care. Applicants considering health-economic approaches should review NOT-OD-16-025, "Clarifying NIH Priorities for Health Economics Research," https://grants.nih.gov/grants/guide/notice-files/NOT-OD-16-025.html.
- Comparing health care utilization or disease outcomes with implementation and without implementation of clinical decision support tools for genomics.

Facilitating analysis of clinical genomic data

The pace and volume of genomic data being generated present challenges and opportunities for methods and tools that facilitate clinical analysis.

- Developing and evaluating methods to calculate and communicate complex disease risk in clinical settings.
- Evaluating methods that automate or otherwise improve the efficiency of clinical annotation and interpretation of genomic variants, including reanalysis.
- Integrating genomic data from various sources with other data types such as environmental data, family history, transcriptomics, epigenomics, functional data, or model organism data and assessing genomic data's contributions to and improvements in predictive value, clinical validity, and/or clinical utility. Applications primarily focused on developing novel approaches to study how genetic variants lead to differences in function and how such functional differences affect health and disease processes are not responsive to this RFA and should respond to PA-18-868 or PA-18-867 or to the Parent R01 (PA-19-055 for Clinical Trials PA-19-056 for studies not Clinical Trials) or Parent R21 (PA-19-054 for Clinical Trials or PA-19-053 for studies not Clinical Trials).

Improving clinical access to genomic data

- Assessing genomic data integration throughout health systems and how genomic information influences healthcare providers, payers, and regulators.
- Enhancing portability of genomic data that uses standards for genomic information and allows for iterative use (e.g., integration with EHR apps, transporting to other care systems).

NHGRI strongly encourages investigators that plan to collect phenotype and/or environmental exposure data about their study participants to utilize standard protocols included in the PhenX Toolkit (www.phenxttoolkit.org). Where possible and applicable, investigators should adhere to GA4GH standards (https://www.ga4gh.org/). Applicants are also encouraged to learn about NHGRI genomic medicine research programs to identify possible synergies (https://www.genome.gov/27551170/division-of-genomic-medicine-current-research-programs/).

Link to Additional Information: http://grants.nih.gov/grants/guide/rfa-files/RFA-HG-20-036.html

5. Pregnancy Prevention Research Grants, Department of Health and Human Services, Office of the Assistant Secretary for Health

Application Deadline: August 4, 2020

The Office of Population Affairs (OPA) announces the availability of funds for Fiscal Year (FY) 2020 initial competitive grant awards under the authority of Section 241 of the Public Health Service Act. This notice solicits applications for projects that will conduct research that would make significant contributions to the mission of the Office of Population Affairs and to the pregnancy prevention and family planning fields.

Under this announcement, research and evaluation projects that encourage healthy behavior choices to delay the onset of sexual activity, reduce number of sexual partners, and if sexually active, encourage the use of preventative measures for STIs and pregnancy will be considered. These grants are for research that can be conducted within 1-2 years, such as secondary data analyses using existing program and evaluation data or administrative data. Potential areas of investigation include, but are not limited to:

- Identify factors that improve the efficiency, effectiveness, and quality of pregnancy prevention programs for adolescents or young adults, or reduce disparities, by age, gender, race/ethnicity, or setting.
- Identify and/or validate core program components or "active ingredients" essential for programs and practices to produce the desired outcomes.
- Identify specific characteristics of program models, participants, or program implementation associated with program impacts.
- Apply innovative methods or techniques from other disciplines that are novel to pregnancy prevention research such as network analysis, matching and distillation techniques, system dynamics modeling or geographic information systems, to address questions beyond the general effectiveness of pregnancy prevention programs.

Link to Additional Information: https://www.grantsolutions.gov/gs/preaward/previewPublicAnnouncement.do?id=76422

6. Funds for Research on Research Integrity, Department of Health and Human Services, Office of the Assistant Secretary for Health

Application Deadline: August 4, 2020

The Office of Research Integrity (ORI) announces the availability of funds for Fiscal Year (FY) 2020 grant awards under the authority of Sec. 301 of the Public Health Service Act, 42 U.S.C. § 241, as delegated to the Director of ORI. This notice solicits applications for projects that will conduct innovative original research related to the prevention of research misconduct, facilitation of whistleblowing and the protection of whistleblowers, and promote the responsible conduct of research and the furtherance of research integrity in the United States and internationally.

This notice solicits applications for projects that will conduct innovative original research related to the prevention of research misconduct, facilitation of whistleblowing and the protection of whistleblowers, and promote the responsible conduct of research and the furtherance of research integrity in the United States and internationally.

The goal of the program is to develop the evidence base for the research integrity community to create or enhance educational and interventional programs for promoting research integrity and preventing research misconduct. ORI specifically seeks to support innovative research to (a) identify risk factors at the individual, group (laboratory or department), and institutional levels that lead to

questionable research practices (QRPs) and research misconduct, and resilience factors at the individual, group, and institutional levels that make involvement in research misconduct and QRPs less likely, and (b) examine the effectiveness of approaches for deterring research misconduct and facilitating the handling of research misconduct allegations, including the identification of factors or circumstances that facilitate or deter whistleblowing and that shield whistleblowers from negative consequences.

This funding opportunity does not support projects with the primary purpose to hold meetings, conferences, or to develop and evaluate programs, resources, or assessment tools. ORI anticipates that the Research on Research Integrity awards will have a ceiling of up to $150,000 (direct and indirect funding) with a floor of $50,000 for a project period of up to 12 months. ORI anticipates making up to ten awards.

HHS/OASH encourages applicants to review all program requirements, eligibility information, application format and submission information, evaluation criteria, and other information in this funding announcement to ensure that its application complies with all requirements and instructions.

Link to Additional Information: https://www.grantsolutions.gov/gs/preaward/previewPublicAnnouncement.do?id=76424

7. Research to Practice Center Grants for Adolescent Health Promotion in Order to Prevent Teenage Pregnancy, Department of Health and Human Services, Office of the Assistant Secretary for Health

Application Deadline: August 4, 2020

The Office of Population Affairs announces the availability of funds for Fiscal Year (FY) 2020 grant awards under the authority of Section 241 of the Public Health Service Act. This notice solicits applications for projects that will synthesize and translate existing research into practice for health promotion activities that will lead to adoption of healthy behaviors and ultimately help to reduce teen pregnancy.

This notice solicits applications for projects that will synthesize and translate existing research into practice for health promotion activities that will lead to adoption of healthy behaviors and ultimately help to reduce teen pregnancy. Subject to availability of funds, OPA will fund no more than one grant per priority area. Organizations may apply for more than one priority area; however, each application may only address a single priority area. Funded organizations will be referred to from here on as "centers". The national centers will be expected to coordinate and collaborate with each other, OPA, and potentially other OPA grantees conducting research in related topic areas.

OPA expects Centers to evaluate or assess best practices, approaches or strategies in a priority protective area and make that information easily accessible to health providers, caregivers and others working with youth to prevent teen pregnancy. OPA expects Centers to address important and relevant topic areas related to adolescent health promotion, including addressing how the reduction of other risky behaviors (such as substance abuse) would aid in pregnancy prevention. Priority areas include but are not limited to:

- engaging parents and caregivers,
- environments supportive of healthy behaviors,
- fostering positive connections to schools, neighborhoods and communities,
- active and meaningful youth engagement, or
- working with youth serving professionals in the systems that serve the most vulnerable youth populations.

OPA expects the Centers to have a high caliber of scientific and technical competency, be forward-looking, provide strong leadership, and collaborate with stakeholders and community partners including state and local health agencies and non-profit, community (including youth and parents) and non-governmental organizations in the development and delivery of research to practice products.

Link to Additional Information: https://www.grantsolutions.gov/gs/preaward/previewPublicAnnouncement.do?id=76421

8. Agricultural Genome to Phenome Initiative, Department of Agriculture, National Institute of Food and Agriculture

Application Deadline: July 15, 2020

The National Institute of Food and Agriculture's Agricultural Genome to Phenome Initiative (AG2PI) focuses on collaborative science engagement and invites innovative research proposals that will lay the foundation for expanding knowledge concerning genomes and phenomes of crops and animals of importance to the agriculture sector of the United States. AG2PI supports the President's high priority on American leadership in the Industries of the Future (IOTF) on Artificial Intelligence and Biotechnology. In addition, AG2PI supports multiple goals within the USDA Science Blueprint, USDA Innovation Agenda, the Genome to Phenome: USDA

Blueprint for Animal Genomics Research, and relevant publicly initiated and led crop research initiatives to catalyze and coordinate research linking genomics and predictive phenomics to achieve advances that generate societal and environmental benefits. The purposes of AG2PI are to:

1. Study agriculturally significant crops and animals in production environments to achieve sustainable and secure agricultural production;
2. Ensure that current gaps in existing knowledge of agricultural crop and animal genetics and phenomics are filled;
3. Identify and develop a functional understanding of relevant genes from animals and agronomically relevant genes from crops that are of importance to the agriculture sector of the United States;
4. Ensure future genetic improvement of crops and animals of importance to the agriculture sector of the United States;
5. Study the relevance of diverse germplasm as a source of unique genes that may be of importance in the future;
6. Enhance genetics to reduce the economic impact of pathogens on crops and animals of importance to the agriculture sector of the United States; and
7. Disseminate findings to relevant audiences.

Link to Additional Information: https://nifa.usda.gov/funding-opportunity/agricultural-genome-phenome-initiative

9. Pilot Projects Increasing the Impact of the NIH Centers for Advancing Research on Botanicals and Other Natural Products (PI2 CARBON), Department of Health and Human Services, National Institutes of Health

Application Deadlines: October 1, 2020; June 1, 2021; February 1, 2022; and September 30, 2022

The purpose of this funding opportunity announcement (FOA) is to support collaborative pilot research projects focused on potential effects relevant to human health of chemically complex natural products and/or the causal, molecular mechanisms underlying such effects. A critical element of each proposed project must be collaboration with one or more of the NIH Centers for Advancing Research on Botanicals and Other Natural Products (CARBON). More specifically, letters of support describing collaboration with one or more of the U19 Botanical Dietary Supplements Research Centers awarded in 2020 must be included at the time of submission. Each proposed pilot project must, with agreement of its collaborating Center(s), leverage products used in those Centers to extend understanding of their biological effects, or of their causal, molecular mechanisms of action, or increase understanding of other chemically complex natural products through use of methods developed and used in the Centers. Research approaches may range from bench through in vitro and non-human animal models to, where feasible and appropriate, obtaining additional feasibility or outcome information from clinical trials being performed by the CARBON awardees, either through inclusion of additional measures or through secondary analysis of data or specimens.

For the purposes of this FOA, as for other components of the CARBON Program, resilience is defined as the capacity of an organism to withstand and successfully adapt to change, disturbance, stressors, or other challenges, or to recover efficiently from disturbance, challenge, illness, or other stressors. Strong preference will be given to applications proposing to use objective, quantitative outcome measures relevant to resilience a) for which relevance to resilience or improved health outcomes is well documented and b) that are validated for the context in which they will be used, or for which there is strong evidence of validity for the proposed use. Such outcomes might include (but are not limited to) HbA1c levels, response to vaccine or viral challenge, time to return to initial or normal/healthy levels of inflammatory cytokines or blood glucose after a perturbation, or measures of fatigability.

The proposed pilot projects must include as a major focus, and leverage, collaboration with one or more components of the NIH CARBON Program. More specifically, detailed letters of collaboration from one or more of the 2020 U19 Botanical Dietary Supplements Research Centers must be included at the time of submission. Natural products studied must be relevant to dietary supplements and must comply with the NCCIH Natural Product Integrity Guidance. Applicants can assume that products in current use in the CARBON Program are compliant with this guidance. Key personnel of PI2-CARBON awards will be strongly encouraged to attend, either virtually or in person, at least one of the annual meetings of the CARBON investigators that occurs during the active period of their PI2-CARBON award.

This FOA cannot be used to assess the variability of botanical ingredients in botanical dietary supplement products available to consumers.

Link to Additional Information: http://grants.nih.gov/grants/guide/pa-files/PAR-20-228.html

10. WorkRise Invites LOIs for Research on Worker Mobility

Application Deadline: June 29, 2020 (Letter of Intent)

WorkRise, a research-to-action network for jobs, workers, and mobility, is launching a drive to rapidly develop and share actionable evidence on what works to shore up workers' economic security during the COVID-19 crisis and promote longer-term upward mobility as they rebuild their lives. To that end, the initiative will provide up to $2 million for research on pilot or existing programs, policies, and practices aimed at the rapid development of rigorous evidence that can inform and drive effective action toward a labor market that boosts workers' mobility; create a clearinghouse for innovative responses to the current labor market crisis taken by the private sector, civil society, and government; and elevate promising policies and practices to key decision makers, including philanthropic leaders; local, state, and federal policy makers; worker advocates; and business leaders.

To achieve these objectives, WorkRise has issued both a request for proposals (RFP) and a request for information (RFI) to identify and accelerate innovative solutions — including programs, policies, and practices — that both provide immediate economic relief to struggling workers and create pathways for long-term economic security and upward mobility.

The RFP is designed for individuals with research projects in need of funding, while the RFI is designed for those implementing promising practices in need of additional support and/or research and evaluation. Both the RFP and the RFI are open to practitioners, policy makers, researchers, advocates, employers, and others. Select RFI respondents will be offered support in developing a response to the RFP that includes a research- or data-focused outcome and, where appropriate, additional program funds.

Selected applicants will be invited to submit a full proposal (invitations will be made on a rolling basis). Award decisions will be made on a rolling basis beginning in mid-July. Awards amounts are anticipated to range between $50,000 to $500,000 for a twelve- to eighteen-month grant period. The network will attempt to notify all LOI submissions of the final status of their submission by the end of July.

For more information, including the complete RFP, complete RFI, and an FAQ, see the Urban Institute website.

Link to Additional Information: https://www.urban.org/workrise/rfp-rfi

11. Division of Physics: Investigator-Initiated Research Projects, National Science Foundation

Application Deadline: December 8, 2020

The Division of Physics (PHY) supports physics research and the preparation of future scientists in the nation's colleges and universities across a broad range of physics disciplines that span scales of space and time from the largest to the smallest and the oldest to the youngest. The Division is comprised of disciplinary programs covering experimental and theoretical research in the following major subfields of physics: Atomic, Molecular and Optical Physics; Elementary Particle Physics; Gravitational Physics; Integrative Activities in Physics; Nuclear Physics; Particle Astrophysics; Physics at the Information Frontier; Physics of Living Systems; Plasma Physics; and Quantum Information Science. The Division of Physics strongly encourages single proposal submission for possible co-review rather than submission of multiple related proposals to several programs. PIs considering submitting more than one proposal to this solicitation, or who already have an active PHY award, are encouraged to first consult with the relevant program officer(s) before preparing a new proposal. This does not apply to awards from or submissions to the MRI, REU, and/or center programs, or in cases of renewal proposals.

PHY Mission: To support fundamental research across the intellectual frontiers of physics, to support research that has broader impacts on other fields of science and on the health, economic strength, and defense of society, to enhance workforce preparation at all levels and share the excitement of science with the public through integration of research and education, and to steward the physics community so as to maintain the intellectual capital essential for future advances. Modes of support include single investigator awards, group awards, centers and institutes, some interdisciplinary in nature, and several national user facilities, as well as research equipment/instrumentation development grants.

PHY Science: Physics research probes the properties of matter at its most fundamental level, the interactions between particles, and the organization of constituents and symmetry principles that lead to the rich structure and phenomena that we observe in the world around us. Physics seeks a deep understanding of processes that led to the formation of the cosmos, to the structure of matter at the very shortest distance scales where quantum effects dominate, and to the structure of atomic and molecular systems that shape and control the everyday world of chemistry and biological systems. Because of the breadth and scope of physics, it forms part of the core educational curriculum in most sciences and in engineering.

Physics research encompasses both theoretical and experimental studies, has very profound connections with fundamental mathematics, and underlies most of the other physical sciences. Collaboration with the other scientific disciplines is very important to the continued health and excitement of physics, some examples being in biological physics at the molecular and cellular levels, in quantum information science and at the physics-computer science/engineering interface, and in the large-scale structure and evolution of the universe. PHY will continue to emphasize the importance of interdisciplinary research.

Physics also supports the development of new tools and techniques needed to expand and refine our understanding of physical systems - from femtosecond lasers to probe and control atomic and molecular systems, to Artificial Intelligence numerical methods for the analysis of complex data sets, to LIGO (Laser Interferometer Gravitational-Wave Observatory), a new window to study the universe through the detection of gravitational waves. The extraordinary sensitivity required for some of the instrumentation demands new technology development. PHY encourages research that pushes the envelope of technology as well as the reach of science and sees this also as an investment in developing the scientific leaders of the future.
Proposals with scope covering topics within the purview of programs outside of the Division of Physics may be co-reviewed with the relevant Divisions as appropriate and at the discretion of the cognizant NSF Program Director.

Link to Additional Information: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf20580

12. Collaborative Centers in Children's Environmental Health Research and Translation Centers, Department of Health and Human Services, National Institutes of Health

Application Deadline: November 23, 2020

To accelerate the movement of research findings to action, NIEHS invites grant applications from institutions/organizations that propose to build a Collaborative Center program in Children's Environmental Health Research and Translation (CEHRT Center). Centers are charged with developing effective strategies to translate key children's environmental health (CEH) research findings to relevant stakeholders in the community, academia and practice.

The objective of this FOA is to create and nurture a national network of Children's Environmental Health Research Translation Centers (CEHRT Centers) that will (1) provide the scientific community and stakeholders (broadly defined) access to state-of -the art collateral expertise in CEH as well as expertise in health communication, environmental health literacy and dissemination and implementation science to enhance and accelerate the reach and adoption of CEH knowledge and science, (2) promote external collaborations with the children's environmental health community of researchers and stakeholders, and (3) provide assistance in response to national, regional, state or local CEH issues or emergencies. To achieve this, the CEHRT center program will adopt dissemination and implementation strategies that can evolve quickly with the state of the science as well as create actionable steps to best implement, disseminate and sustain CEH knowledge, intervention and programs in the most vulnerable communities.

The Program Goals are to:

1. Support collaborations among recognized children's environmental health scientists along with partners from scientific fields not traditionally associated with environmental health science (EHS) research. These fields might include health and risk communication, dissemination and implementation science, behavioral and social sciences, engineering, economics, medicine, policy, computer science, and more. These partners will be expected to provide new ideas, strategies, and approaches for moving the CEH science into applied public health and clinical practice in order to expand the impact of CEH research findings.
2. Synthesize and use existing CEH research findings to create new messages, tools, methods/approaches, risk management strategies, public health interventions and practices, curriculums and other educational activities, clinical guidelines, policies and products that translate CEH research findings to applied products and impacts. These products can then be used and/or adapted by stakeholders, at-risk populations, affected communities, and the clinical or public health community to improve children's health.
3. Establish two distinct pilot programs. Within the Translation Core, the pilot project program will test, implement, adapt and evaluate new CEH research translational products (curriculum, messages, tools, methods, practices, etc.). In the Developmental Core, the catalyst program will consist of small pilot projects that can address time sensitive environmental health concerns in children or test new emerging areas concepts, tools or approaches in CEH science.
4. Nurture and mentor early stage investigators in CEH research with an emphasis on translation research strategies and approaches.

Specific Areas of Research Interest:

The theme or vision of the center program must be within the scientific mission of NIEHS with a focus on Children's Environmental Health to be responsive to this initiative. NIEHS is interested in research that focuses on environmental exposures, which influence the healthy development of children from early conception through adolescence and young adulthood.

Link to Additional Information: http://grants.nih.gov/grants/guide/rfa-files/RFA-ES-20-001.html

13. Improving Smoking Cessation Interventions among People Living with HIV, Department of Health and Human Services, National Institutes of Health – R01 & R21

Application Deadline: September 4, 2020

The purpose of this Funding Opportunity Announcement (FOA) is to provide support for research designed to optimize smoking cessation treatment among people living with HIV (PLWH) in the United States (U.S.). Responsive applications must propose research that will be conducted with PLWH and will inform efforts to reduce the incidence of tobacco-related disease and death among PLWH. Research may address the behavioral and sociocultural factors and conditions that are associated with cigarette smoking among PLWH and may also address smoking-related health disparities among PLWH, considering the heterogeneity across the various subgroups of PLWH. This FOA aims to support research to systematically test existing evidence-based smoking cessation interventions (e.g., combination of behavioral and pharmacological) and/or to develop and test adaptations of evidence-based smoking cessation interventions among PLWH. The principal focus of this initiative is on cigarette smoking cessation; however, studies that address dual/poly tobacco product use as part of a cigarette smoking cessation intervention are acceptable. Proposed projects must include prospective, comparative evaluation(s) of the intervention(s) in terms of the rates of cigarette smoking cessation, including sustained abstinence, among current cigarette smokers.

All projects must include the following:

- Research strategies need to be consistent with the highest HIV/AIDS research priorities as identified by NIH (see NOT-OD-20-018); applicants are encouraged to address the health consequences of smoking that may be prevalent among PLWH;
- Research designed to estimate the effect of an intervention on cigarette smoking cessation outcomes with at least one control or comparison group;
- A detailed assessment of cigarette smoking and cigarette smoking history among study participants;
- The use of other tobacco products, including electronic cigarettes, should also be assessed;

The following cessation endpoints/characteristics are required for all studies: rates of cessation, including quit attempts, and sustained abstinence among current smokers. Biological verification of tobacco abstinence is strongly encouraged.

- Markers of HIV/AIDS immune status (e.g., CD4 cell count) must be assessed. If feasible, examination of HIV/AIDS-related co-infections (e.g., hepatitis B or C, Kaposi sarcoma-associated herpesvirus, human papillomavirus) and/or co-morbidities (e.g., non-AIDS-defining cancers such as lung, anal, or Hodgkin lymphoma) should be assessed.
- Studies should be designed for dissemination (e.g., feasibility/acceptability of the intervention for PLWH and providers) and suitable for the intended context. Applicants are encouraged to use an evaluation framework (e.g., RE-AIM) to assess the potential of the intervention to be scaled up.

Primary research questions that fall within the scope of this FOA include, but are not limited to the following:

- What evidence-based smoking cessation interventions are most effective in helping PLWH to achieve long-term tobacco abstinence?
- How can evidence-based smoking cessation interventions be adapted to improve smoking cessation outcomes among PLWH?
- Considering the diverse and unique needs of PLWH, including culture, country of origin, English language proficiency, socioeconomic status, and race/ethnicity, how can existing evidence-based smoking cessation interventions be adapted to best reach and be effective in specific groups?
- What smoking cessation interventions are most effective among subgroups of PLWH with disproportionately high smoking rates? These subgroups include African American men, American Indian/Alaska Natives, rural residents, sexual and gender minorities, individuals with mental illness, persons with other substance use disorders, those of low socioeconomic status (SES), and medically underserved or uninsured people.

Additional topics (e.g., secondary research questions) that fall within the scope of this FOA include but are not limited to the following:

- What barriers are identified when integrating evidence-based tobacco dependence treatment interventions into the existing HIV prevention and treatment context?
- How does the social and behavioral context of tobacco use among PLWH, including the use of alcohol and other drugs, influence tobacco use behaviors and cessation outcomes within the context of smoking cessation interventions?
- How is smoking cessation among PLWH influenced by the concurrent use of alcohol and drug use, particularly patterns of alcohol and drug use associated with increased behavioral risk for HIV transmission?

- How can relapse prevention strategies best be incorporated into existing evidence-based tobacco cessation interventions for PLWH?
- How does HIV treatment adherence influence the effects of smoking cessation interventions? Conversely, how do smoking cessation and/or smoking cessation interventions influence HIV treatment adherence?
- How can evidence-based smoking cessation interventions be adapted and implemented in the context of diverse HIV care settings?
- What smoking cessation services, such as telephone-based, web-based, text-based, and app-based interventions, influence tobacco use behaviors and cessation outcomes?
- Within health care delivery systems, what strategies are most effective to inform HIV treatment providers and PLWH about the health risks of smoking? Similarly, what strategies are most effective in increasing motivation for smoking cessation among PLWH?
- What strategies are effective to decrease barriers to the provision of evidence-based smoking cessation interventions for PLWH, including increasing motivation of providers?
- What healthcare systems-based approaches can facilitate the delivery of evidence-based smoking cessation interventions for PLWH?

Link to Additional Information: http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-20-036.html

14. CCDC-ARL MANUFACTURING TECHNOLOGY FOA, Department of Defense

Application Deadline: September 30, 2023

This notice of funding availability constitutes a competitive mechanism by which to evaluate and select proposals for award, including a merit-based competition, as described in the Department of Defense Grants and Agreements Regulations (DoDGARS), 32 Code of Federal Regulations (CFR) §22.315 for the selection of proposals to be awarded a TIA and for the competitive process for the award of OTs. A formal Request for Proposals (RFP) or any other type of solicitation regarding this program will not be issued.

ACC-APG RTP Division is soliciting concept papers and proposals, on the endeavor described herein.

The Government encourages businesses of all size, as well as **institutions of higher education**, to participate through teaming arrangements with the lead organization. Applicants must reflect the appropriate teaming structure and eligibility requirements as identified in this announcement. Applicants are responsible for reviewing and addressing, as necessary, any amendment to this FOA, to include but not limited to any adjustment on submission dates or times or other submission requirements.

The topics in Section I.A are intended to help ARL execute manufacturing technology (ManTech) programs to address the highest priority needs of the US Army. The goal of these programs is to demonstrate and ultimately transition improved and cost-effective manufacturing solutions for Army platforms and Warfighter systems. Strong transition planning is essential to program success and requires a clear path to implementation. Program stakeholders typically include proponents from the acquisition community, technology managers, manufacturing facilities, and industry. Program investment areas are aligned with Department of Defense (DoD) directives, and currently include technologies oriented towards: 1) future platforms, 2) legacy platforms, and 3) the organic industrial base. Alignment to the Army Modernization Priorities is also required, and these priorities are: 1) Long-Range Precision Fires, 2) Next Generation Combat Vehicle, 3) Future Vertical Lift, 4) Army Network, 5) Air and Missile Defense, and 6) Soldier Lethality.

CCDC ARL seeks proposals to develop and demonstrate manufacturing and/or repair improvements for Army material, which includes items and materials associated with combat vehicles, armaments, vehicle and personal protection systems, etc. These manufacturing and repair improvements should provide cost, schedule, and risk reduction benefits compared to current baseline processes.

Link to Additional Information: https://apply07.grants.gov/apply/opportunities/instructions/PKG00262123-instructions.pdf

15. Center for Inherited Disease Research (CIDR) High Throughput Sequencing and Genotyping Resource Access, Department of Health and Human Services, National Institutes of Health

Application Deadline: July 8, 2023

The Center for Inherited Disease Research (CIDR) high-throughput genotyping, sequencing and supporting statistical genetics services are designed to aid the identification of genes or genetic modifications that contribute to human health and disease or to enhance existing collections of well-phenotyped specimens by the addition of genotype or next-generation sequence data. The laboratory specializes in genomic services that cannot be efficiently carried out in individual investigator laboratories. CIDR provides

the most up-to-date platforms, services and statistical genetic support. This is an NIH-wide initiative that is managed by NHGRI. Information about current services offered can be accessed via: http://www.cidr.jhmi.edu.

With continued advances in our ability to identify and quantitate human genetic variation, there is great interest in applying state-of-the-art genomic technology to identify genetic elements that contribute to human health and disease. For many studies, this requires high-throughput technologies that cannot be efficiently carried out in individual investigator laboratories.

This FOA allows NIH-supported investigators to apply for access to high-throughput sequencing, genotyping, and epigenetic assay services carried out by CIDR. The services provided include careful quality control and data cleaning. Some statistical analysis services are also offered. Detailed information about current CIDR offerings can be found at http://www.cidr.jhmi.edu.

Specific Areas of Research Interest

The FOA seeks projects that show promise of identifying genetic or epigenetic elements important to human health and disease, or that wish to include high quality genotype or next generation sequence data to existing collections of well phenotyped specimens. For gene discovery projects there should be strong evidence that the project proposed will have sufficient power to detect genetic or epigenetic factors affecting the trait under study. Appropriate projects would include but are not limited to: whole-genome, whole-exome and custom-targeted next-generation sequencing; human genome wide association studies (GWAS); high-throughput custom SNP genotyping; and analyses of DNA methylation. Although the main focus of this FOA is on human studies, some model organism studies are also appropriate.

Projects designed to generate large-scale genotyping or sequencing data from existing collections of human samples will also be considered. Applications for this class of studies need not be solely focused on testing genetic hypotheses, for example, genotyping or sequencing of large, well-phenotyped collections of samples for which gene discovery is not the primary goal. In such a study, genetic data could be used to stratify study participants into more refined groups. This could be especially advantageous for clinical trials or natural history studies. Such projects must result in data that will be of broad utility to the community.

Applications are expected to propose data-sharing plans according to the NIH Genomic Data Sharing Policy (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-14-124.html and https://osp.od.nih.gov/scientific-sharing/genomic-data-sharing/) consistent with achieving the goals of the program.

Link to Additional Information: http://grants.nih.gov/grants/guide/pa-files/PAR-20-230.html

16. Alzheimer's Drug Discovery Foundation Invites Applications for Neuroimaging and CSF Biomarker Development Program

Letter of Intent Deadline: July 10, 2020

The Alzheimer's Drug Discovery Foundation is inviting LOIs for its Neuroimaging and CSF Biomarker Development Program. Specifically, this RFP is focused on developing novel PET ligands for clinical use; supporting novel CSF biomarkers; and validating established MRI approaches in larger cohorts. Novel biomarkers of neuroinflammation and synaptic integrity are considered a high priority. Other target areas of interest include neuronal loss, vascular injury and blood-brain barrier integrity, mitochondria and metabolic function, protein misfolding/proteostasis, oxidative stress, white matter changes, and other novel targets supported by compelling biological rationale and connection to disease. ADDF has limited interest in CSF measures of amyloid and tau. Grants of up to $600,000 will be awarded in support of the advancement of neuroimaging and CSF biomarkers that can do one or more of the following:

- Demonstrate Target Engagement for Novel Therapeutics — Biomarkers that can serve as direct measures of target engagement for novel drugs in clinical development. Priority will be given to projects advancing biomarkers that can be used as specific companion biomarkers for therapies currently in the development pipeline and identification of such therapies strengthens an application.
- Detect Signs of Disease Earlier and Monitor Progression — Programs developing sensitive biomarkers that can detect disease earlier than currently available biomarkers. This includes biomarkers that can predict and monitor conversion from cognitively healthy to mild cognitive impairment (MCI), or MCI to Alzheimer's disease. ADDF also seeks prognostic markers that can predict rates of cognitive decline.
- More Accurately Diagnose and Distinguish Between Dementia Subtypes — Many types of dementia can present with similar clinical features, and patients often show overlapping pathologies. At present, it is challenging to distinguish between dementia subtypes and proteinopathies. Biomarkers that can distinguish between subtypes and stratify patients in clinical trials are a high priority.

Letters of Intent are due July 10. Upon review, selected applicants will be invited to submit a full proposal by August 7, 2020.

Eligible applicants include researchers and clinicians at academic medical centers, universities, nonprofits, and biotechnology companies worldwide. Existing companies and new spinouts also are eligible, and industry partnerships are strongly encouraged.

Links to Additional Information: See the Alzheimer's Drug Discovery Foundation website for complete program details, eligibility criteria, and a link to the application portal at https://www.alzdiscovery.org/research-and-grants/funding-opportunities/biomarkers and https://www.alzdiscovery.org/research-and-grants/funding-opportunities/application-instructions

17. Grants for Early Medical/Surgical Specialists' Transition to Aging Research (GEMSSTAR), Department of Health and Human Services, National Institutes of Health

Application Deadline: November 13, 2020

The goal of the GEMSSTAR program is to provide support for early-career physician-scientists trained in medical or surgical specialties or early-career dentist-scientists to launch careers as future leaders in aging- or geriatrics-focused research. The GEMSSTAR program is intended to support an early-career physician's or dentist's first independent research project. The GEMSSTAR program also provides an opportunity for applicants who are funded in non-aging-related fields to refocus their research efforts on aging- or geriatrics-related topics. Thus, the GEMSSTAR program seeks applicants who aspire to continue or shift their research focus to bridge their specialty/discipline and the clinical care of older adults.

To accomplish this goal, NIA will provide two years of support for small, transdisciplinary research projects on questions relevant to aging and/or the aged. Applicants should emphasize integration of gerontologic or geriatric research with the candidate's clinical specialty/discipline. Proposed projects may involve pilot or feasibility studies, secondary analyses of existing data, development of research methodology, development of new research technology, or other similar approaches. Projects may span the breadth of scientific domains, including basic, translational, clinical, genetic, or epidemiologic science. Human subjects, animal models, and *in vitro* systems are all acceptable as appropriate to the research questions. Projects should be appropriate to the background and level of experience of the applicant. Potential research topics may include, but are not limited to, the following:

- Characterization of an aging-related disease, condition, syndrome, or phenomenon relevant to a clinical specialty/discipline
- Elucidation of mechanisms underlying specialty/discipline-related diseases in older age
- Identification of predictors and/or outcomes of specialty/discipline-related interventions specific to older populations
- Pilot investigation of a specialty/discipline-related intervention in older adults
- Development of strategies to address and/or integrate important complexities common in older patients typically seen within a clinical specialty/discipline, such as multiple chronic conditions; polypharmacy; multispecialty guideline integration; and preservation of function, cognition, and independence
- Multidisciplinary care strategies, such as palliative care, to improve outcomes in older patients within or across care settings
- Specific diagnostic, management, and/or decision-making and communication strategies pertaining to older adults with Alzheimer's disease/Alzheimer's disease-related dementias (AD/ADRD) within or across medical and/or surgical specialties and primary care/geriatrics
- Strategies for screening, primary, and/or secondary prevention of specialty/discipline-related diseases in older adults
- Initial development of tools to assess the risk and/or prognosis of a specialty/discipline-related disease and/or interventions in older adults

It is expected that applicants will have expertise in their clinical specialty/discipline, but may be less experienced in geriatric/gerontologic science or in other areas. As such, applicants should include participation of a senior collaborator with complementary expertise in aging-related research and, if needed, other collaborators and/or consultants in additional areas appropriate to the proposed project.

Geriatricians proposing a research project that integrates their geriatrics expertise with a specific clinical problem that is typically embraced by another specialty should involve a senior collaborator with expertise in that clinical problem as it relates to older patients. For example, a geriatrician researcher proposing a project focused on chronic kidney disease is encouraged to involve a senior nephrologist or other relevant specialist.

Link to Additional Information: http://grants.nih.gov/grants/guide/rfa-files/RFA-AG-21-023.html

18. Martin Delaney Collaboratories for HIV Cure Research, Department of Health and Human Services, National Institutes of Health

Application Deadline: December 7, 2020

The purpose of this Funding Opportunity Announcement (FOA) is to address the problem of HIV persistence in people living with HIV treated with suppressive antiretroviral drug regimens. This FOA will support coordinated basic, clinical, and applied research focused on developing strategies to achieve an HIV cure, defined as either sustained viral remission or eradication of HIV infection. While some aspect of clinical research is required, unlike the previous iteration of this RFA, clinical trials will no longer be supported. The application must include at least one private sector entity to facilitate rapid translation of basic discovery research into therapeutic development and testing. Collaboratory research should be milestone-based and should be focused on specific innovative approaches to characterize and quantify persistent HIV-1 reservoirs and/or understand and predict post-treatment control of viral rebound, identify and test therapeutic strategies to control viral rebound after discontinuation of antiretroviral therapy, and identify and test strategies to eradicate or permanently inactivate rebound-competent HIV.

The objective of this FOA is to support highly collaborative and synergistic research programs focused on the development of specific strategies to achieve either a sustained viral remission or complete eradication of persistent HIV reservoirs, through academic, industry, government, and community partnerships. The awardee will be required to communicate and collaborate with other awards made under this and the companion Martin Delaney Collaboratory for Pediatric HIV Cure Research program. The proposed research should be innovative and must include a combination of basic, clinical, and applied research. The research program must be divided into three, interconnected areas of research focus: 1) Basic Research, 2) Control of Rebound, and 3) Eradication/Inactivation.

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

- Identification and characterization of the cellular, tissue, and anatomical reservoirs of HIV that persist in individuals treated with effective ART regimens and serve as the source of rebound viremia following cessation of therapy.
- Development of physiologically relevant assays for quantifying rebound-competent HIV reservoirs and identifying biomarkers for predicting viral rebound.
- Characterization of rebound-competent HIV proviruses, their clonal expansion, and variables affecting their control or viral rebound after cessation of ART.
- Studies of the mechanisms of post-treatment control in individuals that have undergone treatment interruption.
- Development and analysis of therapeutic strategies that are hypothesized to lead to sustained, durable control (either immunologic or therapeutic) of viral rebound following the cessation of ART.
- Identification and preclinical testing of innovative strategies and combination approaches to reduce the size of the rebound-competent reservoir, towards an ultimate goal of permanently eradicating or inactivating rebound-competent virus to achieve a “classical” cure (no remaining rebound-competent virus).

Applicants are encouraged to include research to characterize and/or target HIV reservoirs in all tissues, including the central nervous system. Applications that include characterization of reservoirs in the central nervous system and/or cells of the myeloid lineage and the impact of interventions on viral rebound in this compartment and cell types will be considered for co-funding by NIMH, NIDA, and NINDS. Applications that include characterization of reservoirs in the gastrointestinal tract, male genital tract, kidney, and/or adipose tissue will be considered for co-funding by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). In addition, applications that include research evaluating the effects of addictive substances on HIV persistence at key reservoir sites will be considered for co-funding by NIDA.

The research proposed is expected to push the boundaries of what is currently feasible. It is expected that aspects of the research plan necessarily will include high-risk research and implementation of cutting-edge technology. Development of combination treatment strategies and/or gene-based therapies would be particularly suitable for this FOA.

Some aspect of clinical research as defined by NIH (https://grants.nih.gov/grants/glossary.htm#ClinicalResearch) must be integrated into the research plan (for example, collection of tissue biopsies or leukapheresis). Clinical trials are not allowed; however, applicants are encouraged to develop clinical trial protocols and seek independent funding support to carry out trials through NIAID HIV/AIDS Clinical Trial Networks, private sector partners, U01 applications, or other funding organizations. Funding from this UM1 can be used for analysis of samples collected from separately funded clinical trials. Each Collaboratory is expected to demonstrate an ability to provide the infrastructure needed for carrying out clinical research.

Link to Additional Information: http://grants.nih.gov/grants/guide/rfa-files/RFA-AI-20-035.html

19. Linguistics, National Science Foundation

Application Deadline: July 15, 2020 & January 15, 2021

The Linguistics Program supports basic science in the domain of human language, encompassing investigations of the grammatical properties of individual human languages, and of natural language in general. Research areas include syntax, semantics, morphology, phonetics, and phonology.

The program encourages projects that are interdisciplinary in methodological or theoretical perspective, and that address questions that cross disciplinary boundaries, such as (but not limited to):

- What are the psychological processes involved in the production, perception, and comprehension of language?
- What are the computational properties of language and/or the language processor that make fluent production, incremental comprehension or rapid learning possible?
- How do the acoustic and physiological properties of speech inform our theories of natural language and/or language processing?
- What role does human neurobiology play in shaping the various grammatical properties of language?
- How does language develop in natural learning contexts across the life-span?
- What social and cultural factors underlie language variation and change?

Because NSF's mandate is to support basic research, the Linguistics Program does not fund research that takes as its primary goal improved clinical practice or applied policy, nor does it support work to develop or assess pedagogical methods or tools for language instruction.

The Linguistics Program accepts proposals for a variety of project types: research proposals from scholars with PhDs or equivalent degrees, proposals for Doctoral Dissertation Research Improvement (LING-DDRI) awards, and CAREER proposals. We will also consider proposals for conferences. Funding requests for conference support should be submitted in accordance with Chapter II.E.7 of NSF's Proposal & Award Policies & Procedures Guide (PAPPG) https://www.nsf.gov/pubs/policydocs/pappg19_1/pappg_2.jsp#IIE7.

The Linguistics Program, in partnership with the National Endowment for the Humanities and in collaboration with programs in other NSF Directorates, supports efforts to develop and advance knowledge and infrastructure that will enable the analysis of languages that are both understudied and at risk of falling out of use. In recognition of the critical relevance of these languages to understanding the range and limits of human linguistic and cultural variation, the Linguistics Program accepts research and dissertation proposals in response to solicitations NSF Dynamic Language Infrastructure - NEH Documenting Endangered Languages (DLI-DEL) NSF 19-606 and Linguistics: Dynamic Language Infrastructure -Doctoral Dissertation Research Improvement Grants (DLI-DDRI) NSF 19-607. For more information about Multidisciplinary Research and Training Opportunities, please visit the SBE Office of Multidisciplinary Activities web site.

Link to Additional Information:
https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5408&WT.mc_id=USNSF_39&WT.mc_ev=click

20. Fomenting research partnerships between the U.S. and the D.R., Department of State

Application Deadline: July 6, 2020

The Public Affairs Section (PAS) of the U.S. Embassy in Santo Domingo announces an open competition to support effective partnerships that will bolster and leverage U.S. - Dominican Republic higher education research collaboration and capacity building focused on issues exacerbated by the COVID-19 pandemic, including gender-based violence, public health, and access to education for vulnerable populations. Proposals should include at least one U.S. higher education institution and one Dominican higher education institution as joint implementers. The proposal should support the development of a sustainable and long-lasting partnership between U.S. and Dominican higher education institutions and training and capacity building for Dominican students, faculty, and researchers.

The U.S. Embassy, Santo Domingo seeks proposals from U.S. and/or Dominican-based higher education institutions that meet all eligibility requirements outlined below. Organizations should submit proposals via email to SantoDomingoGrants@state.gov by Monday, July 6, 2020 at 11:59 p.m.

Project Purpose: The goal of this higher education research partnership program is to connect higher education institutions from the United States and the Dominican Republic to conduct joint research and capacity building focused on issues exacerbated by the COVID-19 pandemic, including gender-based violence, public health, and access to education for vulnerable populations. This

program will increase research, dialogue and training for students, faculty and researchers at Dominican and U.S. higher education institutions. The project will provide training related to planning and implementing a research project and must include U.S. content as part of the proposal. Proposals should also include webinars that are open to the public and showcase the U.S. and Dominican higher education research partnership. Proposals must highlight how they plan on becoming sustainable following grant completion and evolve into a sustainable and long-lasting partnership.

Participants and Audiences: Dominican and U.S. faculty, researchers and students who are conducting or will conduct research related to issues exacerbated by COVID-19 at higher education institutions.

Link to Additional Information: https://do.usembassy.gov/funding-opportunity-fomenting-research-partnerships-between-the-u-s-and-the-d-r/

21. Data.org Inclusive Growth and Recovery Challenge Welcomes Applications

Application Deadline: July 17, 2020

As part of a commitment to build the field of data science for social impact, data.org has launched a $10 million Inclusive Growth and Recovery Challenge, an open call for breakthrough ideas that harness the power of data science to help people and communities thrive, especially in the wake of COVID-19. Any strong and growing economy requires an inclusive and resilient approach to growth. By tapping into the expertise of a broad pool of thinkers and doers, data.org aims to catalyze innovative and scalable solutions to help individuals and communities thrive while building their resilience to withstand future challenges. Beyond the impacts on public health, the COVID-19 crisis is likely to have severe economic repercussions. Supply chains are being disrupted, businesses are suffering losses, workers are facing unemployment, and too many people lack the savings or credit to weather an economic downturn.

To that end, data.org seeks proposals from anywhere in the world aimed at using data science to advance shared prosperity and help ensure an inclusive recovery, with a particular focus on the following areas:

- Jobs of Tomorrow — In a time of economic stress, the current trends toward automation and job displacement could accelerate. How can data science be used to help workers remain secure in precarious times? Can data insights predict trends in the labor market and connect and prepare workers for the jobs of tomorrow?
- Access to Capital — Unleashing the spirit of grassroots entrepreneurs can help communities rebound by creating much-needed jobs and growing local economies. But in times of recession, the flow of credit to micro and small businesses tends to slow. How can data science enable microentrepreneurs to gain access to capital? How can data science help identify micro and small businesses with the potential to grow? How can data insights rethink creditworthiness and unlock capital for high potential business owners?
- Cities & Towns — As public- and private-sector investments flow into cities and towns to stimulate the economy, how can leaders use data-driven insights to make the right decisions to ensure economic security in underserved communities? How can data and analytics help connect neighborhoods to the resources and networks they need to access opportunity, including quality education, affordable housing and childcare, decent jobs, and transportation?

Through the challenge, data.org will award up to ten winners with data science talent, software, training, and a package of grants, technical support, consulting services, media production, marketing and promotional outreach, and software and infrastructure licenses valued at between $10,000 and $10 million.

Phase-one proposals are currently being accepted. Upon review, technical assistance and mentoring will be available to finalists to refine their proposals for phase two.

The challenge is open to any individual, organization, or collaboration from anywhere in the world (with the exception of North Korea, Sudan, Iran, Crimea, Syria, and Cuba), including nonprofits, for-profits, individuals 18 and older, and governments and UN agencies.

Links to additional information: https://www.data.org/challenge/ and https://www.data.org/terms-and-conditions/

22. Pfizer, Lilly Invite Applications for Osteoarthritis, Osteoarthritis Pain Virtual Learning Competitive Grant Program

Application Deadline: July 22, 2020

Pfizer and Lilly are inviting applications for the 2020 Osteoarthritis and Osteoarthritis Pain Virtual Learning Competitive Grant Program. Given the recent and anticipated cancellation of many medical conferences worldwide, healthcare providers will have

difficulty staying current with the newest recommendations for management/guidelines of osteoarthritis (OA) and the emerging data for research/therapies under development to treat OA and OA pain.

To help address the problem, Pfizer and Lilly intend to support virtual programs focused on osteoarthritis and chronic pain associated with OA patient-centered standard of care and management, including pain and function, the biopsychosocial aspects of the disease, the complexities and challenges of care, and the future of OA/OA pain management. Programs focused on reviewing data from canceled or virtual rheumatology, pain, primary care, or other associated medical conferences are of particular interest.

Grants of up to $250,000 will be awarded in support of education regarding the impact and importance of OA and its disease burden and the unmet medical need in OA pain management; current standard of care for OA/OA pain and its challenges; comprehensive OA pain management (including the biopsychosocial aspects of the disease, setting functional goals and tools for individual pain and function assessment, goal setting, monitoring and tailored pain management; and comorbidities associated with chronic pain in OA (psych, etc.); the impacts of COVID-19 on Chronic Pain Osteoarthritis patients; trends in OA management and the future of OA management; the evolution of the primary provider of osteoarthritis; healthcare disparities; and/or investigations into best practices from other relevant disease states.

Eligible applicants include medical, dental, nursing, allied health, and/or pharmacy professional schools; healthcare institutions (both large and small); professional associations and medical societies; medical education companies; and other entities with a mission related to healthcare professional education and/or healthcare improvement.

Link to Additional Information: https://pfe-pfizercom-prod.s3.amazonaws.com/2020%20RFP%20OA%20pain%20Revised%204-22-20_0.pdf

23. Leakey Foundation Invites Applications for Research of Human Origins

Application Deadline: July 15, 2020

The San Francisco-based Leakey Foundation is dedicated to advancing scientific knowledge, education, and public understanding of human origins, evolution, behavior, and survival. To that end, the foundation welcomes applications from investigators for promising new research projects specifically related to human origins, including projects in the areas of paleoanthropology, genetics, primate behavior, and the behavioral ecology of contemporary hunter-gatherers.

The foundation requests that in light of potential short- and long-term impacts of the COVID-19 pandemic, applicants have formal contingency plans for proposed projects. The foundation requests that applicants describe in a page their plans for adjusting the project if needed. Changes could include modified start dates for travel, field work or data collection, alternative data collection strategies, alternative field sites, or alternative methods for recruitment and engagement of participants, as well as any other potential modifications to research and development activities (including IRB/IACUC approvals/changes).

Most grants will range between $3,000 and $15,000, although larger grants of up to $25,000 may be awarded to senior scientists and postdoctoral students.

Eligible applicants must be affiliated with a school or research institution and hold a PhD or equivalent qualification in anthropology or a related discipline; or be enrolled in a doctoral program with all degree requirements fulfilled other than by a thesis/dissertation. There are no citizenship restrictions.

Link to Additional Information: https://leakeyfoundation.org/grants/research-grants/

24. Dynamics of Integrated Socio-Environmental Systems, National Science Foundation

Application Deadline: November 16, 2020

The DISES Program supports research projects that advance basic scientific understanding of integrated socio-environmental systems and the complex interactions (dynamics, processes, and feedbacks) within and among the environmental (biological, physical and chemical) and human ("socio") (economic, social, political, or behavioral) components of such a system. The program seeks proposals that emphasize the truly integrated nature of a socio-environmental system versus two discrete systems (a natural one and a human one) that are coupled. DISES projects must explore a connected and integrated socio-environmental system that includes explicit analysis of the processes and dynamics between the environmental and human components of the system. PIs are encouraged to develop proposals that push conceptual boundaries and build new theoretical framing of the understanding of socio-environmental systems. Additionally, we encourage the exploration of multi-scalar dynamics, processes and feedbacks between and within the socio-environmental system.

The human population on Earth has had an impact on virtually all aspects of the Earth's near-surface environment and distinguishing between separate human and natural sub-systems is no longer clear or obvious since these are often overlapping and can be considered integrated socio-environmental systems. Such systems include a continuum of environments from those with limited human populations (e.g. polar regions) to those in which human systems and processes mostly dominate (e.g. densely populated megacities). In all these spaces there are integrated systems operating, and many can be considered as domains for DISES study. For the purposes of this solicitation, we define the "socio" or human component of the system as one predominantly governed by human decisions, actions, and behaviors, and we define the "environmental" component of the system as one predominantly governed by biological, physical, and chemical processes. DISES projects can, therefore, include research that investigates integrated socio-environmental systems in agricultural and urban settings, as well as areas more distant from intensive human influence.

DISES projects must clearly identify a socio-environmental system, synthesis of multiple socio-environmental systems, or problem(s) that are amenable to investigation from both environmental-science and social-science perspectives. The analysis of the socio-environmental system must include and integrate the processes through which the environmental components impact or modify the human components, and the reciprocal processes through which the human components impact or modify the environmental component.

DISES projects should examine human societies and environmental characteristics as system components comprised of many individuals or processes at local, regional or global scales. Projects in which either of these components under study stands by itself or focuses on a singular component, process, or organism are unlikely to be supported by DISES.

DISES projects should address research questions that will advance theory in the science of socio-environmental systems or related interdisciplinary fields such as Coupled Human and Natural Systems (CHANS) as well as make contributions in specific disciplines. A DISES research proposal should demonstrate how the proposed research is grounded in relevant theory and on the ability to produce generalizable knowledge, such as, advancing basic conceptual models of how integrated socio-environmental systems interact over a variety of spatial and temporal scales.

Projects that are of interest to a range of sciences and extend across the human and environmental sciences are encouraged. Narrow case studies and projects that are entirely empirical or applicable only to a restricted locality should be avoided. Proposals should present novel, clear, and non-trivial hypotheses (or pose cogent research questions) that can be tested using a scientifically sound research design that employs established or innovative new methods, or a strong integration of several methods. Projects likely to improve capabilities for predicting the responses of integrated systems to endogenous and exogenous changes, including appropriate estimates of uncertainty in model predictions, are encouraged.

Link to Additional Information: https://www.nsf.gov/pubs/2020/nsf20579/nsf20579.pdf

25. Chronic Pain Management, Investigator- Initiated Research Award, Department of Defense

Application Deadline: November 16, 2020

The intent of the FY20 CPMRP IIRA is to support studies that have the potential to make significant advances in research, patient care, and/or quality of life in the FY20 CPMRP IIRA Focus Areas. IIRA applications may involve any phase of basic, translational, and clinically oriented research, including studies in animal models, research with human anatomical substances, and research with human subjects, as well as ancillary studies associated with an existing clinical trial; ***however, this award may not be used to conduct clinical trials.*** Multidisciplinary collaborations and innovative approaches are encouraged. The proposed research must be relevant to active duty Service members, Veterans, military beneficiaries, **and/or the American public**.

Per the FY19 CPMRP Congressional appropriation, chronic pain is defined as pain that occurs on at least half the days for 6 months or more, and which can be caused by issues including, but not limited to, combat- and training-related physical or mental stress and trauma, migraines and chronic headaches, traumatic brain injury, arthritis, muscular-skeletal conditions, neurological disease, tick and vector-borne disease, other insect-transmitted or tropical disease, and cancer. The CPMRP encourages alignment of research projects with the Federal Pain Research Strategy for maximizing the impact of chronic pain research outcomes. Applications from investigators within the military Services and applications involving multidisciplinary collaborations among academia, industry, the military Services, the U.S. Department of Veterans Affairs (VA), and other Federal Government agencies are highly encouraged. To meet the intent of the award mechanism, applications must address one of the FY20 CPMRP Investigator-Initiated Research Award (IIRA) Focus Areas. Selection of the appropriate Focus Area is the responsibility of the applicant.

- Chronification of pain (i.e., the transition of acute pain to chronic pain)
  - Understanding mechanisms of, and developing models for studying, the transition from acute to chronic pain following trauma either physical and/or psychological

- Development of mechanistically justified therapies to prevent and treat chronification
- Identification of risk or protective factors or biomarkers for patients susceptible to chronification including relevant subpopulations

- Development of novel non-μ-opioid receptor-targeted therapies for the treatment of chronic pain
  - Novel non-opioid pharmacological solutions
  - Devices that treat chronic pain directly or those that improve the administration of non-opioid analgesics
  - Complementary and integrative health non-pharmacological interventions

Additionally, the incorporation of the following into the proposed research approaches is encouraged but not required:

- Pain informatics
- Pragmatic approaches
- Patient expectations, preference, and goals of treatment at point of care
- Multiple ecological levels and stakeholder engagement in study designs with human participants
- Chronic pain conditions with high prevalence in military populations
- Established models of pain assessment that include pain interference in emotional and physical functioning

Link to Additional Information: https://www.grants.gov/web/grants/view-opportunity.html?oppId=327761

26. Disaster Resilience Research Grants, National Science Foundation

Application Deadline: September 15, 2020

Every year, communities across the United States suffer significant disasters from natural hazards, including droughts, earthquakes, floods, hurricanes, tornadoes, fires, and other natural hazards. While these sorts of adverse events cannot be eradicated, their consequences can be less disastrous if communities reduce their vulnerabilities and increase their resilience. Scientific and engineering research can contribute significantly to disaster resilience by revealing fundamental principles with implications for actions that can improve the nation's disaster resilience. This solicitation, therefore, seeks to catalyze research into disaster-resilience relevant phenomena in support of improved, science-based measures or mechanisms for improved resilience, including improved planning, policy, decisions, design, codes, and standards or other relevant mechanisms.

Two congressionally mandated interagency coordination programs - the National Earthquake Hazards Reduction Program (NEHRP) and the National Windstorm Impacts Reduction Program (NWIRP) - make NSF and NIST responsible to promote the nation's resilience to earthquake and windstorm hazards respectively. The Director of NSF and the Director of NIST serve as the senior leadership for both NEHRP and NWIRP, along with the FEMA Administrator and the Director of the USGS (for NEHRP) and the NOAA Administrator (for NWIRP). For both NEHRP and NWIRP, NSF is responsible to advance fundamental understanding that can be used to achieve those goals and NIST is responsible to ensure that fundamental new insights are translated to practice, as well as to conduct applied research directly. The laws also direct the agencies to coordinate to achieve those goals. This solicitation is designed to help both agencies better meet their NEHRP and NWIRP responsibilities, as well as their overall missions, via collaboration.

In addition, for several years, the OSTP-OMB priority memos have encouraged all science and technology agencies to pursue work relevant to the resilience of the nation, particularly its critical infrastructure, to natural hazards. The memos have also strongly encouraged agencies to coordinate, collaborate, and partner in order to maximize the probability of achieving national priorities. This solicitation adheres to the spirit of those priorities.
Toward the goals and responsibilities listed above, this joint solicitation is designed to enable both NSF and NIST to collaborate and partner to, among other things:

Encourage the nations' university-based research communities to pursue resilience-relevant research across the spectrum from fundamental to applied, in support of NEHRP and NWIRP; Enable agency staff (as well as the reviewing community) to better understand the range of research ideas and capabilities across the nation, across the fundamental to applied spectrum. Improved understanding will enable more effective policy design and coordination across agencies going forward; Convene all the awardees in a jointly designed annual PI meeting, that will (a) enable investigators to share research approaches and results; (b) ensure that findings are shared with Federal scientists and engineers with responsibility to improve resilience policies and standards; and (c) encourage discussion of potential new collaborations, including translational opportunities.

With this joint solicitation, the NSF and the U.S Department of Commerce (DOC) National Institute for Standards and Technology (NIST) call for proposals for research to advance fundamental understanding of disaster resilience in support of improved, science-based planning, policy, decisions, design, codes, and standards.

Natural hazards that are of interest include, but are not limited to:

- Windstorm events, including hurricanes and tornadoes;
- Water events, including hurricanes, sustained rain, both coastal and inland flood, and tsunamis;
- Wildland-urban interface fires;
- Earthquakes.

Terrorism, industrial accidents, and pandemics are not covered by this competition.

Projects that aim to address multi-hazard resilience phenomena are welcome. Processes associated with disaster resilience that are of interest include, but are not limited to:

- Destructive forces associated with hazards, such as wind forces, seismic forces, water forces, and wildland-urban interface fire-related radiative, convective, or branding forces;
- Performance of structures and infrastructure in natural hazard events;
- Assessment of potential community-level disaster consequences, including characterization of risks, potential failures, and anticipated losses in support of planning and decision making;
- Development or assessment of alternatives for improving resilience that address prevention, preparedness, response, mitigation, or recovery;
- Diffusion, adoption and implementation of measures for resilience of households, organizations, or jurisdictions.

Entities associated with disaster resilience that are of interest include, but are not limited to:

- Structures;
- Infrastructures/Lifelines;
- Communities/National, State, Local, Tribal Territorial Jurisdictions; Households.

Disaster resilience-related policies and practices that are of interest include, but are not limited to:

- Building design practices, codes, and standards;
- Infrastructure design practices, codes, and standards;
- Community planning and decision making;
- Household planning and decision making;
- Land-use planning and decision making.

Link to Additional Information: https://www.nsf.gov/pubs/2020/nsf20581/nsf20581.pdf

27. Social Psychology, National Science Foundation

Application Deadlines: July 15, 2020 & January 15, 202

The Social Psychology Program at NSF supports research and research infrastructure to advance basic knowledge in social psychology. Projects funded by the Social Psychology Program support the NSF mission to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense. Proposals considered by the Social Psychology Program must communicate both the intellectual merit of the science and its broader societal impacts.

Proposed research should carry strong potential for creating transformative advances in the basic understanding of human social behavior. Among the many research topics supported are: social cognition, attitudes, social and cultural influence, stereotypes, motivation, decision making, group dynamics, aggression, close relationships, social and affective neuroscience, social psychophysiology, emotions, prosocial behavior, health-related behavior, and personality and individual differences. Proposals that develop new theories or methods for understanding social behavior are highly encouraged. Research samples should represent substantial ranges of ethnicities, socioeconomic backgrounds, cultures, and other dimensions of human populations.

Interdisciplinary, multidisciplinary and convergent research approaches are encouraged. Proposals involving non-human animals are considered only if the research offers clear and direct contributions to understanding human social behavior. The program does not fund research that seeks to improve clinical practice as its primary outcome, nor does it consider proposals with disease-related goals, including work on the etiology, diagnosis or treatment of physical or mental disease, abnormality, or malfunction in human beings or animals.

In assessing intellectual merit, the Social Psychology Program places highest priority on research that is theoretically grounded, based on empirical observation and validation, and with designs appropriate to the questions asked. In assessing broader impacts, the Social Psychology Program places highest priority on proposals that offer strong potential to benefit society, strengthen our national security interests, improve the quality of life, broaden participation in science, enhance infrastructure for research and education, and include a plan for sharing the results with a wide variety of audiences.

The Social Psychology Program expects the methods, measures and data that result from NSF support to be openly shared with other researchers and the public. For further guidance proposers should consult Data Management for NSF SBE Directorate Proposals and Awards. The Data Management Plan should articulate how the proposed research will engage with best practices of open science. Researchers are expected to engage in open science practices, and deviations from that should be well-justified.

The Social Psychology Program accepts regular research proposals, including Faculty Early Career Development (CAREER) proposals, proposals for research in undergraduate institutions (RUI), rapid response research proposals (RAPID), and early-concept grants for exploratory research (EAGER). The Program also accepts small conference proposals for events (including workshops) being planned one year or more after submission. The Social Psychology Program does **not** accept proposals for doctoral dissertation improvement awards.

Investigators are encouraged to contact a Social Psychology Program Director before submitting a proposal to confirm its fit with the scope and priorities of the Social Psychology Program. Such contact will be most productive by sending a one-page (maximum) summary with an overview of the planned proposal, which includes a description of intellectual merit and broader impacts.

Link to Additional Information:
https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5712&WT.mc_id=USNSF_39&WT.mc_ev=click

Strategic
Resources

AUTORIZADO POR LA COMISIÓN ESTATAL DE ELECCIONES CEE-SA-2020-7751