Research Activities Newsletter

June - July 2021

In the News: Congratulations to the following awardees!!



Katherine Balantekin, Clinical Assistant Professor of Exercise and Nutrition Sciences, received a supplement award from the National Institute of Diabetes and Digestive and Kidney Diseases/NIH for her funded K01 entitled, *The Intersection between Loss of Control Eating and Obesity: The Role of Restriction and Food Reinforcement.* The supplement will support a project staff member who will assist with the study, which is examining the relationships among loss of control eating, parental restriction, and the reinforcing value of food with respect to obesity risk.



Rachael Hageman Blair, Associate Professor of Biostatistics, is Co-I on the continuation of the award from the National Institute of Diabetes and Digestive and Kidney Diseases/NIH (PI: Chelsie Elizabeth Armbruster, Microbiology and Immunology) for the research project entitled, *Conserved Proteus Mirabilis Genetic Requirements for Colonization of the Catheterized Urinary Tract.* The study aims to uncover novel, conserved, and clinically relevant targets for therapeutic intervention of catheter-associated urinary tract infections, which are among the most common hospital-acquired infections worldwide.



R. Lorraine Collins, Professor of Community Health and Health Behavior and Associate Dean for Research for SPHHP, is Co-I on a new award from UB CAT (PI: Qiaoqiang Gan, Electrical Engineering) for the project entitled *Rapid Drug-abuse Sensing using Portable Surface Enhanced Raman Spectroscopy (SERS) Chips*. The project is designed to test the use of SERS sensing as the basis for a cost-effective chip that will enable the rapid sensing of selected opioids chemicals in human samples. This simple, fast and low-cost method with high sensitivity in identifying opioids, may serve as routine pre-screening tool that could complement more invasive and expensive testing for clinical use and point-of-care diagnostics.



Jo Freudenheim, SUNY Distinguished Professor of Epidemiology and Environmental Health, is PI on a continuation award from the National Cancer Institute/NIH for the T32 training grant entitled, *Interdisciplinary Training in Cancer Epidemiology at UB.* The program provides training and hands-on opportunities for pre-doctoral and post-doctoral fellows to develop research skills in epidemiology, as well as other related disciplines.



Gregory Homish, Professor and Chair of Community Health and Health Behavior, is PI on a continuation award from National Institute on Drug Abuse/NIH, for the project entitled, *Substance Use in Reservists: Social and Environmental Influences*. The longitudinal study is in its 9th year and continues to examine the impact of two military experiences - never being deployed and separation from military – on substance use outcomes for both soldiers and their spouses.



Katarzyna Kordas, Associate Professor of Epidemiology and Environmental Health (EEH), is PI on a continuation award from the National Institute of Environmental Health Sciences/NIH for the project entitled, Effect of complex mixtures on oxidative stress and cognition in children. The study will continue to examine the extent to which chemical mixtures in early-middle childhood affect a molecular process thought to underlie the development of chronic disease, as well as functional endpoints that underlie children's learning and social interactions. Hailey Banack, Research Assistant Professor of EEH, James Olson, UB Distinguished Professor of Pharmacology & Toxicology and EEH, and Guan Yu, Assistant Professor of Biostatistics, are Co-Is.



Michael LaMonte, Research Professor, is PI on a new award from the Kent County Memorial Hospital/NIH, for the research project entitled, *Racial/Ethnic Disparities in Heart Failure: A Cross Cohort Collaboration*. The study will evaluate the magnitude and potential causes of racial/ethnic and sex disparities in incident heart failure and its subtypes and their prognosis in 130,000 men and women from 10 pooled cohorts.



Lucia Leone, Associate Professor of Community Health and Health Behavior, is Co-I on a continuation award (PI: Stephanie Anzman-Frasco, Pediatrics) from the Eunice Kennedy Shriver National Institute of Child Health & Human Development/NIH for the project entitled, *Promoting Healthier Meal Selection and Intake among Children in Restaurants*. The goal of the study is to establish the effectiveness of an inrestaurant intervention that is easy to implement and can be applied across restaurant contexts to promote healthier eating among children.



Amy Millen, Associate Professor of Epidemiology and Environmental Health, is PI on a new award from the National Eye Institute/NIH for the research project entitled, *A Study of Estrogen and Body Mass Index in Fuch's Endothelial Corneal Dystrophy*. Using data of postmenopausal women in the WHI, the study will examine associations between estrogen exposure, menopausal hormone therapy, body mass index, and serum estradiol concentrations in relation to Fuchs' endothelial corneal dystrophy, the leading cause of corneal blindness within the U.S. **Jean Wactawski-Wende**, SUNY Distinguished Professor of EEH and Dean of SPHHP, is Co-Investigator.



Kimberly Naus, Director of CAT Clients Services, is PI on a renewal award from the NYS Office of Children and Family Services for the project entitled, *Equipment Loan Closet*. The program loans equipment to legally blind persons for educational and work purposes.



Heather Orom, Associate Professor of Community Health and Health Behavior and the SPHHP's Associate Dean for Equity, Diversity and Inclusion, is Co-I on a continuation award (PI: Timothy Murphy, Medicine) from the National Center for Advancing Translational Sciences/NIH for the project entitled, *Igniting Hope: Mobilizing Community Resources to Achieve Health Equity 2020.* The award provides funding for an annual community-based multidisciplinary conference entitled the *Igniting Hope* series. The goal of the conference is to continue the dialogue on developing a strategy, which builds a culture of health, as the cornerstone of a plan to end health disparities among African Americans in Buffalo.



Meng Wang, Assistant Professor of Epidemiology and Environmental Health, is PI on a new award from the National Institute of Environmental Health Sciences/NIH for the research project entitled, *Air Pollution, Coronary Events, Atherosclerotic Progression in a Susceptible Population.* The study will examine whether exposure to air pollutants alter coronary biological process, accelerate disease progression, and contribute to coronary heart disease in 3500 patients with atherosclerosis in Beijing. **Lina Mu**, Associate Professor of Epidemiology and Environmental Health, and **Guan Yu**, Assistant Professor of Biostatistics, are Co-Investigators.



Courtney Wheelock, Predoctoral student in Exercise and Nutrition Science, received a fellowship from the American College of Sports Medicine for the project entitled, *Heat and Hypoxic Cross Acclimation for* exercise performance during altitude exposure and quantify any physiologic or cellular mechanisms involved. **David Hostler**, Professor and Chair of Exercise and Nutrition Sciences, is faculty sponsor.



Gregory Wilding, Professor and Chair of Biostatistics, is Co-I on two new awards. The first, from the National Institute of Neurological Disorders and Stroke/NIH (PI: Ferdinand Schweser, Neurology) is entitled, *Deep Gray Matter Iron and Disease Progression in Multiple Sclerosis*. The research is expected to determine a generalizable model of the evolution of imaging markers over time in patients relative to controls; cellular and molecular underpinnings of the imaging markers; and how imaging markers of iron are linked to neurodegeneration and injury in the white matter.

The second, from the National Institute on Aging/NIH (PI: Elsa Bou Ghanem, Microbiology and Immunology) is entitled *The Role of Neutrophils in the Age-driven Decline in Anti-pneumococcal Vaccine Responses.* The project's goal is to

determine the role of polymorphonuclear leukocytes in the age-driven reduction in vaccine responses and increased susceptibility to streptococcus pneumoniae.

Dr. Wilding also is Co-I on three continuation awards:

The first, from the National Institute of Nursing Research/NIH (PI: Grace Dean, Nursing), is entitled, *Efficacy of Nurse-Delivered Brief Behavioral Treatment to Self-Manage Insomnia in Cancer Survivors*. The study will continue to test a self-management behavioral intervention for cancer survivors with insomnia in order to reduce disease burden, improve well-being, strengthen self-determination and participation in health care, and prevent illness and complications.

The second is from the National Institute on Aging/NIH (PI: Kathleen Tornatore, Pharmacy) for the project entitled, Age and Race Influences on Immunosuppression after Renal Transplant. The study continues to seek to improve immunosuppression by creating novel dosing that integrates age, race and sex with cellular and clinical endpoints, pharmacokinetics and pharmacogenomics to attain personalized medicine.

The third is from the National Institute of Dental & Craniofacial Research/NIH (PI: Michelle Kay, Oral Biology) for the project entitled, *The Role of Oral Spirochete Virulence Factors in the Impairment of Neutrophil Response.* The study seeks to understand how oral treponemese modulate neutrophil response leads to periodontal disease and the development of potentially active therapeutic molecules will lead to the improvement of oral and systemic health.

In This Issue

In the News: Congratulations to the Following Awardees	1
Grant Clinic	4
NIH Funding Opportunities	
Request for Applications (RFA)	9
Program Announcements Reviews in an Institute (PAR)	14
Program Announcements (PA)	19
Individual Actions for Sustainability	21

Grant Clinic

GENERAL NOTICE

A new Research Space/Venue Questionnaire is now available on the SPHHP website.

Investigators who are planning to submit proposals, please complete both the <u>RAS Questionnaire</u> and <u>Research Venue/Space Questionnaire</u>.

NIH Applications: Page limits on attachments

https://nexus.od.nih.gov/all/2021/06/29/does-every-attachment-in-a-grant-application-have-a-page-limit/

NIH Applications: Creating system and people-friendly pdfs

https://nexus.od.nih.gov/all/2021/06/30/creating-people-and-system-friendly-pdf-attachments/

NOT-OD-21-073

Now Implemented: Changes to the Biographical Sketch and Other Support Format Page

Please check the Notice for the Specific changes. A full copy of the updated Biosketch instructions can be found here.
Use of the updated format pages now is required for applications and Research Performance Progress Reports (RPPRs) submitted for due dates on or after May 25, 2021. During the transition to the new Biosketch format, NIH will not withdraw applications that include the previous Biosketch format. Beginning with applications submitted on or after January 25, 2022, failure to follow the appropriate Biosketch format may cause NIH to withdraw your application from consideration.

NOT-ES-21-008

Notice of Intent to Publish a Funding Opportunity Announcement for Virtual Consortium for Translational/Transdisciplinary Environmental Research (ViCTER) (R01 Clinical Trial Optional)

The purpose of this Notice is to inform the scientific community that the National Institute of Environmental Health Sciences (NIEHS) plans to reissue a Funding Opportunity Announcement (FOA) for RFA-ES-18-007 - Virtual Consortium for Translational/Transdisciplinary Environmental Research (ViCTER) (R01 Clinical Trial Optional). When reissued, this FOA will continue to use the R01 activity code and will continue to have a clinical trial optional. The FOA is expected to be published in Fall 2021 with an expected application due date in Winter 2022 for Fiscal Year 2022 funding.

REQUESTS FOR INFORMATION

NOT-OD-21-160

NIH Request for Information (RFI): Advancing NIH Research on the Health of Women: A 2021 Conference (ARHW2021)

The NIH seeks comments on any or all of, but not limited to, the following topics:

- 1. Maternal Morbidity and Mortality
- 2. Chronic Debilitating Conditions in Women
- 3. Stagnant Cervical Cancer Survival Rates

Responses must be received by September 15, 2021, at 11:59 pm ET

NOT-OD-21-161

Request for Information (RFI) on Clarifying the Reporting Requirements for Departures from the Guide for the Care and Use of Laboratory Animals

Through this Request for Information (RFI), the NIH Office of Laboratory Animal Welfare (<u>OLAW</u>) is seeking input on clarifying guidance to Assured institutions regarding the Institutional Animal Care and Use Committee (IACUC) reporting requirements for departures from the *Guide for the Care and Use of Laboratory Animals* (<u>Guide</u>). Comments must be received on or before **November 1**, **2021**, **at 11:59 pm ET**.

REQUESTS FOR PROPOSAL

- NOT-OD-21-139 Extramural Loan Repayment Program for Clinical Researchers (LRP-CR)
- NOT-OD-21-140 Extramural Loan Repayment Program for Pediatric Research (LRP-PR)
- NOT-OD-21-141 Extramural Loan Repayment Program for Health Disparities Research (LRP-HDR)
- NOT-OD-21-142 Extramural Clinical Research Loan Repayment Program for Individuals from Disadvantaged Backgrounds (LRP-IDB)

NOT-OD21-143 Extramural Loan Repayment Program for Contraception and Infertility Research (LRP-CIR)

These Notices provides program-specific information for a new Extramural Loan Repayment Program subcategory called the Extramural Loan Repayment Program for Research in Emerging Areas Critical to Human Health (LRP-REACH). The NIH Loan Repayment Programs (LRPs) are a set of programs established by Congress and designed to recruit and retain highly qualified health professionals into biomedical or biobehavioral research careers. Additional detailed information about each LRP is provided at www.lrp.nih.gov/eligibility-programs and www.lrp.nih.gov/apply. The deadline for the applications period will be November 18, 2021

NOTICE OF INTENT TO PUBLISH

NOT-AA-21-035

Notice of Intent to Publish a Funding Opportunity Announcement for HIV Prevention and Alcohol (R01 Clinical Trials Optional)

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) intends to promote a new initiative by publishing a Funding Opportunity Announcement to solicit applications to expand the HIV/AIDS prevention toolkit among alcohol impacted populations with a range of patterns of episodic and long-term use and associated behavioral and biological risks for HIV acquisition. The FOA is expected to be published in Summer 2021 with an expected application due date in Fall 2021.

NOT-AA-21-036

Notice of Intent to Publish a Funding Opportunity Announcement for HIV Prevention and Alcohol (R34 Clinical Trials Optional)

The FOA seeks to expand the HIV/AIDS prevention toolkit among alcohol impacted populations with a range of patterns of episodic and long-term use and associated behavioral and biological risks for HIV acquisition. This R34 Funding Opportunity Announcement (FOA) supports studies that are both necessary and sufficient to inform the planning of a clinical trial within the scope of the companion announcement <u>RFA-AA-21-016</u>, HIV Prevention and Alcohol (R01 Clinical Trials Optional). The FOA is expected to be published in Summer 2021 with an expected application due date in Fall 2021.

NOT-NS-22-004

Notice of Intent to Publish a Funding Opportunity Announcement for Clinical Relevance of the Linkage between Environmental Toxicant Exposures and Alzheimer's Disease and Alzheimer's Disease Related Dementias (R01 Clinical Trial Not Allowed)

The National Institute of Neurological Disorders and Stroke (NINDS) and the National Institute on Aging (NIA) intend to promote a new initiative by publishing a Funding Opportunity Announcement (FOA) to solicit applications for research on the clinical relevance of the linkage between environmental toxicant exposures and Alzheimer's Disease and Alzheimer's Disease Related Dementias (AD/ADRD). The FOA is expected to be published in Winter 2022 with an expected application due date in Spring 2022.

NOTICE OF SPECIAL INTERESTS

If you will be applying under any of the special interest topics listed below, please indicate so, including the NIH Notice number, in the Comments box of the RAS Questionnaire. The RAS staff will ensure that this information is included with the application to NIH.

NOT-OD-21-127

Electronic Nicotine Delivery Systems (ENDS) and Alternative Nicotine and Tobacco Delivery Systems: Basic Mechanisms of Health Effects

The Office of Disease Prevention and participating ICOs are issuing this Notice to communicate our interest in research examining how electronic nicotine delivery systems (ENDS) affect normal and disease states relevant to human cells, tissues, organs, and behaviors. Research on alternative nicotine and tobacco delivery systems [e.g., heated tobacco products (also called heat-not-burn)] will also be considered. Studies exclusively examining smokeless tobacco or combustible tobacco products (e.g., cigarettes, cigars) will be considered non-responsive. Check the FOA for a list of the announcements. **Applicants must include** "NOT-IC-19-XXX" **in box 4B of the SF424 R&R form.**

NOT-CA-21-074

Early-life Factors and Cancer Development Later in Life

This NOSI seeks to further support research on early-life factors and cancer development later in life. Studies proposed in response to this NOSI should focus on human studies, but may incorporate research using animal models, especially in elucidating mechanisms relevant in humans. **Applicants must include** "NOT-CA-21-074" **in box 4B of the SF424 R&R form.** This NOSI will expire on March 08, 2024.

NOT-CA-21-085

New Information Technology-Enabled Care Delivery Models to Improve Depression Care in Cancer

This Notice of Special Interest (NOSI) highlights interest of the National Cancer Institute (NCI)'s Division of Cancer Control and Population Sciences in receiving investigator-initiated applications for conducting research on the design and implementation of new information technology (IT)-enabled care delivery models to improve depression-related care in cancer. **Applicants must include** "NOT-CA-21-085" **in box 4B of the SF424 R&R form.**

NOT-HD-21-027

Navigating Pediatric to Adult Health Care: Lost in Transition

The purpose of this NOSI is to encourage applications in high-priority research areas related to pediatric health care transition for youth with chronic physical/medical conditions or intellectual/developmental disabilities. Research applications that will advance our understanding of promising practices designed to facilitate successful health care transitions (HCT) from pediatric to adult care settings as well as barriers and facilitators to such transition are encouraged. The ultimate goal is to improve care quality and patient and family outcomes during and after HCT. **Applicants must include** "NOT-HD-21-027" **in box 4B of the SF424 R&R form.**

NOT-AI-21-057

HIV/AIDS in the Era of COVID-19: When Pandemics Collide

This NOSI encourages research on the impact and strategies needed to adapt the HIV/AIDS response through agile and innovative support of prevention and care and the maintenance of sustained HIV viral suppression during the coronavirus disease 2019 (COVID-19) pandemic. Submit applications for this initiative using PA-20-185 & PA-20-195. Applicants must include "NOT-AI-21-057" in box 4B of the SF424 R&R form.

NOT-AA-21-028

Public Policy Effects on Alcohol-, Cannabis-, Tobacco-, and Other Drug-Related Behaviors and Outcomes

This Notice is intended to support innovative research to examine policy effects that have the potential to lead to meaningful changes in public health. Research projects that may be supported include, but are not necessarily limited to: causal analyses of the effects of one or multiple public policies; evaluations of the effectiveness of specific public policies as tools for improving public health through their effects on alcohol-, cannabis-, tobacco-, and other substance-related behaviors and outcomes; studies of disparities in policy effects and the role of policy in exacerbating or potentially reducing health disparities; and research to advance methods and measurement used in studying relationships between public policies and alcohol-, cannabis-, tobacco-, and other substance-related behaviors and outcomes. **Applicants must include** "NOT-AA-21-028" **in box 4B of the SF424 R&R form.**

NOT-DA-21-012

Women and Sex/Gender Differences in Drug and Alcohol Abuse/Dependence

The purpose of this Notice is to inform potential applicants of the National Institute on Drug Abuse (NIDA) special interest in grant applications to conduct rigorous basic, translational and/or clinical research to: (1) advance identification of sex and/or gender differences in risk for substance use disorders or the response or medical consequences of alcohol or substance misuse to uncover the mechanisms of those differences, and to conduct translational research on those differences, and (2) advance research specific to women or highly relevant to women. Both preclinical and clinical studies are sought across all areas of drug and alcohol research. **Applicants must include** "NOT-DA-21-012" **in box 4B of the SF424 R&R form.**

NOT-CA-21-071

Expanding Cancer Control Research in Persistent Poverty Areas

The purpose of this Notice is to inform potential applicants about the National Cancer Institute (NCI)'s special interest in providing resources to support highly collaborative, multi-disciplinary Program Projects (P01s) that focus on the development and conduct of cancer control research in low-income and/or underserved populations living in persistent poverty (PP) areas. NCI is interested in programs that address the challenges and opportunities related to working in partnership with local clinics and other health or public health-related organizations to enhance the prevention of cancer and delivery of cancer care strategies to reduce the burden of cancer in PP areas. **Applicants must include** "NOT-CA-21-071" **in box 4B of the SF424 R&R form.** This NOSI will expire on May 08, 2023.

NOT-DA-21-003

Leveraging Longitudinal Studies in Animal Models to Identify Neural Mechanisms of Vulnerability and Resilience to Substance Use Disorder

NIDA seeks to stimulate research in non-human species aimed at modeling environmental and/or biological risk factors for SUD to elucidate neural and cognitive developmental mechanisms that may mediate, moderate, or predict the effects of these factors on subsequent emergence of SUD-related behaviors. Use of longitudinal designs and developmental-stage-appropriate paradigms are strongly encouraged. **Applicants must include** "NOT-DA-21-003" **in box 4B of the SF424 R&R form.** This NOSI will expire on September 08, 2024.

NOT-AG-21-015

Aging-Relevant Behavioral and Social Research on Coronavirus Disease 2019 (COVID-19)

This Notice of Special Interest (NOSI) is to highlight the continuing need for behavioral, psychological, social, and economic research on SARS-CoV-2 and coronavirus disease 2019 (COVID-19). There is a need for ongoing research on the longer-term effects of COVID-19 on the health and well-being of those infected, those caring for the sick, and many others whose lives were disrupted by the pandemic and its associated mitigation and prevention strategies. **Applicants must include** "NOT-AG-21-015" **in box 4B of the SF424 R&R form.**This NOSI will expire on May 08, 2023.

NOT-CA-21-031

Understanding the effects of cancer and cancer treatment on aging trajectories and aging outcomes

The purpose of this Notice of Special Interest is to solicit investigator-initiated applications that aim to better understand the effects of a cancer diagnosis and subsequent cancer treatment on aging trajectories and aging outcomes. Investigations in understudied populations, including those that are medically underserved, are encouraged. This notice applies to due dates on or after *March 8, 2021,* and subsequent receipt dates through January 7, 2024. **Applicants must include** "NOT-CA-21-031" in box 4B of the SF424 R&R form. This NOSI will expire on January 08, 2024.

NOT-DA-21-011

Effects of smoking and vaping on the risk and outcome of COVID-19 infection

The purpose of this notice is to communicate NIDA's interest in supporting research on the effects of smoking or vaping tobacco or marijuana on the risk of acquiring COVID-19 and the clinical course of the infection. This Notice is a reissuance of NOT-DA-20-084. Research applications focusing on individuals who smoke or vape either marijuana and/or tobacco to determine: 1) the risk of contracting a COVID-19 infection, 2) the effects on asymptomatic COVID-19 infected persons, and 3) the course of the COVID-19 infection are interested. Applicants must include "NOT-DA-21-011" in box 4B of the SF424 R&R form. This NOSI will expire on September 08, 2024.

NOT-DA-21-017

Medical Consequences of Smoking & Vaping Drugs of Abuse in Individuals with HIV and COVID-19

NIDA is interested in receiving research applications focusing on individuals with HIV who smoke or vape marijuana, tobacco, cocaine and/or methamphetamine to determine the long-term effects of their use among individuals with HIV and COVID-19. **Applicants must include** "NOT-DA-21-017" **in box 4B of the SF424 R&R form.** This NOSI will expire on September 08, 2024.

NOT-MD-21-008

Research to Address Vaccine Hesitancy, Uptake, and Implementation among Populations that Experience Health Disparities

The purpose of this NOSI is to solicit community-engaged research to: 1) evaluate intervention strategies (e.g., expand reach, access) to facilitate vaccination uptake in clinical and community contexts; and 2) address the barriers to increasing reach, access, and uptake of vaccinations among health disparity populations at high risk and likely to experience vaccine hesitancy. Submit applications for this initiative using <u>PA-20-183</u> & <u>PA-20-185</u>. **Applicants must include** "NOT-MD-21-008" in box 4B of the SF424 R&R form. This NOSI will expire on January 08, 2022.

NOT-OD-21-087

Developing and Testing Multilevel Physical Activity Interventions to Improve Health and Well-Being

The Office of Disease Prevention and participating ICOs are issuing this Notice to highlight our interest in encouraging highly innovative and promising translational research to improve our understanding of how to increase and maintain health-enhancing physical activity using multi-level interventions in a wide range of population groups across the lifespan (e.g., including racial and ethnic minorities, children, older adults, persons with medical/behavioral health conditions, and persons with disabilities). **Applicants must include** "NOT-OD-21-087" **in box 4B of the SF424 R&R form.** This NOSI will expire on February 16, 2024.

NOT-OD-21-100

Improving Patient Adherence to Treatment and Prevention Regimens to Promote Health

The objective of this NOSI is to encourage research grant applications that address patient adherence to treatment and prevention regimens to promote health outcomes. Applications may address healthcare regimen initiation, implementation, and/or persistence by patients. Descriptive and intervention research may address adherence determinants at one or more levels of ecologic influence, including the patient, caregiver/family, provider, healthcare system, and community levels. **Applicants must include** "NOT-OD-21-100" **in box 4B of the SF424 R&R form.** This NOSI will expire on June 08, 2024.

NOT-CA-21-062

National Cancer Institute SBIR/STTR Program Announcement Regarding Cancer Prevention, Diagnosis, and Treatment Technologies for Low-Resource Settings

The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs at the National Cancer Institute (NCI) are issuing this Notice of Special Interest (NOSI) to encourage SBIR/STTR grant applications from small business concerns (SBCs) in response to SBIR/STTR Omnibus Solicitations proposing commercially-directed research for the development of cancer prevention, diagnosis, or treatment technologies to improve cancer outcomes in low- and middle-income countries (LMICs), and low-resource settings in the US. **Applicants must include** "NOT-CA-21-062" **in box 4B of the SF424 R&R form.** This NOSI will expire on September 07, 2024.

NOT-OD-21-150

Interventions Designed to Change the Culture to Mitigate or Eliminate Sexual Harassment in the Biomedical Research Enterprise

The purpose of this Notice is to inform potential applicants of the NIH's interest in supporting research on interventions designed to change the culture to mitigate or eliminate sexual harassment in the biomedical research enterprise. This notice aligns with the Anti-Sexual Harassment policy statements released by NIH as well as recommendations made in the December 2019 Report from the Working Group to the Advisory Committee to the NIH Director (ACD) on Changing the Culture to End Sexual Harassment, which were endorsed by the ACD. Applicants must include "PAR-21-269" in box 4B of the SF424 R&R form. This NOSI will expire on October 14, 2023.

NIH Funding Opportunities

NIH Funding Opportunities: Request for Applications (RFA)

SEPTEMBER DUE DATES

RFA-RM-21-017 (R01 Clinical Trial Optional)

NIH Director's Transformative Research Awards

The NIH Director's Transformative Research Award Program supports individual scientists or groups of scientists proposing groundbreaking, exceptionally innovative, original, and/or unconventional research with the potential to create new scientific paradigms, establish entirely new and improved clinical approaches, or develop transformative technologies. Projects must clearly demonstrate, based on the strength of the logic, a compelling potential to produce a major impact in a broad area of relevance to the NIH. **Application Due Date:** September 01, 2021

RFA-RM-21-018 (DP5 Clinical Trial Optional)

NIH Director's Early Independence Awards

The NIH Director's Early Independence Award supports exceptional junior investigators who wish to pursue independent research soon after completion of their terminal doctoral degree or post-graduate clinical training, thereby forgoing the traditional post-doctoral training period and accelerating their entry into an independent research career. **Application Due Date:** September 03, 2021

RFA-AG-22-016 (R61/R33 Clinical Trial Required)

Mechanism-Focused Research to Promote Adherence to Healthful Behaviors to Prevent Mild Cognitive Impairment (MCI) and Alzheimer's Disease and Related Dementias (AD/ADRD)

This FOA will support pilot research (R61) to identify, measure, and assess the malleability of psychological or interpersonal adherence-relevant targets that, if successful, can transition to an R33 phase for implementation of rigorous, proof-of-concept intervention studies. The transition from the R61 to the R33 phase of the award will be administratively reviewed for and be dependent upon successful completion of the go/no-go criteria specified for the R61 phase. **Application Due Date:** September 05, 2021

RFA-CA-21-033 (U01 Clinical Trial Optional)

The Early Detection Research Network: Clinical Validation Centers

Clinical Validation Centers (CVCs) will conduct research to validate biomarkers and/or imaging methods for risk assessment and detection of early stage cancers. CVCs will also serve as resource centers for collaborative research within the EDRN by providing high-quality specimens for phase 1 and 2 biomarker refinement studies to other EDRN scientific units, as well as for conducting Network collaborative biomarker validation studies. The CVCs must also have the expertise and ability to conduct Phase 4 clinical utility trials of validated early detection biomarkers and/or imaging methods. **Application Due Date:** September 09, 2021

RFA-CA-21-034 (U24 Clinical Trial - Not Allowed)

The Early Detection Research Network: Data Management and Coordinating Center

The EDRN is a national infrastructure to discover, develop, and validate biomarkers and imaging methods for early cancer detection and risk assessment. The proposed DMCC will be responsible for the following activities: 1) Network Coordination, 2) Data Science, Data Management and Study Protocol Development, 3) Validation Study Infrastructure and Services, and 4) EDRN Core Fund Management. **Application Due Date:** September 09, 2021

RFA-CA-21-035 (U2C - Clinical Trial Not Allowed)

The Early Detection Research Network: Biomarker Characterization Centers

BCCs will (1) discover, develop, characterize and test new biomarkers or refine existing biomarkers, (2) develop, refine and/or standardize biomarker assays, (3) provide resources and support for the validation of biomarkers developed by the EDRN, and (4) participate in collaborative projects with other laboratories and centers.

Application Due Date: September 09, 2021

RFA-RM-21-015 (DP1 Clinical Trial Optional)

NIH Director's Pioneer Award Program

The NIH Director's Pioneer Award Program supports individual scientists of exceptional creativity who propose highly innovative research projects with the potential to produce a major impact on broad, important areas relevant to the mission of NIH. To be considered pioneering, the proposed research must reflect substantially different scientific directions from those already being pursued in the investigator's research program or elsewhere. **Application Due Date:** September 10, 2021

OCTOBER DUE DATES

RFA-AG-22-009 (R25 Clinical Trial Not Allowed) RFA-AG-22-010 (R25 Clinical Trial Not Allowed)

Short Courses on Interdisciplinary Behavioral and Social Sciences Research on Alzheimer's Disease and Related Dementias

The goal of the FOA is to support short courses geared towards advancing selected priority topic areas identified by the NIH on Aging in order to advance behavioral and social science research on Alzheimer's disease and its related dementias (AD/ADRD). It targets the following three priority research areas: 1) cross-national dementia research using harmonized data on cognitive function; 2) behavioral economic approaches to improve AD/ADRD health care delivery at the organizational level; and 3) integrating machine learning and the social sciences to improve healthcare research in AD/ADRD. **Application Due Date:** October 04, 2021

RFA-CA-21-021 (U01 Clinical Trial Optional)

Metabolic Dysregulation and Cancer Risk Program, Research Grants: A Transdisciplinary Approach to Obesity-Associated Research

The National Cancer Institute (NCI) invites research grant applications for transdisciplinary studies that will enhance our knowledge of the dynamics and underlying mechanisms that link obesity, metabolic dysregulation and increased cancer risk as part of the Metabolic Dysregulation and Cancer Risk Program. The Metabolic Dysregulation and Cancer Risk Program will focus on metabolic dysregulation as the key process linking obesity with cancer risk.

Application Due Date: October 06, 2021

RFA-CA-21-022 (U24 Clinical Trial Not Allowed)

Coordinating Center for the Metabolic Dysregulation and Cancer Risk Program: A Transdisciplinary Approach to Obesity-Associated Cancer Research

Through this Funding Opportunity Announcement (FOA), the National Cancer Institute (NCI) will support a Coordinating Center to facilitate coordination across the consortium of multiple individual research project grants for the Metabolic Dysregulation and Cancer Risk Program (U24; <u>RFA-CA-21-022</u>) whose overarching goal is to enhance our knowledge of the dynamics, and underlying mechanisms, that link obesity, metabolic dysregulation, and increased cancer risk. **Application Due Date:** October 06, 2021

RFA-Al-20-069 (R61/R33 Clinical Trial Optional)

Innovative Models for Delivering PrEP and STI Services to Stop HIV in the United States

The purpose of this FOA is to encourage and support the development of effective strategies for expanding the provision of HIV pre-exposure prophylaxis (PrEP) for people at increased risk but currently lacking these services by leveraging existing sexually transmitted infection (STI) programs. Funding for the fourth and fifth years(s) will be dependent upon achieving negotiated Go/No-go criteria and milestones. **Application Due Date:** October 13, 2021

RFA-DA-22-005 (R21 Clinical Trial Not Allowed)

RFA-DA-22-007 (R01 Clinical Trial Not Allowed)

RFA-DA-22-024 (R01 Basic Experimental Studies with Humans Required)

RFA-DA-22-030 (R21 Basic Experimental Studies with Humans Required)

Mechanistic Studies on the Impact of Social Inequality on the Substance Use Trajectory

This funding opportunity announcement invites mechanistic studies on the impact of social inequality on the brain and on the substance use trajectory. Applications investigating relevant mechanisms at the behavioral, cognitive, neurocircuitry, cellular, genetics, and epigenetics levels are encouraged. **Application Due Date:** October 14, 2021

RFA-DA-22-016 (R61/R33 Clinical Trials Not Allowed)

Exploratory Studies to Investigate the Mechanisms of Interrelationship Between Sleep and Substance Use Disorders

The purpose of this FOA is to support research project applications that are developmental and exploratory in nature to expand our knowledge on the basic neurobiology of the interrelationship between sleep and substance use disorders (SUDs). These mechanistic studies will not only offer an insight into the fundamental processes that link substance use disorders to disorders of sleep regulation and vice-versa but may also have implications for managing the risk for the development of SUDs and identifying new targets for prevention and therapeutics.

Application Due Date: October 14, 2021

RFA-HL-21-014 (R01 Clinical Trial Optional)

Understanding and Reducing Cardiovascular Disease in Type 1 Diabetes Mellitus

This funding opportunity will support epidemiologic studies to refine risk assessment, mechanistic trials to enhance understanding of the pathophysiology of CVD in T1DM, and small clinical trials that could inform the future development of larger trials focused on preventing or reducing the CVD complications of T1DM. The overall goal is to develop evidence-based guidelines to prevent or reduce CVD complications of T1DM across the lifespan.

Application Due Date: October 15, 2021

RFA-DA-22-032 (R21 Clinical Trial Not Allowed)

HEAL Initiative: Novel Targets for Opioid Use Disorders and Opioid Overdose

The purpose of this Funding Opportunity Announcement (FOA) is to support research projects focusing on the identification of druggable new targets and discovery of optimizable probes for development of safe and efficacious medications to prevent and treat opioid use disorders (OUDs), opioid overdose, and opioid-polysubstance use comorbidities. Application Due Date: October 19, 2021

RFA-DK-21-015 (P30 Clinical Trial Optional)

Nutrition Obesity Research Centers

This FOA invites applications from institutions/organizations that propose to establish core centers that are part of an integrated and existing program of nutrition and/or obesity research. The Nutrition Obesity Research Centers (NORC) program is designed to support and enhance the national research effort in nutrition and obesity. NORCs support three primary research-related activities: Research Core services, a Pilot and Feasibility (P and F) program, and an Enrichment program. All activities pursued by Nutrition Obesity Research Centers are designed to enhance the efficiency, productivity, effectiveness, and multidisciplinary nature of research in nutrition and obesity.

Application Due Date: October 20, 2021

NOVEMBER DUE DATES

RFA-DA-22-020 (UE5 Clinical Trial Not Allowed)

Growing Great Ideas: Research Education Course in Product Development and Entrepreneurship for Life Science Researchers

This FOA seeks applications to develop a customized curriculum and implement education programs/short courses in biomedical entrepreneurship, innovation and biomedical product development, specifically targeting scientists working in the field of drug addiction research. **Application Due Date**: November 18, 2021

RFA-DA-22-017 (R01 - Clinical Trial Optional)

PrEP for HIV Prevention among Substance Using Populations

NIDA is interested in research that addresses research gaps related to PrEP and its use among people who use drugs (PWUD), with the goals of improving PrEP uptake, adherence and implementation. Current US Public Health Service PrEP guidelines recommend PrEP for people who inject drugs (PWID) and mention alcohol and illicit drug use as potential concerns for clinical management. This RFA is restricted to projects conducted in the United States.

Applications are encouraged that propose research in states and counties identified in the US Government's Ending the HIV Epidemic (EHE) initiative. **Application Due Date**: November 12, 2021

RFA-AA-21-005 (P50 Clinical Trial Optional) Specialized Alcohol Research Centers

RFA-AA-21-006 (P60 Clinical trial Optional) Comprehensive Alcohol Research Centers

The overall purpose of the NIAAA Alcohol Research Center program is to provide leadership in conducting and fostering interdisciplinary, collaborative research on a wide variety of topics relevant to the Institute's mission. These topics include, but are not limited to: the nature, etiology, genetics, diagnosis, treatment, and prevention of alcohol use disorder, alcohol-related end organ diseases and their biomedical, psychosocial, and economic consequences across the lifespan and racial/ethnic groups and other health disparity populations. **Application Due Date**: November 15, 2021

RFA-CA-21-013 (R21 Clinical Trial Optional)

RFA-CA-21-014 (U01 Clinical Trial Optional)

RFA-CA-21-015 (U24 Clinical Trial Optional)

RFA-CA-21-016 (U24 Clinical Trial Optional)

Early-Stage Development of Informatics Technologies for Cancer Research and Management

The purpose of FOA is to invite applications for the development of enabling informatics technologies to improve the acquisition, management, analysis, and dissemination of data and knowledge across the cancer research continuum including cancer biology, cancer treatment and diagnosis, early cancer detection, risk assessment and prevention, cancer control and epidemiology, and/or cancer health disparities. This FOA focuses on early-stage development from prototyping to hardening and adaptation. Early-stage development is defined as initial tool development or the significant modification of existing tools for new applications. **Application Due Date**: November 17, 2021

MULTIPLE DUE DATES

RFA-HL-22-010 (K01 Independent Clinical Trial Required)

RFA-HL-22-011 (K01 Independent Clinical Trial Not Allowed)

Mentored Career Development Award to Promote Faculty Diversity in Biomedical Research

This FOA invites applications to enhance the pool of highly trained investigators from diverse backgrounds, including those from groups underrepresented in research areas of interest to the NHLBI. The career development will take place under the guidance of an experienced mentor in the biomedical, behavioral or clinical sciences leading to research independence. It is targeted toward individuals whose basic, clinical, and translational research interests are grounded in the advanced methods and experimental approaches needed to solve problems related to cardiovascular, pulmonary, and hematologic diseases and sleep disorders in the general and health disparities populations.

Application Due Dates: October 14, 2021; February 11, 2022; October 13, 2022; February 14, 2023; October 13, 2022; February 13, 2024

RFA-HL-23-004 (R35 Clinical Trial Optional)

NHLBI Outstanding Investigator Award (OIA)

The purpose of the NHLBI Outstanding Investigator Award (OIA) is to promote scientific productivity and innovation by providing long-term support and increased flexibility to experienced Program Directors/Principal Investigators (PD/PIs) who are currently PD/PIs on at least two NHLBI R01-equivalent awards and whose outstanding record of research demonstrates their ability to make major contributions to heart, lung, blood and sleep (HLBS) research. The OIA is intended to support a research program, rather than a research project, by providing the primary and most likely sole source of NHLBI funding on individual grant awards. The OIA will support the research program of NHLBI-funded investigators for up to seven years. **Application Due Dates**: February 15, 2022; February 15, 2023; February 15, 2024

RFA-HL-23-005 (R35 Clinical Trial Optional)

NHLBI Emerging Investigator Award (EIA)

The purpose of the NHLBI Emerging Investigator Award (EIA) is to promote scientific productivity and innovation by providing long-term support and increased flexibility to experienced Program Directors/Principal Investigators (PD/PIs) who are currently PD/PIs on at least two NHLBI R01-equivalent awards and whose outstanding record of research demonstrate their ability to make major contributions to heart, lung, blood and sleep (HLBS) research. The EIA will support the research program of NHLBI-funded investigators for up to seven years.

Application Due Dates: February 15, 2022; February 15, 2023; February 15, 2024

RFA-NS-20-008 (R41/R42); RFA-NS-20-010 (R43/R44) clinical trial required RFA-NS-20-009 (R41/R42); RFA-NS-20-011 (R43/R44) clinical trial not allowed

HEAL INITIATIVE: Development of Therapies and Technologies Directed at Enhanced Pain Management

These FOAs aim to speed scientific solutions to stem the national opioid public health crisis by supporting the development of therapies and technologies directed at enhanced pain management. They are focused on applications directed at improving pain treatment, including the development of new non-addictive medications and devices and objective pain measurement. In addition, NIH is interested in new screening tools and models focused specifically on pain and development of pain therapies.

Application Due Dates: September 8, 2021; January 6, 2022; April 6, 2022; September 8, 2022

RFA-AG-21-021 K76 Clinical Trial Required

Paul B. Beeson Emerging Leaders Career Development Award in Aging

This FOA invites early-stage physician and other health professional investigators with a commitment to aging and/or aging-related diseases to apply for this award to advance their research and leadership skills in their specialty and in the broader field of aging and geriatrics research. LOI due 30 days before application due date.

Application Due Dates: October 22, 2021 and October 21, 2022

RFA-OD-20-008 (K01) clinical trial not allowed RFA-OD-20-011 (K01) clinical trial required

Mentored Research Scientist Career Development Award in Tobacco Regulatory Research

This award provides support and protected time (2-5 years) for an intensive, supervised career development experience in biomedical, behavioral, and social science research that will inform the development and evaluation of regulations on tobacco product manufacturing, distribution, and marketing and that will lead to research independence. Candidates for the K01 award must have a research or health-professional doctoral degree.

Application Due Dates: October 08, 2021 and July 8, 2022

RFA-OD-20-009 (K99/R00) clinical trial not allowed

RFA-OD-20-010 (K99/R00) clinical trial required

Pathway to Independence Award in Tobacco Regulatory Research

This program is designed to facilitate a timely transition of outstanding postdoctoral researchers with a research and/or clinical doctorate degree from mentored, postdoctoral research positions to independent, tenure-track or equivalent faculty positions. This program will provide independent research support during this transition in order to help awardees launch competitive, independent research careers. **Application Due Dates**: October 08, 2021 and July 8, 2022

RFA-DA-19-019 (R43/R44) clinical trial optional

RFA-DA-19-020 (R41/R42) clinical trial optional

America's Startups and Small Businesses Build Technologies to Stop the Opioid Crisis

These FOAs invite applications from US small business concerns to develop technologies to provide science-and research-based solutions to the opioid emergency. **Application Due Date**: September 8, 2022

RFA-ES-19-011 (R21) – clinical trial not allowed

Mechanism for Time-Sensitive Research Opportunities in Environmental Health Sciences

This FOA supports novel environmental health research in which an unpredictable event or policy change provides a limited window of opportunity to collect human biological samples or environmental exposure data. A distinguishing feature of an appropriate study is the need for rapid review and funding, substantially shorter than the typical NIH grant review/award cycle, for the research question to be addressed and swiftly implemented.

Application Due Dates: Monthly due dates: please refer to the RFA.

RFA-DK-20-032 (R34 Clinical Trial Required)

Pilot and Feasibility Studies to Facilitate the Use of Diabetes Self-Management Education and Support to Improve Diabetes Care

The FOA is to test an innovative and pragmatic approach to address barriers to and facilitate greater use of diabetes self-management education and support (DSMES) by people living with diabetes mellitus. Research applications should engage key stakeholders in cultivating a practical and sustainable strategy with the potential for dissemination. The pilot trial of the proposed strategy should be designed to generate preliminary data in support of a future, full-scale trial to study broader dissemination and implementation to expand the use of DSMES.

Application Due Dates: June 22, 2022 and June 22, 2023.

RFA-Al-21-023 (R01 Clinical Trial Optional)

Respond: Epidemiology to End the HIV Epidemic (RESPOND: EEE)

The purpose of FOA is to support applications that address the RESPOND pillar of the *Ending the HIV Epidemic: A Plan for America* (EHE) initiative. The objective is to better understand HIV susceptibility and ongoing transmission in the United States (U.S.) using local and population-level epidemiology in collaboration with implementing partners. Data generated through this research will inform intervention approaches and facilitate more timely evaluation of context-specific HIV control strategies towards the goal of ending the HIV epidemic in the U.S.

Application Receipt Dates: Multiple dates, see announcement.

NIH Funding Opportunities: Program Announcements Reviews in an Institute (PAR)

PAR-21-281 (R01 Clinical Trials Not Allowed)

Dyadic Interpersonal Processes and Biopsychosocial Outcomes

This funding opportunity announcement (FOA) invites basic and/or methodological research projects that seek to illuminate or measure independent and interdependent health-related effects within dyads. For the purpose of this FOA, a *dyad* is a unit of two individuals whose interactions and influences on one another are nested within larger social contexts and networks. Both animal and human subjects research projects are welcome. **Application Due Dates:** February 05, 2022; February 05, 2023

PAR-21-287 (R01 Clinical Trial Optional)

Effectiveness of School-Based Health Centers to Advance Health Equity

The purpose of this Funding Opportunity Announcement is to support research that investigates the effectiveness of school-based health centers (SBHCs) as a health services care delivery model to address the needs of school-aged children from populations with health disparities (hence, underserved youth).

Application Due Dates: Standard dates apply.

PAR-21-286 (R50 Clinical Trial Not Allowed)

NCI Research Specialist (Core-based Scientist) Award

The Research Specialist Award is designed to encourage the development of stable research career opportunities for exceptional scientists who want to continue to pursue research within the context of an existing NCI-funded basic, translational, clinical, or population science cancer research program, but not serve as independent investigators. These scientists, such as researchers within a core/shared resource/central scientific support, are vital to sustaining the biomedical research enterprise. **Application Due Date:** March 17, 2022.

PAR-21-168 (R25) Clinical Trial Not Allowed

Summer Research Education Experience Program

The overarching goal of this R25 program is to support educational activities that complement and/or enhance the training of a workforce to meet the nation's biomedical, behavioral and clinical research needs. R25 programs that propose at least 8 weeks, but fewer than 15 weeks, of full-time research experiences during the summer may request continued part-time support for the participants to work on their research projects during the school year, up to the equivalent of a total of 15 weeks of full-time participation, as long as the entire research experience is completed within a 12-month period. Applications that demonstrate the potential to impact students and teachers from diverse backgrounds are particularly encouraged. **Application Due Dates:** March 17, 2022; March 17, 2023; March 19, 2024

PAR-20-236(R25) Clinical Trials Not Allowed

Providing Research Education Experiences to Enhance Diversity in the Next Generation of Substance Use and Addiction Scientists

This FOA invites applications from established researchers with a record of NIH funding, who can demonstrate that they have successfully guided previous early career scientists to independent research careers and are able to direct an educational research capacity building program. This R25 program intends to strengthen the pipeline of individuals in biomedical, behavioral, and clinical substance use and addiction research across various stages of the research pipeline to enhance the number of independently funded investigators from diverse backgrounds.

Application Due Dates: November 15, 2021; March 15, 2022; August 10, 2022; November 15, 2022; March 15, 2023; August 10, 2023; November 15, 2023

PAR-20-310 (R01) Clinical Trial Optional

Health Services Research on Minority Health and Health Disparities

The primary interest of this FOA is research on system-wide health services research that encompasses the diversity of individuals served within these health care systems. It is expected that projects will include patient or participant samples that are representative of the population served by the health care system(s) to be studied. Projects that include populations that identify across more than one health disparity group are encouraged.

Application Due Dates: November 17, 2021; March 17, 2022; November 17, 2022; February 17, 2023

PAR-20-302(R01) PAR-20-303 (R21)

Tobacco Control Policies to Promote Health Equity

Specifically, this FOA aims to stimulate scientific inquiry focused on innovative state and local level tobacco prevention and control policies. The long-term goal of this FOA is to reduce disparities in tobacco-related cancers, and in doing so, to promote health equity among all populations.

Application Due Dates: Standard dates apply.

PAR-20-289 (R25)-Clinical Trial Not Allowed

NIAID Research Education Program

The overarching goal of this R25 program is to support educational activities that complement and/or enhance the training of a workforce to meet the nation's biomedical, behavioral and clinical research needs. The PD/PI should be an established investigator in the scientific area in which the application is targeted and capable of providing both administrative and scientific leadership to the development and implementation of the proposed program. The PD/PI will be expected to monitor and assess the program and submit all documents and reports as required. Participants are limited to the following individuals:

- Graduate/health professional (e.g., medical) students, medical residents, postdoctoral fellows, and/or earlycareer faculty. For this program "early career faculty" must be within the first 8 years of their first faculty appointment.
- Participants may be from a single career stage, or programs may propose to bridge several career stages of participants.
- Participants may be early career researchers that are moving into new research areas relevant to the NIAID research.

Note that high school and undergraduate students, postbaccalaureate fellows, and master's level graduate students may not be supported as participants under this FOA.

Application Due Dates: December 7, 2021 and December 7, 2022

PAR-21-027 (R01) Clinical Trial Not Allowed

Multidisciplinary Approaches to HIV-Associated Comorbidities and Prioritizing Intervention Targets

This FOA seeks applications for comprehensive systems biology studies using multidisciplinary team science to identify common, overlapping etiologies of HIV-associated comorbidities. Ultimately, the goal is to identify targets for intervention to mitigate multiple comorbidities associated with HIV infection.

Application Due Dates: January 7, 2022; May 7, 2022; January 7, 2023

PAR-21-044 (X01)

Population Assessment of Tobacco and Health (PATH) Study Biospecimen Access

This Funding Opportunity Announcement (FOA) allows investigators to apply for access to the Population Assessment of Tobacco and Health (PATH) Study biospecimens for use in conducting tobacco-related research studies. The PATH Study collects data from adults and youth. Investigators proposing meritorious and feasible studies consistent with PATH Study objectives and/or research priorities for tobacco regulatory science will be given highest priority for access to PATH Study biospecimens.

Application Due Dates: October 29, 2021; April 29, 2022; October 31, 2022; April 28, 2023; October 31, 2023.

PAR-20-307(P30) Clinical Trial Optional PAR-20-308(P30) Clinical Trial Optional

Developmental AIDS Research Centers on Mental Health and HIV/AIDS

D-ARC awards permit the centralized coordination of affiliated research activities, foster the development of scientific innovations and new collaborations, encourage interdisciplinary research, and facilitate the dissemination of public health advances to implementing agencies, academia, affected communities, and policymakers. These Centers must have the potential to support research over a range of cross-cutting areas that may include biological, biomedical, behavioral, neuroscience, mental health, prevention, clinical sciences, and implementation science research.

Application Due Dates: August 25, 2021; August 25, 2022; August 25, 2023.

PAR-21-033 (R01 Clinical Trial Required)

National Cancer Institute's Investigator-Initiated Early Phase Clinical Trials for Cancer Treatment and Diagnosis The purpose of this FOA is to seek research projects that implement early phase (Phase 0, I, and II) investigator-initiated clinical trials focused on cancer-targeted diagnostic and therapeutic interventions of direct relevance to the research mission of the National Cancer Institute's (NCI) Division of Cancer Treatment and Diagnosis (DCTD) and the Office of HIV and AIDS Malignancies (OHAM, Office of the Director). Applicants are strongly encouraged to consult the NCI DCTD website and/or the OHAM website to learn more about the various program goals, research priorities, and strategies developed to fight cancer. Applications submitted to this FOA must include studies that meet the National Institutes of Health (NIH) definition of a clinical trial (see NOT-OD-15-015 for details) and provide specific clinical trial information as described in this FOA. This FOA does not accept phase III clinical trials in any area of cancer research; Application Due Dates: Standard dates apply.

PAR-21-035 (R01 Clinical Trial Required)

Cancer Prevention and Control Clinical Trials Grant Program

The National Cancer Institute (NCI) invites applications for support of investigator-initiated clinical trials related to the programmatic interests of the NCI Division of Cancer Prevention and/or the NCI Division of Cancer Control and Population Sciences that have the potential to reduce the burden of cancer through improvements in early detection, screening, prevention and interception, healthcare delivery, quality of life, and/or survivorship related to cancer; with such attributes, the proposed studies should also have the potential to improve clinical practice and/or public health. Applications submitted to this FOA must include studies that meet the National Institutes of Health (NIH) definition of a clinical trial (see NOT-OD-15-015 for details) and provide specific clinical trial information as described in this FOA and the application instructions. **Application Due Dates:** Standard dates apply.

PAR-21-038 (R01 Clinical Trial Not Allowed)

PAR-21-039 (R01 Basic Experimental Studies with Humans Required)

Stephen I. Katz Early Stage Investigator Research Project Grant

The Stephen I. Katz Early Stage Investigator Research Project Grant supports an innovative project that represents a change in research direction for an early stage investigator (ESI) and for which no preliminary data exist. Applications submitted to this Funding Opportunity Announcement (FOA) must not include preliminary data. Applications must include a separate attachment describing the change in research direction. The proposed project must be related to the programmatic interests of one or more of the participating NIH Institutes and Centers (ICs) based on their scientific missions. **Application Due Dates:** September 28, 2021; January 26, 2022; May 26, 2022; September 27, 2022; January 26, 2023; May 26, 2023; September 26, 2023

PAR-21-072 (R24 Clinical Trial Not Allowed)

NIAAA Resource-Related Research Projects

The purpose of the R24 grant is to support investigator-initiated resources designed to provide materials and services to support and advance biomedical research on a national basis. An R24 resource grant mechanism is a non-hypothesis-driven activity to provide data, materials, tools, or services that are essential to making timely, high quality, and cost-efficient progress in a field. Hypothesis-driven research applications should not be submitted in response to this program announcement but to another mechanism that encourages this type of research.

Application Due Dates: Standard dates apply.

PAR-20-315 (R00 Clinical Trial Optional)

Limited Competition: Lasker Clinical Research Scholars Transition Award

The Lasker Clinical Research Scholars Program supports research activities during the early stage careers of independent clinical researchers. This FOA offers the opportunity for current Lasker awardees (Si2) to apply for the

transition phase (R00) of the program. In the R00 phase, successful Si2 scholars will receive up to 5 years of NIH support for their research at an extramural research facility. **Application Due Dates: Rolling receipt dates**

PAR-21-022 (R01 Clinical Trial Optional)
PAR-21-023 (R34 Clinical Trial Optional)

Multi-Site Studies for System-Level Implementation of Substance Use Prevention and Treatment Services

This FOA seeks research projects that will test implementation strategies intended to achieve system-wide integration of evidence-based practices (interventions, guidelines, or service delivery models) to prevent or treat substance use disorders (broadly defined to include alcohol, tobacco and other drugs, as well as prescription medications). Areas of interest also include implementation of guidelines related to the appropriate use of opioids for pain management in individuals with or at risk for opioid use disorder. When clearly justified, applicants may propose to test strategies that are designed to achieve system-wide de-implementation of programs or clinical practices that are ineffective, unproven, wasteful or harmful.

Application Due Dates: November 15, 2021; July 19, 2022; November 15, 2022; July 19, 2023; November 15, 2023.

PAR-21-065 Curriculum or Methods Development (R25 Clinical Trial Not Allowed)

PAR-21-066 Courses for Skills Development (R25 Clinical Trial Not Allowed)

PAR-21-067 Research Experiences (R25 Clinical Trial Not Allowed)

Cancer Research Education Grants Program

The over-arching goal of this NCI R25 program is to support educational activities that complement and/or enhance the training of a workforce to meet the nation's biomedical, behavioral and clinical research needs. Applications are encouraged that propose innovative, state-of-the-art programs that address the cause, diagnosis, prevention, or treatment of cancer, rehabilitation from cancer, or the continuing care of cancer patients and the families of cancer patients. **Application Due Dates:** Standard dates apply.

PAR-21-080 (R01 Clinical trial not allowed)

PAR-21-081 (R01 Clinical Trial Optional)

Addressing the Etiology of Health Disparities and Health Advantages Among Immigrant Populations

Addressing the Etiology of Health Disparities and Health Advantages Among Immigrant Populations

The purpose of this FOA is to support innovative research to understand factors uniquely associated with the immigration experience that contribute to health disparities or health advantages among U.S. immigrant populations. Most research on immigrant health does not consider the factors and processes that pushed migration of members from groups or subsets of groups from one country to another. Little attention has been given to integration of the pre-existing experiences, (for example, starvation resulting from rapid environmental changes, changing food sources, exposures to toxic chemicals and pesticides), and how the experience of migration itself, or how the process of adjustment and adaptation to a new cultural, social, political and ecological environment may affect health outcomes. It is also important to consider the period(s) in the life course when immigration was experienced and how that experience may affect health outcomes. **Application Due Dates:** Standard dates apply.

PAR-21-068 (R01 Clinical Trial Optional) PAR-21-069 (R21 Clinical Trial Optional)

Multidisciplinary Studies of HIV/AIDS and Aging

This FOA encourages applications at the intersection of HIV and aging by addressing two overarching objectives: 1) to improve understanding of biological, clinical, and socio-behavioral aspects of aging through the lens of HIV infection and its treatment; and 2) to improve approaches for testing, prevention, and treatment of HIV infection, and management of HIV-related comorbidities, co-infections, and complications in different populations and cultural settings by applying our current understanding of aging science. **Application Due Dates:** Standard dates apply.

PAR-21-097 (R34 Clinical Trial Optional)

Prevention and Intervention Approaches for Fetal Alcohol Spectrum Disorders

This FOA for R34 planning grant applications focuses on prevention and intervention strategies for fetal alcohol spectrum disorders (FASD) throughout the lifespan. The intent of this FOA is to support research that advances (1) prevention approaches to reduce prenatal alcohol exposure and incidence of FASD and (2) interventions for FASD. It is expected that research conducted via this mechanism will consist of studies that are a pre-requisite for preparing and submitting subsequent applications for larger scale FASD prevention or intervention studies.

Application Due Dates: October 19, 2021; February 17, 2022; June 17, 2022; October 18, 2022; February 17, 2023; June 19, 2023; October 17, 2023

PAR-21-098 (R61/R33 Clinical Trial Optional)

Prevention and Intervention Approaches for Fetal Alcohol Spectrum Disorders

This FOA focuses on prevention and intervention strategies for fetal alcohol spectrum disorders (FASD) throughout the lifespan. The intent of this FOA is to support research that advances (1) prevention approaches to reduce prenatal alcohol exposure and the incidence of FASD and (2) interventions for FASD. These objectives will be accomplished with the Exploratory/Developmental Phased Award (R61/R33) mechanism, clinical trial optional. The R61 phase will support pilot studies or secondary data analysis for hypothesis development and feasibility, and research testing the hypotheses can be expanded in the R33 phase. The transition to the R33 phase will be determined by NIAAA program staff after evaluation of the achievement of specific milestones set for the R61 phase. Highest priority will be given to applications with clinical trials. **Application Due Dates:** October 19, 2021; February 17, 2022; June 17, 2022; October 18, 2022; February 17, 2023; June 19, 2023; October 17, 2023

PAS-21-031 (R01 Clinical Trial Optional)

Priority HIV/AIDS Research within the Mission of the NIDDK

This Funding Opportunity Announcement (FOA) seeks to stimulate HIV/AIDS research within the mission of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) that align with the HIV/AIDS research priorities outlined by the NIH Office of AIDS Research (OAR). These priorities were most recently described in NOT-OD-20-018 UPDATE: NIH HIV/AIDS Research Priorities and Guidelines for Determining HIV/AIDS Funding.

Application Due Dates: Standard dates apply.

PAR-21-170 (K01 Independent Basic Experimental Studies with Humans Required)

PAR-21-171 (K01 Clinical Trial Required)

PAR-21-172 (K01 Clinical Trial Not Allowed)

Transition to Independent Environmental Health Research (TIEHR) Career Award

The Transition to Independent Environmental Health (TIEHR) Career Award is a 3-year bridge scholar development program for newly independent faculty who intend to pursue research careers in environmental health sciences. At the conclusion of the career development period the candidates are expected to demonstrate they can successfully compete for research funding in the environmental health sciences. **Application Due Dates:** Standard dates apply.

PAR-21-173 (R16 - Clinical Trial Not Allowed)

Support for Research Excellence - First Independent Research (SuRE-First) Award

The purpose of SuRE-First awards is to support research grants for faculty investigators who have not had prior independent external research grants. Since the SuRE-First Award is structured to best support a single PD/PI, multiple PD(s)/PI(s) are not allowed. PD(s)/PI(s) with similar or complementary research interests may apply separately. A PD/PI must have a full-time tenure-track (or equivalent) faculty appointment at the applicant institution and be eligible to apply for NIH research project grants. **Application Due Dates:** Standard dates apply.

PAR-21-183 (UG3/UH3 Clinical Trial optional)

Developing Digital Therapeutics for Substance Use Disorders

The purpose of this Funding Opportunity Announcement (FOA) is to accelerate the development of Digital Therapeutics (DTx) to treat Substance Use Disorders (SUDs). The primary objective of this FOA is to move DTx to their next step in the development process, with the ultimate goal of generating new, FDA authorized, disseminated treatments for SUDs. Applications may focus on the pre-clinical and/or clinical development and testing of new DTx or existing DTx developed for other indications. **Application Receipt Dates:** Multiple dates, see announcement.

PAR-21-206 (R01 Clinical Trial Optional)

Academic-Industrial Partnerships for Translation of Technologies for Diagnosis and Treatment

The purpose of this Funding Opportunity Announcement (FOA) is to stimulate efforts to translate scientific discoveries and engineering developments into methods or tools that address problems in basic research to understand disease, or in applied research to assess risk, detect, prevent, diagnose, treat, and/or manage disease. The rationale is to deliver new capabilities to meet evolving requirements for technologies and methods relevant to the advance of research and delivery of care in pre-clinical, clinical and non-clinical settings, domestic or foreign, for conditions and diseases within the missions of participating institutes. **Application Receipt Dates:** Multiple dates, see announcement.

PAR-21-208 (R21 Clinical Trial Optional)

Cutting-Edge Basic Research Awards (CEBRA)

The proposed research should: 1. develop, and/or adapt, revolutionary techniques or methods for addiction research or that show promising future applicability to SUD research; and /or 2. test an innovative and significant hypothesis for which there are scant precedent or preliminary data and which, if confirmed, would transform current thinking. The program supports high-risk and potentially high-impact research that is underrepresented or not included in NIDA's current portfolio that has the potential to transform SUD research. **Application Receipt Dates:** Multiple dates, see announcement.

PAR-21-196 (R25 Independent Clinical Trial Not Allowed)

Innovative Programs to Enhance Research Training (IPÉRT)

The overarching goal of this R25 program is to support educational activities that complement and/or enhance the training of a workforce to meet the nation's biomedical, behavioral, and clinical research needs. this FOA will support creative educational activities with a primary focus on: **Courses for Skills Development; Mentoring Activities.**

Application Due Dates: October 14, 2021; October 14, 2022; October 13, 2023

PAR-21-197 (UG3/UH3 Clinical Trial Required)

NIDCR Behavioral and Social Intervention Clinical Trial Planning and Implementation Cooperative Agreement The purpose of this Funding Opportunity Announcement (FOA) is to encourage UG3/UH3 phased cooperative agreement research applications to plan and implement behavioral and social intervention clinical trials. Studies appropriate for this announcement include clinical trials to develop and test behavior change interventions related to dental, oral, or craniofacial conditions. Awards made under this FOA will initially support a milestone-driven planning phase (UG3) for up to 2 years, with possible transition to a clinical trial implementation phase (UH3) of up to five years. Application Due Dates: Multiple dates, see announcement.

PAR-21-207 (R01 Clinical Trial Optional)

Mechanism-Focused Research to Promote Adherence to Healthful Behaviors to Prevent Mild Cognitive Impairment (MCI) and Alzheimer's Disease and Related Dementias

This FOA invites R01 applications for ancillary studies that address psychological and interpersonal mechanisms driving adherence to behavior or lifestyle change relevant to the prevention of cognitive decline, Mild Cognitive Impairment (MCI), and Alzheimer's disease and Alzheimer's disease-related dementias (AD/ADRD). This FOA will specifically support ancillary studies to ongoing, early- to late-stage clinical intervention trials.

Application Due Dates: Multiple dates, see announcement.

PAR-21-250 (R21/R33 Clinical Trial Optional)

Mechanisms of Alcohol Tolerance

The intent of this FOA is to: (1) develop hypotheses about cellular, molecular or network mechanisms that regulate sensitivity and tolerance to alcohol, and (2) develop quantitative models to predict the development of tolerance and the progression to alcohol use disorder. These objectives will be accomplished with a Phased Innovation (R21/R33) mechanism, clinical trial optional, in which secondary data analysis or pilot studies can occur during the R21 phase, and research testing the hypotheses can be expanded in the R33 phase.

Application Due Dates: Multiple dates, see announcement.

NIH Funding Opportunities: Program Announcements (PA)

The following opportunities have standard due dates unless noted otherwise:

PA-21-262

PHS 2021-2 Omnibus Solicitation of the NIH for Small Business Technology Transfer Grant Applications (Parent STTR [R41/R42] Clinical Trial Not Allowed). Expiration Date: April 06, 2022

PA-21-261

PHS 2021-2 Omnibus Solicitation of the NIH for Small Business Technology Transfer Grant Applications (Parent STTR [R41/R42] Clinical Trial Required). Expiration Date: April 06, 2022

PA-21-260

PHS 2021-2 Omnibus Solicitation of the NIH and CDC for Small Business Innovation Research Grant Applications (Parent SBIR [R43/R44] Clinical Trial Required). Expiration Date: April 06, 2022

PA-21-259

PHS 2021-2 Omnibus Solicitation of the NIH, CDC and FDA for Small Business Innovation Research Grant Applications (Parent SBIR [R43/R44] Clinical Trial Not Allowed).

Expiration Date: April 06, 2022

PA-21-232

Comprehensive Care for Adults with Type 2 Diabetes Mellitus from Populations with Health Disparities (R01 Clinical Trial Optional). Expiration Date: September 08, 2024

PA-21-180

Pilot Health Services and Economic Research on the Treatment of Drug, Alcohol, and Tobacco Use Disorders (R34 - Clinical Trial Optional). Expiration Date: May 08, 2024

PA-21-205

Development & Testing of Novel Interventions to Improve HIV Prevention, Treatment, and Program Implementation for People Who Use Drugs (R34 Clinical Trial Required).

Expiration Date: May 08, 2024

PA-21-164

Using Innovative Digital Healthcare Solutions to Improve Quality at the Point of Care (R21/R33 - Clinical Trial Optional). Expiration Date: July 18, 2024

PA-21-151

NIH Support for Conferences and Scientific Meetings (Parent R13 Clinical Trial Not Allowed).

Expiration Date: January 08, 2024

PA-21-071

Research Supplements to Promote Diversity in Health-Related Research (Admin Supp - Clinical Trial Not Allowed). Expiration Date: May 8, 2023

PA-20-272

Administrative Supplements to Existing NIH Grants and Cooperative Agreements (Parent Admin Supp Clinical Trial Optional). Expiration Date: July 24, 2023

PA-21-047 Ruth L. Kirschstein National Research Service Award (NRSA) Individual Senior Fellowship (Parent F33)

PA-21-048 Ruth L. Kirschstein National Research Service Award (NRSA) Individual Postdoctoral Fellowship (Parent F32)

PA-21-049 Ruth L. Kirschstein National Research Service Award (NRSA) Individual Fellowship for Students at Institutions with NIH-Funded Institutional Predoctoral Dual-Degree Training Programs (Parent F30)
PA-21-050 Ruth L. Kirschstein National Research Service Award (NRSA) Individual Fellowship for Students at

Institutions Without NIH-Funded Institutional Predoctoral Dual-Degree Training Programs (Parent F30)

PA-21-051 Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship (Parent F31)

PA-21-052 Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship to Promote Diversity in Health-Related Research (Parent F31-Diversity)

Expiration Date: September 8, 2023

PA-21-110 Pilot and Feasibility Studies in Preparation for Substance Use Prevention Trials (R34 Clinical Trial Optional). Expiration Date: May 08, 2024

Individual Actions for Sustainability

Reduce water waste.

It takes a lot of energy to pump, heat, and treat your water. So, take shorter showers, turn off the tap while brushing your teeth, and switch to <u>Water Sense</u>-labeled fixtures and appliances.



For more information about research support, visit our website sphhp.buffalo.edu/ras