

# WEEKLY RESEARCH UPDATES AND OPPORTUNITIES

December 6, 2017

## Faculty Research Opportunities

**Mentored Quantitative Research Development Award (Parent K25 - Independent Clinical Trial Not Allowed)** - The purpose of the Mentored Quantitative Research Career Development Award (K25) is to attract to NIH-relevant research those investigators whose quantitative science and engineering research has thus far not been focused primarily on questions of health and disease. The K25 award will provide support and "protected time" for a period of supervised study and research for productive professionals with quantitative (e.g., mathematics, statistics, economics, computer science, imaging science, informatics, physics, chemistry) and engineering backgrounds to integrate their expertise with NIH-relevant research. *This Funding Opportunity Announcement (FOA) is designed specifically for applicants proposing research that does not involve leading an independent clinical trial, a clinical trial feasibility study, or an ancillary study to a clinical trial.* Applicants to this FOA are permitted to propose research experience in a clinical trial led by a mentor or co-mentor. Applicants proposing a clinical trial *or an ancillary study to an ongoing clinical trial* as lead investigator, should apply to the companion FOA ([PA-18-395](#)). **Application Due Date(s): Standard dates apply.** <http://grants.nih.gov/grants/guide/pa-files/PA-18-396.html>

**Education and Health: New Frontiers (R01)- Clinical Trial Optional** - The goal of this funding opportunity announcement is to support research that will further elucidate the pathways involved in the relationship between education and health outcomes and in doing so to carefully identify the specific aspects and qualities of education that are responsible for this relationship and what the mediating factors are that affect the nature of the causal relationship. Companion Funding Opportunities are [PAR-18-362](#), [R21](#) Exploratory/Developmental Research Grant and [PAR-18-388](#), [R03](#) Small

Grant Program. **Application Due Date(s): Standard dates apply.** <http://grants.nih.gov/grants/guide/pa-files/PAR-18-387.html>

**Predicting Behavioral Responses to Population-Level Cancer Control Strategies (R21 Clinical Trial Optional)** - The goal of this funding opportunity announcement (FOA) is to facilitate research to identify individual influences on the effectiveness of population-level strategies that target cancer-related behaviors. We seek to encourage collaborations among scientists with expertise in health policy research and implementation, as well as investigators in scientific disciplines that have not traditionally conducted cancer or policy research, such as: psychological science (e.g., social, developmental); affective and cognitive neuroscience; judgment and decision-making; consumer behavior and marketing; organizational behavior; sociology, cultural anthropology; behavioral economics; linguistics; and political science. **Application Due Date(s): April 11, 2018; October 10, 2018; April 11, 2019.** <http://grants.nih.gov/grants/guide/pa-files/PAR-18-024.html>

**Linking the Provider Recommendation to Adolescent HPV Vaccine Uptake (R01)** - This Funding Opportunity Announcement (FOA) encourages research on how the healthcare delivery system enhances or inhibits the effectiveness of a provider's recommendation of the adolescent human papillomavirus (HPV) vaccine. Characteristics of the provider, parent/patient, and clinical setting, can all affect whether a provider makes a recommendation, and whether that recommendation results in uptake of the HPV vaccine. This research requires expertise in cancer prevention, adult and childhood behavior, immunization promotion, and healthcare delivery. Companion Funding Opportunities are [PAR 18-019](#), [R21](#) Exploratory/Developmental Research Grant and [PAR-16-337](#), [R03](#) Small Grant Program. **Application Due Date(s): Standard dates apply.** <https://grants.nih.gov/grants/guide/pa-files/PAR-18-008.html>

**Addressing Health Disparities through Effective Interventions Among Immigrant Populations (R01)** - The purpose of this Funding Opportunity Announcement (FOA) is to support innovative research to develop and implement effective interventions to

address health disparities among U.S. immigrant populations. Companion Funding Opportunity is [PA-18-285](#), [R21](#) Exploratory/Developmental Research Grant. **Application Due Date(s): Standard dates apply.** <https://grants.nih.gov/grants/guide/pa-files/PA-18-284.html>

**Use of Technology to Enhance Patient Outcomes and Prevent Illness (R21)** - This Funding Opportunity Announcement (FOA) seeks clinical research focused on the development and utilization of technologies that can help address patient outcomes. Relevant areas of technology include remote healthcare delivery to patients via telehealth, robotics to enhance medication adherence, on-site (e.g., clinical or home setting) care delivery, mobile health to increase access and adherence, web-based decision support tools, and others. Research projects may focus on assessment, diagnosis, intervention development, or intervention implementation. Research projects that a) incorporate emerging and cutting edge technologies to explain and predict patient trajectories, b) inform interventions, c) support real-time clinical decision making, and d) facilitate effective long-term management of chronic illness are especially needed. Critical to this FOA, proposed research should identify specific patient outcomes expected to improve from technological approaches. The specific tools or interventions proposed should clearly indicate how they will enhance patient benefits in environments, such as clinical settings, and/or in the home and community. Companion Funding Opportunity is [PA-18-145](#), [R01](#) Research Project Grant. **Application Due Date(s): Standard dates apply.** <https://grants.nih.gov/grants/guide/pa-files/PA-18-163.html>

**Prescription Drug Abuse (R01 Clinical Trial Optional)** - This Funding Opportunity Announcement (FOA) encourages applicants to develop innovative research applications on prescription drug abuse, including research to examine the factors contributing to prescription drug abuse; to characterize the adverse medical, mental health and social consequences associated with prescription drug abuse; and to develop effective prevention and service delivery approaches and behavioral and pharmacological treatments. Applications to address these issues are encouraged across a broad range of methodological approaches including basic science, clinical,

epidemiological, and health services research to define the extent of the problem of prescription drug abuse, to characterize this problem in terms of classes of drugs abused and combinations of drug types, etiology of abuse, and populations most affected (including analyses by age group, race/ethnicity, gender, and psychiatric symptomatology). Studies on individual- and patient-level factors, prescriber factors, and/or health system factors are encouraged, as are studies on all classes of prescription drugs with high abuse liability, including analgesics, stimulants, sedative/hypnotics and anxiolytics. Researchers are further encouraged to study the relationship between the prescription medication, the indication for which the medication was prescribed (e.g., pain, sleep disorder, anxiety disorder, obesity), and the environmental and individual factors contributing to abuse. Companion Funding Opportunity is [PA-18-076](#), [R21](#) Exploratory/Developmental Grant. **Application Due Date(s): Standard dates apply.** <https://grants.nih.gov/grants/guide/pa-files/PA-18-058.html>

**Self-Management Interventions and Technologies to Sustain Health and Optimize Functional Capabilities (R01 Clinical Trial Optional)** - This Funding Opportunity Announcement (FOA) seeks clinical research on self-management interventions and technologies that improve health and quality of life in persons needing assistance to optimize and maintain existing functional capabilities, prevent/delay disabilities and navigate their environment. The research focus encompasses maintenance/restorative care that can be tailored to individuals' existing functional abilities and interests and is intended to enhance physical, sensory, motor, and mental capabilities. Of particular interest is research designed to maintain functional capabilities in such conditions as cardiac and respiratory insufficiency, movement impairment associated with arthritis, chronic back pain, stroke, and other physical or cognitive disabilities. Companion Funding Opportunity is [PA-18-164](#), [R21](#) Exploratory/Developmental Grant. **Application Due Date(s): Standard dates apply.** <https://grants.nih.gov/grants/guide/pa-files/PA-18-146.html>

**Zika Virus (ZIKV) Complications (R21 Clinical Trial Optional)** - The purpose of this Funding Opportunity Announcement (FOA) is to provide support for research on Zika

virus (ZIKV) and its complications. This FOA replaces [PAR-16-106](#) which had used rolling application due dates to facilitate the rapid review and award of particularly urgent or time-sensitive projects. The last date for submitting an application to PAR-16-106 is January 13, 2017. **Application Due Date(s): Standard dates apply.** <https://grants.nih.gov/grants/guide/pa-files/PA-18-048.html>

**Evaluating the NIDA Standardized Research E-Cigarette in Risk Reduction and Related Studies (U01 Clinical Trial Optional)** - The purpose of this Funding Opportunity Announcement (FOA) is to accelerate research evaluating electronic cigarettes (e-cigarettes, electronic nicotine delivery systems, ENDS) as a potential means of reducing the risks associated with combustible tobacco use. This goal will be achieved by funding clinical studies that use the newly-developed NIDA Standard Research E-cigarette (SREC) to examine potential risks and benefits associated with e-cigarette use in current tobacco smokers. Ultimately, this FOA aims to evaluate whether e-cigarettes can reduce the risks associated with combustible tobacco use and to establish the NIDA SREC as a standard to which other e-cigarettes can be compared. Studies submitted to this FOA should examine the effects of the SREC on multiple behavioral and health biomarkers in current tobacco smokers and may include examination of whether e-cigarettes can reduce the negative health impacts of conventional tobacco use, and / or examine their effects on craving and dependence. Funding will be contingent upon the FDA Center for Tobacco Products (CTP) determination that the studies fall under their regulatory jurisdiction. Furthermore, funding will require that CTP accepts the use of the NIDA SREC as an Investigational Tobacco Product (ITP) in the proposed study, or determines that an ITP is not required. Studies funded by this FOA are expected to rapidly increase understanding of whether e-cigarettes reduce the risks associated with tobacco use. Additionally, these studies may provide significant data to inform e-cigarette public health policy decision-making. **Application Due Date(s): April 24, 2018; April 24, 2019.** <http://grants.nih.gov/grants/guide/pa-files/PAR-18-220.html>

**Quantitative Imaging Tools and Methods for Cancer Therapy Response Assessment (UG3/UH3 Clinical Trial Optional)** - This Funding Opportunity

Announcement (FOA) encourages research project applications under the cooperative agreement (UG3/UH3) mechanism to address the development, optimization and validation of quantitative imaging (QI) software tools and methods for prediction and/or measurement of response to cancer therapies or for planning and validating radiation therapy treatment strategies in clinical trials. Companion Funding Opportunity is [PAR-18-249](#). Letter of Intent Due Date(s): 30 days prior to the application due date. **Application Due Date(s): May 9, 2018; September 12, 2018; January 9, 2019; May 9, 2019; September 12, 2019; January 9, 2020.** <http://grants.nih.gov/grants/guide/pa-files/PAR-18-248.html>

**Improving Smoking Cessation in Socioeconomically Disadvantaged Populations via Scalable Interventions (R21 Clinical Trial Optional)** - The purpose of this Funding Opportunity Announcement (FOA) is to provide support for innovative and promising intervention research designed to improve smoking cessation outcomes among socioeconomically disadvantaged populations. Specifically, this FOA is intended to stimulate research efforts aimed at the development of smoking cessation interventions that: 1) are targeted to socioeconomically disadvantaged populations, and 2) could be made scalable for broad population impact. Applicants may propose projects that develop and test novel cessation interventions with the potential to be scaled up, as well as projects that focus on enhancing the effectiveness, quality, accessibility, utilization, and cost-effectiveness of currently scaled smoking cessation interventions. This FOA provides funding for up to 2 years for protocol development and early phase, pilot, or exploratory projects. Companion Funding Opportunity is [PAR-18-251](#), [R01](#) Research Project Grant. **Application Due Date(s): June 13, 2018; October 11, 2018, June 13, 2019.** <http://grants.nih.gov/grants/guide/pa-files/PAR-18-250.html>

**Youth Violence Prevention Interventions that Incorporate Racism/Discrimination Prevention (R01-Clinical Trial Required)** - The purpose of this initiative is to support research to develop and test youth violence prevention interventions that incorporate racism/discrimination prevention strategies for one or more health disparity populations. The target age range includes middle school to high school-aged youth, corresponding

to an approximate age range of 11 to 18. **Application Due Date: May 25, 2018.** <http://grants.nih.gov/grants/guide/rfa-files/RFA-MD-18-005.html>

**Strategies to Increase Delivery of Guideline-Based Care to Populations with Health Disparities (R01 Clinical Trial Optional)** - This Funding Opportunity Announcement (FOA) invites applications to conduct innovative and feasible studies to test strategies to accelerate the adoption of guideline-based recommendations into clinical practice among populations with health disparities. Applications that propose strategies with a focus on providers who care for clinical populations with excess burden of cardiovascular, lung, blood, and sleep diseases and disorders, in concert with the health care delivery systems in which they practice, are strongly encouraged. Applications that test systems, infrastructures, and strategies to implement guideline-based care for NHLBI disorders in clinical care settings are also of high programmatic interest. **Application Due Date: June 21, 2018.** <https://grants.nih.gov/grants/guide/pa-files/PA-18-133.html>

**Research on Autism Spectrum Disorders (R01-Clinical Trial Optional)** - The purpose of this Funding Opportunity Announcement (FOA) is to encourage research grant applications to support research designed to elucidate the etiology, epidemiology, diagnosis, treatment, and optimal means of service delivery in relation to Autism Spectrum Disorders (ASD). Companion Funding Opportunities are [PA-18-400](#), [R21](#) Exploratory/Developmental Grant and [PA-18-399](#), R03, Small Research Grant. **Application Due Date(s): Standard dates apply.** <https://grants.nih.gov/grants/guide/pa-files/PA-18-401.html>

**Diabetes and Cardiovascular Disease in Older Adults (R03)** - This Funding Opportunity Announcement (FOA) invites applications that propose basic, clinical, and epidemiological outcomes research on the impact of age on the development of, diagnosis, and management of diabetes and cardiovascular disease (CVD) complications in older persons or animal models. Research may focus on, but is not limited to 1) the epidemiology of increasing incidence and prevalence of DM with advancing age, particularly regarding potential racial-ethnic disparities, 2) the

elucidation of age-related mechanisms predisposing older adults to diabetes and resultant CVD , 3) understanding the role of aging in increased incidence and severity of CVD outcomes in older diabetics, and 4) determining age-specific prevention, screening, diagnostic, and management strategies of DM in older persons and its CVD complications. Research supported by this initiative is expected to elucidate the role of aging mechanisms that underlie the increased vulnerability of older adults to DM and its CVD complications and to provide evidence-based guidance to improve more appropriate diagnostic criteria, risk stratification, and intervention recommendations to prevent the onset, or improve short- and long-term outcomes, of DM and CVD in older persons. Companion Funding Opportunities are [PA-15-037, R01](#) Research Project Grant and [PA-15-038, R21](#) Exploratory/Developmental Grant. **Application Due Date(s): Standard dates apply.** <https://grants.nih.gov/grants/guide/pa-files/PA-15-039.html>

**Midcareer Investigator Award in Patient-Oriented Research (Parent K24 - Independent Clinical Trial Required)** - The purpose of the NIH Midcareer Investigator Award in Patient-Oriented Research (K24) is to provide support to mid-career health-professional doctorates for protected time to devote to patient-oriented research (POR) and to act as research mentors primarily for clinical residents, clinical fellows and/or junior clinical faculty. This Funding Opportunity Announcement (FOA) is designed specifically for applicants proposing to serve as the lead investigator of an independent clinical trial, a clinical trial feasibility study, or a separate ancillary study to an existing trial, as part of their research and career development. Applicants not planning an independent clinical trial, or proposing to gain research experience in a clinical trial led by another investigator, must apply to companion opportunity [PA-18-394](#), Midcareer Investigator Award in Patient-Oriented Research (Parent K24 - Independent Clinical Trial Not Allowed). **Application Due Date(s): Standard dates apply.** <https://grants.nih.gov/grants/guide/pa-files/PA-18-393.html>

**NSF Smart and Connected Communities (S&CC)** - Communities in the United States (US) and around the world are entering a new era of transformation in which residents and their surrounding environments are increasingly connected through rapidly-



changing intelligent technologies. This transformation offers great promise for improved wellbeing and prosperity, but poses significant challenges at the complex intersection of technology and society. The goal of the NSF Smart and Connected Communities (S&CC) program solicitation is to accelerate the creation of the scientific and engineering foundations that will enable smart and connected communities to bring about new levels of economic opportunity and growth, safety and security, health and wellness, and overall quality of life. This goal will be achieved through integrative research projects that pair advances in technological and social dimensions with meaningful community engagement. A proposal for an S&CC Integrative Research Grants must include the following: Integrative research that addresses the technological and social dimensions of smart and connected communities; Meaningful community engagement that integrates community stakeholders within the project; A management plan that summarizes how the project will be managed across disciplines, institutions, and community entities; and An evaluation plan for assessing short-, medium-, and long-term impacts of the proposed activities. **Application Due Date(s): Required Letters of Intent Due by January 30, 2018. Full Proposals Due by February 28, 2018.** [https://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=505364](https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505364)

**Research Aimed at Novel Behavioral Targets to Improve Adolescent Substance Abuse Treatment and Prevention Interventions (R34)** - This Funding Opportunity Announcement (FOA) is part of a trans-NIH initiative known as Collaborative Research on Addiction at NIH (CRAN). Areas supported by this FOA include research to inform the generation and refinement of novel targets for substance abuse treatment and prevention interventions, modules or adjuncts to existing treatments and prevention interventions that seek to target and modulate behavioral or neurobehavioral processes (e.g., impulsivity, risk-taking propensity, sensation and novelty seeking, distress tolerance, delay discounting, self-regulation, stress reactivity) in adolescents. Additionally, this FOA will encourage studies to include theoretical links that explore the relationship(s) between neural circuitry and treatment and prevention effects, and in particular, how behavioral targets might be affected by treatment and prevention interventions, and how that might be used to improve targeted treatment and prevention development, that translate to reduced morbidity and mortality. Companion Funding

Opportunity is [PA-15-036](#), [R01](#) Research Project Grant. **Application Due Date(s): Standard dates apply.** <https://grants.nih.gov/grants/guide/pa-files/PA-15-035.html>

**Multi-Site Pilot & Feasibility Studies for System-Level Implementation of Substance Use Prevention and Treatment Services (R34 Clinical Trial Optional)** - As part of the Collaborative Research on Addiction at NIH (CRAN) initiative, NIDA and NIAAA join to issue this FOA. The purpose of this FOA is to support the development and testing of interventions, models, and/or frameworks that examine system-level implementation of evidence-based interventions, guidelines, or principles to improve the delivery, uptake, quality, and sustainability of substance use prevention and treatment interventions and services. Companion Funding Opportunity is [PAR-18-222](#), [R01](#) Research Project Grant. **Application Due Date(s): July 17, 2018; November 13, 2018; July 17, 2019; November 13, 2019; July 17, 2020; November 13, 2020.** <https://grants.nih.gov/grants/guide/pa-files/PAR-18-223.html>

**Research on Pre-Exposure Prophylaxis (PrEP) to Prevent HIV in Health Disparity Populations (R01-Clinical Trial Not Allowed)** - The purpose of this initiative is to support community-based and healthcare setting-based research to understand the individual, interpersonal, community and societal factors that influence patterns of PrEP attitudes, access, availability, and adherence among health disparity populations in the US. Projects may involve primary quantitative/qualitative data collection and/or secondary analysis of existing data. **Application Due Date: February 28, 2018.** <https://grants.nih.gov/grants/guide/rfa-files/RFA-MD-18-003.html>

**Strengthening the HIV Pre-Exposure Prophylaxis (PrEP) Care Continuum through Behavioral, Social, and Implementation Science (R21 Clinical Trial Optional)** - This Funding Opportunity Announcement (FOA) encourages behavioral, social, and implementation science research designed to (a) identify gaps in the HIV pre-exposure prophylaxis (PrEP) care continuum and associated determinants; (b) develop and test interventions to strengthen PrEP delivery, use, and outcomes; and (c) reduce racial/ethnic and age-related disparities in PrEP uptake and use. Companion Funding

Opportunity is [R21](#) Exploratory/Developmental Research Grant. **Application Due Date(s): Standard AIDS dates apply.** <https://grants.nih.gov/grants/guide/pa-files/PA-18-271.html>