

The Division of Science and Research distributes a weekly e-mail update regarding current grant opportunities from a variety of funders, including the National Science Foundation, NASA, National Institute of Health and others. To sign up for alerts, contact Dr. Jan Taylor.



NSF INCLUDES video site http://includes2017.videohall.com/. Useful for seeing what others have done, particularly if you are interested in apply for an INCLUDES grant.

Interesting article: http://www.chronicle.com/article/NIH-Is-Firm-on-Plan-to-Limit/240102

Do you know a graduating senior who will be a first-generation college student in the fall? West Virginia, and the Nation need more STEM professionals, but completing a STEM course of study can be challenging. The First2Network is a growing group of professors, state officials and students who want to improve persistence in STEM during the first two years of college. July 16-29, 2017 research Internship: This 2-week all expenses paid research internship at one of two First2 research sites: Fairmont State University in Fairmont, WV, or the Green Bank Observatory in Green Bank, WV. This experience will give you a "leg-up" as a STEM major and could lead to future internships. The Green Bank Observatory Internship will immerse you in a national research center dedicated to understanding the universe. The research project has an engineering flavor, and will focus on building an optimizing an inexpensive radio telescope, using common or cheap components. The Fairmont State University Internship is part of the Solar Army Project that started at Cal Tech. The Research goal is to project is to find a metal oxide material that is cheap, stable, non-toxic, and efficient at converting sunlight into hydrogen fuel.

NSF NIH DOD NASA

National Science Foundation

Biomechanics and Mechanobiology (BMMB) - The BMMB Program supports fundamental research in biomechanics and mechanobiology. An emphasis is placed on multiscale mechanics approaches in the study of organisms that integrate across molecular, cell, tissue, and organ domains. The influence of in vivo mechanical forces on cell and matrix biology in the histomorphogenesis, maintenance, regeneration, and aging of tissues is an important concern. In addition, the relationships between mechanical behavior and extracellular matrix composition and organization are of interest. Funded projects may include theoretical, computational, and experimental approaches. The program encourages the consideration of diverse living tissues as smart materials that are self-designing. Full Proposal Window: September 1, 2017 - September 15, 2017.

The Civil Infrastructure Systems (CIS) program supports fundamental and innovative research necessary for designing, constructing, managing, maintaining, operating and protecting efficient, resilient and sustainable civil infrastructure systems. Research that recognizes the role that these systems play in societal functioning and accounts for how human behavior and social organizations contribute to and affect the performance of these systems is encouraged. While component-level, subject-matter knowledge may be crucial in many research efforts, this program focuses on the civil infrastructure as a system in which interactions between spatially-distributed components and intersystem connections exist. Thus, intra- and inter-physical, information and behavioral dependencies of these systems are also of particular interest. Full Proposal Window: September 1, 2017 - September 15, 2017.

Computational and Data-Enabled Science and Engineering (CDS&E) - The goal of the CDS&E program is to identify and capitalize on opportunities for major scientific and engineering breakthroughs through new computational and data analysis approaches. The intellectual drivers may be in an individual discipline or they may cut across more than one discipline in various Directorates. The key identifying factor is that the outcome relies on the development, adaptation, and utilization of one or more of the capabilities offered by advancement of both research and

infrastructure in computation and data, either through cross-cutting or disciplinary programs. Full Proposal Window(s): September 1, 2017 - October 31, 2017 for All proposals to the Division of Materials Research; September 1, 2017 - October 2, 2017 for All proposals to the Division of Chemistry - Chemical Theory, Models and Computational Methods; September 1, 2017 - September 15, 2017 for All proposals to the Directorate for Engineering's Division of Civil, Mechanical and Manufacturing Innovation; and September 15, 2017 - November 15, 2017 for all proposals to the Division of Astronomical Sciences - Astronomy and Astrophysics Research Grants.

The Design of Engineering Material Systems (DEMS) program supports fundamental research intended to lead to new paradigms of design, development, and insertion of advanced engineering material systems. Fundamental research that develops and creatively integrates theory, processing/manufacturing, data/informatics, experimental, and/or computational approaches with rigorous engineering design principles, approaches, and tools to enable the accelerated design and development of materials is welcome. Full Proposal Window: September 1, 2017 - September 15, 2017.

Documenting Endangered Languages (DEL) - This funding partnership between the National Science Foundation (NSF) and the National Endowment for the Humanities (NEH) supports projects to develop and advance knowledge concerning endangered human languages. Made urgent by the imminent death of roughly half of the approximately 7000 currently used languages, this effort aims to exploit advances in information technology to build computational infrastructure for endangered language research. The program supports projects that contribute to data management and archiving, and to the development of the next generation of researchers. Funding can support fieldwork and other activities relevant to the digital recording, documenting, and archiving of endangered languages, including the preparation of lexicons, grammars, text samples, and databases. Funding will be available in the form of one- to three-year senior research grants as well as fellowships from six to twelve months. Full Proposal Deadline Date: September 15, 2017.

The Dynamics, Control and Systems Diagnostics (DCSD) program supports fundamental research on the analysis, measurement, monitoring and control of dynamic systems. The program promotes innovation in the following areas: Modeling: creation of new mathematical frameworks to apply tools of dynamics to physical systems; Analysis: discovery and exploration of structure in dynamic behavior; Diagnostics: dynamic methods that infer system properties from observations; and Control: methods that produce desired dynamic behavior. Proposals submitted to the DCSD program should clearly identify, articulate and motivate innovative components in one or more of the foundational areas above. Full Proposal Window: September 1, 2017 - September 15, 2017.

The Engineering for Natural Hazards (ENH) program supports fundamental research that advances knowledge for understanding and mitigating the impact of natural hazards on constructed civil infrastructure. Natural hazards considered by the ENH program include earthquakes, windstorms (such as tornadoes and hurricanes), tsunamis, storm surge, and landslides. The constructed civil infrastructure supported by the ENH program includes building systems, such as the soil-foundation-structure-envelope-nonstructural system, as well as the façade and roofing, and other structures, geostructures, and underground facilities, such as tunnels. While research may focus on a single natural hazard, research that considers civil infrastructure performance over its lifetime in the context of multiple hazards, that is, a multi-hazard approach, is encouraged. Research may integrate geotechnical, structural, and architectural engineering advances with discoveries in other science and engineering fields, such as earth and atmospheric sciences, materials science, mechanics of materials, dynamic systems and control, systems engineering, decision theory, risk analysis, high performance computational modeling and simulation, and social, behavioral, and economic sciences. Multi-disciplinary and international collaborations are encouraged. The ENH program encourages research integrated with knowledge dissemination and activities that can lead to broader societal benefit for reducing the impact of natural hazards on civil infrastructure. Full Proposal Window: September 1, 2017 - September 15, 2017.

The Engineering and Systems Design (ESD) program supports fundamental research leading to new engineering and systems design methods and practices for specific global contexts. In particular, ESD seeks intellectual advances in which the theoretical foundations underlying design and systems engineering are operationalized into rigorous and pragmatic methods for a specific context. In addition, the program funds the rigorous theoretical and empirical characterization of new or existing methods for design and systems engineering, identifying in which global contexts and under which assumptions these methods are effective and efficient. Such a global context includes both a domain (such as energy systems, consumer products, cyber-physical systems) and an economic, socio-political, environmental and technological context. Full Proposal Window: September 1, 2017 - September 15, 2017.

Infrastructure Management and Extreme Events (IMEE) - The IMEE program supports fundamental, multidisciplinary research on the impact of hazards and disasters upon civil infrastructure and society. The program is focused upon

research on the mitigation of, preparedness for, response to, and recovery from multi-hazard disasters. Community and societal resilience and sustainability are important topics within the research portfolio of IMEE. The program is deeply multidisciplinary, integrating multiple perspectives, methods and results from diverse areas in engineering, social and natural sciences, and computing. Among these are civil, mechanical, transportation and system engineering; sociology, cognitive science and psychology, economics, geography, political science and urban planning; geology, biology and meteorology; and applied computing. Methodological innovations that span multiple, diverse disciplines are strongly encouraged. Full Proposal Window: September 1, 2017 - September 15, 2017.

In order to maintain, strengthen and grow a national innovation ecosystem, NSF has established the Innovation Corps National Innovation Network Teams Program (I-Corps Teams). The NSF I-Corps Teams Program purpose is to identify NSF-funded researchers who will receive additional support in the form of entrepreneurial education, mentoring and funding to accelerate innovation that can attract subsequent third-party funding. The purpose of the NSF I-Corps Teams grant is to give the project team access to resources to help determine the readiness to transition technology developed by previously-funded or currently funded NSF projects. The outcomes of I-Corps Teams projects will be threefold: 1) a clear go /or no go decision regarding viability of products and services, 2) should the decision be to move the effort forward, a transition plan for those projects to move forward, and 3) a definition of a compelling technology demonstration for potential partners. Proposal accepted anytime with an I-Corps Cognizant Program Officer's invitation. See II. PROGRAM DESCRIPTION – Requirements.

Manufacturing Machines and Equipment (MME) - The MME program supports fundamental research that enables the development of new and/or improved manufacturing machines and equipment, and optimization of their use, with a particular focus on equipment appropriate for the manufacture of mechanical and electromechanical devices, products, and systems featuring scales from microns to meters. Proposals relating to a wide range of manufacturing operations are encouraged, including both subtractive and additive processes, forming, bonding/joining, and laser processing. Proposals that will enable innovations in one or more of the Manufacturing USA institutes' focus areas (https://www.manufacturing.gov/nnmi-institutes/) and leverage the facilities, infrastructure and member companies of an institute, are also encouraged. Full Proposal Window: September 1, 2017 - September 15, 2017.

The Materials Engineering and Processing (MEP) program supports fundamental research addressing the processing and performance of engineering materials by investigating the interrelationship of materials processing, structure, properties and/or life-cycle performance for targeted applications. Materials processing proposals should focus on manufacturing processes that convert material into a useful form as either intermediate or final composition. These nclude processes such as extrusion, molding, casting, forming, deposition, sintering and printing. Proposed research should include the consideration of cost, performance, and feasibility of scale-up, as appropriate. Novel processes for the production of nanoscale materials (nanotubes, nanocrystals, etc.) are of interest. Process optimization studies without a fundamental scientific contribution are not supported. Research approaches which exploit knowledge of biological processes for the processing of non-biological materials, as well as the utilization of advanced computing techniques to enable major advances in Materials Engineering and Processing are encouraged. Full Proposal Window: September 1, 2017 - September 15, 2017.

The Mechanics of Materials and Structures program supports fundamental research in mechanics as related to the behavior of deformable solid materials and structures under internal and external actions. The program supports a diverse spectrum of research with emphasis on transformative advances in experimental, theoretical, and computational methods. Submitted proposals should clearly emphasize the contributions to the field of mechanics. Full Proposal Window: September 1, 2017 - September 15, 2017.

Return to top

National Institutes of Health

Gene-Environment Interplay in Substance Use Disorders (R01) - This Funding Opportunity Announcement (FOA) seeks to stimulate and expand research on the interplay of genetic and environmental factors in the genesis, course, and outcomes of substance and alcohol use disorders (SUDs). Previous work in genetic epidemiology and molecular genetics has established that SUDs are highly heritable, developmental disorders with important genetic substrates. Building on these findings, new studies using genetically informative approaches are needed to elucidate the complex interplay of genetic and environmental factors in developmental trajectories of SUDs and comorbid conditions, deepen and refine phenotypic definitions of SUDs, and meet the methodologic challenges of the field. Such studies hold great potential to promote understanding of the true contributions of both genetic and environmental factors to initiation,

progression, comorbidity, adverse outcomes, and cessation of SUDs; to elucidate mechanisms of risk; and to enhance opportunities for translation to treatment, prevention, gene-finding and molecular studies. Application Due Date(s): Standard dates apply.

Genomic Community Resources (U24) - To facilitate genomic research and the dissemination of its products, NHGRI supports genomic resources that are crucial for basic research, disease studies, model organism studies, and other biomedical research. Awards under this FOA will support the development and distribution of genomic resources that will be valuable for the broad research community, using cost-effective approaches. Such resources include (but are not limited to) databases and informatics resources (such as human and model organism databases, ontologies, and analysis toolsets), comprehensive identification and collections of genomic features (such as functional genomic elements), and standard data types produced using central sets of samples (such as structural variants in 1000 Genomes or GTEx samples). NCI is interested in any of the above types of resources that focus on cancer. Letter of Intent Due Date(s): 60 days prior to due dates. Application Due Date(s): Standard dates apply.

Uncovering the Causes, Contexts, and Consequences of Elder Mistreatment (R01) - The purpose of this Funding Opportunity Announcement is to solicit applications proposing research that can lead to advancements in the understanding of elder mistreatment (emotional abuse, physical abuse, and sexual abuse; financial exploitation; abandonment; and neglect) and lay the foundation for the future design of mechanistically focused interventions for individuals at risk for http://grants.nih.gov/grants/guide/pa-files/PA-17-280.htmlmistreating elders, for promoting recovery and resilience in the maltreated and their families, and for preventing re-perpetration for those who have inflicted harm. Applications are solicited from multidisciplinary teams which include researchers from the fields of elder mistreatment, child abuse and neglect, intimate partner violence, and/or emergency medicine to pursue research in two priority areas: (1) the development of new and innovative tools and methods for the screening and detection of elder mistreatment; and (2) the identification of modifiable risk factors for elder mistreatment and modifiable protective factors, with potential to prevent maltreatment and/or enable individuals who have been mistreated and those who have mistreated others to overcome adversity and thrive. All applications should propose evidence-based strategies for addressing ethical challenges surrounding informed consent and study design in the research proposed, and to employ, when possible, best practices established in the fields of child abuse and neglect and/or intimate partner violence. Letter of Intent Due Date(s): September 20, 2017. Application Due Date(s): October 20, 2017.

In Vitro and Animal Model Studies on HBV/HIV Co-Infection (R01) - The purpose of this Funding Opportunity Announcement (FOA) is to: (a) stimulate and accelerate development of novel in vitro and small animal models of HBV/HIV co-infection to accelerate drug discovery/drug development in HBV/HIV co-infection; and (b) stimulate and accelerate a better understanding of the immunopathogenic interactions between HBV and HIV. Companion Funding Opportunity is PA-17-281, R21 Exploratory/Developmental Grant. Application Due Date(s): Standard AIDS dates apply.

HIV and Hepatitis B Co-Infection: Advancing HBV Functional Cure through Clinical Research (R01) - The purpose of this Funding Opportunity Announcement (FOA) is to fill scientific gaps needed to (a) inform HBV functional cure strategies by furthering our understanding of unique challenges impacting HBV and HIV co-infected hosts and (b) advance the discovery and development of novel HBV interventions that are safe and achieve a functional cure in HIV and HBV co-infected individuals. Companion Funding Opportunity is PA-17-278, R21 Exploratory/ Developmental Research Grant. Application Due Date(s): Standard AIDS dates apply.

Wearable to Track Recovery and Relapse Factors for People w/ Addiction(R43/R44) - The purpose of this Funding Opportunity Announcement (FOA) is to encourage small businesses (SBCs) to develop next generation wearables and supporting mobile applications to identify digital biomarkers associated with reinitiating drug use and relapse, and create a model for just-in-time intervention. Letter of Intent Due Date(s): 30 days prior to the application due date. Application Due Date(s): August 15, 2017.

Therapeutic Strategies for the Converging TB/T2DM/HIV Epidemics (R01) Therapeutic Strategies for the Converging TB/T2DM/HIV Epidemics (R01) - The purpose of this Funding Opportunity Announcement (FOA) is to invite applications to support innovative research to improve our understanding of innate and adaptive immune dysregulation caused by Type 2 diabetes mellitus (DM) and pre-diabetes that causes increased risk of latent tuberculosis (TB) re-activation and more severe active TB disease with more frequent treatment failure/relapse and death in the context of HIV co-infection. Companion Funding Opportunity is PA-17-282 R21 Exploratory/ Developmental Grant. Application Due Date(s): Standard dates apply.

Understanding Processes of Recovery in the Treatment of Alcohol Use Disorder (R21) - The purpose of this FOA is encourage applications that seek to examine processes of recovery and relapse in the treatment of Alcohol Use Disorders. Applications high in innovation and significance are highly encouraged that address the following potential topics: 1) defining recovery; 2) Examining new and innovative methods to examine precipitants of relapse; 3) Understanding mechanisms of mutual help and recovery; 4) Evaluating recovery systems of care; and 5) Examining processes of extended treatment for AUD. Companion Funding Opportunity is PA-17-285, R01 Research Project Grant. Application Due Date(s): Standard dates apply.

Exploring Novel RNA Modifications in HIV/AIDS and Substance Use Disorders (R01) - The purpose of this FOA is to encourage research projects that investigate covalent RNA modifications in HIV/AIDS and substance use disorders. Identifying modifications involved in HIV function as well as understanding the mechanisms involved and how these processes interact with chronic drug exposure could lay the foundation for the development of future novel therapeutics to treat HIV in patients with SUDs. Companion Funding Opportunity is RFA-DA-18-009, R21 Exploratory/Developmental Research Grant. Letter of Intent Due Date(s): 30 days prior to the application due date. Application Due Date(s): August 17, 2017.

ImPlementation REsearCh to DEvelop Interventions for People Living with HIV (PRECluDE) (U01) - This Funding Opportunity Announcement (FOA) seeks applications for implementation research in the delivery of proven effective interventions for co-occurring heart, lung, blood, and sleep (HLBS) diseases and conditions among people living with HIV/AIDS. Proven effective interventions and management guidelines exist for co-morbid HLBS diseases and disorders for people living with HIV. However, these interventions have not been fully implemented among people living with HIV/AIDS and gaps in care remain. The intent of this FOA is to stimulate the use of late-stage T4 translation research and implementation science strategies to address barriers that impede the scale-up and application of proven effective interventions in community and clinical settings for the prevention, control, and treatment of co-morbid HLBS conditions for people living with HIV. Letter of Intent Due Date(s): July 7, 2017. Application Due Date(s): August 7, 2017.

NIDCR Clinical Trial or Biomarker Clinical Validation Study Planning Grant (R34) - The NIDCR will support R34 grants for the planning and design of clinical trials or biomarker clinical validation studies. This Funding Opportunity Announcement (FOA) will support activities to develop: the draft clinical protocol; the Clinical Investigators Brochure (or equivalent) if needed; tools for data and quality management, safety and operational oversight plans; recruitment and retention strategies; the study team; and other essential documents such as a draft Manual of Procedures that are necessary for the subsequent clinical trial or biomarker clinical validation study. The Clinical Trial or Biomarker Clinical Validation Study Planning Grant is not designed for the collection of preliminary data on the efficacy of the intervention (clinical or pre-clinical), or the collection of prospective data to support the rationale for a clinical trial or study. Evaluation of the potential subject population to determine its eligibility for participation in the future trial or biomarker validation study is allowed but not required. Planning grant activities for behavioral and social interventions may include pilot testing of the intervention during the R34 phase, thus a separate FOA (PAR-14-342) will support these types of interventional trials. Companion Funding Opportunities are PAR-11-339, U01 Research Project--Cooperative Agreement and PAR-14-342, R34 Planning Grant. Letter of Intent Due Date(s): 30 days prior to the application due date. Application Due Date(s): Standard dates apply.

SBIR E-learning for HAZMAT and Emergency Response (R43/R44) - This Funding Opportunity Announcement (FOA) encourages Small Business Innovation Research (SBIR) grant applications from small business concerns (SBCs) that propose to further the development of Advanced Technology Training (ATT) products for the health and safety training of hazardous materials (HAZMAT) workers; skilled support personnel; emergency responders in biosafety response, infectious disease training and cleanup; emergency responders in disasters and resiliency training; and for ATT tools to assist in research into the acute and long-term health effects of environmental disasters. ATT as defined by the Worker Training Program (WTP) includes, but is not limited to, online training, virtual reality, and serious gaming, which complement all aspects of training from development to evaluation including advance technologies that enhance, supplement, improve, and provide health and safety training for hazardous materials workers. These products must complement the goals and objectives of the WTP http://www.niehs.nih.gov/careers/hazmat/about_wetp/. The major objective of the NIEHS WTP is to prevent work related harm by assisting in the training of workers in how best to protect themselves and their communities from exposure to hazardous materials. The financial support for this initiative comes directly from NIEHS Worker Education and Training Branch SBIR funds. Letter of Intent Due Date(s): June 28, 2017. Application Due Date(s): July 28, 2017.

Psychological, Behavioral, and Neurocognitive-Focused Ancillary Studies to the Molecular Transducers of Physical Activity in Humans Consortium (MoTrPAC) (U01) - The purpose of this Funding Opportunity Announcement (FOA) is to support an ancillary study grant application(s) to add psychological, behavioral, and/or neurocognitive assessments to the data collection in adults (18 years of age) enrolled at the clinical sites in the Molecular Transducers of Physical Activity in Humans Consortium (MoTrPAC) supported by the NIH Common Fund. This ancillary study FOA complements the parent MoTrPAC study by supporting research to elucidate the individual level psychological, behavioral, and neurocognitive characteristics that explain variation in individual response and adherence to a program of physical activity. The ultimate goal of the research supported by this FOA is to characterize individual differences in response to exercise over the course of the MoTrPAC protocol in order to identify novel treatment targets and inform personalized physical activity intervention approaches in the future. Letter of Intent Due Date(s): September 24, 2017. Application Due Date(s): October 24, 2017.

Addressing Suicide Research Gaps: Aggregating and Mining Existing Data Sets for Secondary Analyses (R01) - This funding opportunity announcement (FOA) seeks to leverage data from existing basic, clinical, and intervention research on suicide risk and behaviors as well as social media and healthcare records data, by encouraging the integration of existing data sets for novel secondary analyses aimed at identifying potential biological, experiential, and other predictors and moderators of suicide risk. The use of dimensional variables and inclusion of multiple levels of analyses is particularly encouraged. A secondary goal of this FOA is to support innovative projects that will generate foundational work for research studies on suicide-related behaviors that inform a Research Domain Criteria (RDoC) approach in this area. Projects supported by this FOA will help address gaps identified in the 2014 Prioritized Research Agenda for Suicide Prevention. Letter of Intent Due Date(s): 30 days prior to the application due date. Application Due Date(s): November 2, 2017.

NIA Academic Leadership Career Award (K07) - The objective of the NIA Academic Leadership Career Award (K07) is to provide support for senior investigators who have the expertise and leadership skills to enhance aging and geriatric research capacity within their academic institution. Application Due Date(s): Standard dates apply.

Leveraging Population-based Cancer Registry Data to Study Health Disparities (R01) - The goal of this Funding Opportunity Announcement (FOA) is to efficiently use the existing cancer registry infrastructure by augmenting data already collected with additional information needed to understand health disparities among people diagnosed with cancer. Specifically, this FOA will support the study of factors influencing observed health disparities within the framework of population-based cancer registries by the inclusion of data not routinely collected by or linked to the registries. The studies should be hypothesis-driven and multidisciplinary approaches are encouraged. Investigators are encouraged to leverage the data already collected by the registries to investigate the determinates of health disparities. The goal of these analyses will be to understand why disparities in cancer treatment and outcomes persist by identifying factors contributing to disparities and their relative importance. Companion Funding Opportunity is PA-17-288, R21 Exploratory/Developmental Grant. Letter of Intent Due Date(s): 30 days prior to the application due date. Application Due Date(s): Standard dates apply.

This Funding Opportunity Announcement (FOA) invites applications for a Center for Identification and Study of Individuals with Atypical Diabetes Mellitus (U54). The purpose of this Center is to: foster the study of individuals with rare/atypical forms of diabetes mellitus; identify and analyze phenotypic and genotypic defects that may provide insights into more common, heterogeneous forms of Type 2 diabetes mellitus (T2DM) in the general population; and develop a community resource to advance research in this area through the collection and dissemination of data and samples for access by the broad research community. To achieve this goal, the Center should support the following primary research endeavors: (1) develop a process for identifying and studying individuals/families with rare and uncharacterized forms of diabetes and (2) create and manage a database and biospecimen repository of rare/atypical forms of diabetes for use by the broader research community in future analyses. Letter of Intent Due Date(s): October 2, 2017. Application Due Date(s): November 2, 2017.

NIA MSTEM: Advancing Diversity in Aging Research through Undergraduate Education (R25) - The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The over-arching goal of this NIA R25 program is to support educational activities that enhance the diversity of the biomedical, behavioral and clinical research workforce in aging. Letter of Intent Due Date(s): August 25, 2017. Application Due Date(s): Standard dates apply.

Specialized Alcohol Research Centers (P50) - This Funding Opportunity Announcement (FOA) invites applications for specialized Alcohol Research Centers using the P50 mechanism. 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 Institutes mission. These topics include, but are not limited to: the nature, etiology, genetics, diagnosis, treatment, and prevention of alcohol use disorders and their biomedical,

psychosocial, and economic consequences across the lifespan. Centers also are regional or national resources that contribute to the development of new research methods, technologies and approaches that sustain innovative goal-directed research. Letter of Intent Due Date(s): November 5, 2017. Application Due Date(s): December 5, 2017.

Catalyzing Innovation in Late Phase Clinical Trial Design and Statistical Analysis Plans (U34) - The purpose of this FOA is to provide support for planning activities for late phase (phase II and beyond) single-site or multi-site investigator-initiated clinical trials that address critical clinical questions within the mission of the National Heart, Lung, and Blood Institute (NHLBI) and that require non-traditional clinical trial designs with the opportunity for statistical novelty and/or innovation. The FOA will support the development of feasible and well-designed clinical trials utilizing consultative services provided by the Innovative Clinical Trials Resource (ICTR) (N01). Companion Funding Opportunity is RFA-HL-18-009, X01 Resource Access Award. Letter of Intent Due Date(s): 30 days prior to the application due date. Application Due Date(s): October 19, 2017; January 12, 2018.

Behavioral Interventions for Prevention of Opioid Use Disorder or Adjunct to Medication Assisted Treatment-SAMHSA Opioid STR Grants (R21/R33) - The purpose of this FOA is to solicit applications to examine the impact of behavioral interventions within the context of states plans for use of the SAMHSA Opioid STR grant funds authorized under the 21st Century Cures Act. Applications are encouraged for studies that examine the impact of interventions such as mindfulness meditation, cognitive behavioral therapy, or multi-disciplinary rehabilitation for primary or secondary prevention for opioid use disorder (OUD) or as an adjunct to medication assisted treatment (MAT) of OUD. Applications that emphasize treatment of the comorbidity of OUD and chronic pain are of particular interest. Letter of Intent Due Date(s): 30 days prior to the application due date. Application Due Date(s): August 4, 2017.

Exploratory Clinical Trial Grants in Arthritis and Musculoskeletal and Skin Diseases (R21) - This Funding Opportunity Announcement (FOA) is designed to facilitate clinical trials that can be completed within a limited timeframe and budget. A broad range of types of exploratory studies may be submitted to this FOA. The trials must address research questions related to the mission and goals of the NIAMS and may evaluate interventions with drugs, biologics, devices, or surgical, dietary, behavioral or rehabilitation therapies. Companion Funding Opportunities are PAR-15-115, R01 Research Project Grant, PAR-16-446, R34 Planning Grant, and PAR-16-447, U01 Research Project – Cooperative Agreements. Application Due Date(s): November 2, 2017.

Basic Research in Calcific Aortic Valve Disease (R01) - The purpose of this Funding Opportunity Announcement (FOA) is to encourage innovative molecular and physiological research that could lead to early diagnosis or effective medical therapy for calcific aortic valve disease (CAVD). Applications from investigators in related fields (for example, mineralization and bone physiology, extracellular matrix physiology, and molecular imaging) are strongly encouraged. Letter of Intent Due Date(s): September 18, 2017. Application Due Date(s): October 18, 2017.

Silencing of HIV-1 Proviruses (R61/R33) - This Funding Opportunity Announcement (FOA) encourages exploratory and developmental bi-phasic research applications to support the identification and optimization of small molecules or RNAs that interact with host epigenetic machinery to mediate long-term or permanent epigenetic silencing of HIV-1 proviruses. Letter of Intent Due Date(s): November 6, 2017. Application Due Date(s): December 6, 2017.

HIV Drug Resistance: Genotype-Phenotype-Outcome Correlations (R01) - The purpose of this Funding Opportunity Announcement is to support studies that will evaluate HIV drug resistance and its relationship to treatment success. Applications are sought proposing studies of genotype/phenotype correlations in diverse subtypes, the relationship between minority variants and treatment outcomes and on the reasons for the discordance between genotype and treatment success or failure. Laboratory evaluations of samples with clinical correlates in patients on recommended regimens are encouraged. Companion Funding Opportunity is PA-17-292, R21 Exploratory/Developmental Grant. Application Due Date(s): Standard AIDS dates apply.

Return to top

Department of Defense

FY17 Vision Research Program (VRP) - The FY17 VRP challenges the scientific community to design innovative research that will foster new directions for, and address neglected issues in, the field of vision research. Applications from investigators within the military Services and applications involving multidisciplinary collaborations among academia, industry, the military Services, the U.S. Department of Veterans Affairs (VA), and other Federal Government agencies are highly encouraged. There are two award mechanisms, Clinical Trial

Award and Technology/Therapeutic Development Award. For both, Pre-Application (Preproposal): July 12, 2017. Application: October 25, 2017.

FY 2017 (FY17) Multiple Sclerosis Research Program (MSRP) - The MSRP, established in FY09, is dedicated to supporting pioneering concepts and high-impact research that are relevant to the prevention, etiology, pathogenesis, assessment, and treatment of multiple sclerosis (MS) to ultimately lessen its personal and societal impact. There are two award mechanisms, Investigator Initiated Research Award and Exploration - Hypothesis Development Award. For both, Pre-Application (Preproposal): June 26, 2017. Preproposal is required; Application submission is by invitation only. Application: October 5, 2017.

FY17 Lung Cancer Research Program (LCRP) - The goal of the FY17 LCRP is to eradicate deaths from lung cancer to better the health and welfare of military Service members, Veterans, their families, and the American public. As such, the LCRP will support and integrate research from multiple disciplines for risk assessment, prevention, early detection, diagnosis, and treatment for the control and cure of lung cancer. There are five award mechanisms: Concept Award for which Pre-Application (Letter of Intent): July 27, 2017 (Letter of Intent is required). Application: August 10, 2017; Idea Development Award, Investigator Initiated Translational Research Award and Translational Research Partnership Award for which Pre-Application (Preproposal): June 28, 2017 (Preproposal is required; application submission is by invitation only). Application: September 27, 2017; and Career Development Award which has the following due dates, Pre-Application (Letter of Intent): September 13, 2017 (Letter of Intent is required). Application: September 27, 2017.

Return to top

NASA

ROSES 2017: Exobiology - The goal of NASA's Exobiology is to understand the origin, evolution, distribution, and future of life in the Universe. Research is centered on the origin and early evolution of life, the potential of life to adapt to different environments, and the implications for life elsewhere. This research is conducted in the context of NASA's ongoing exploration of our stellar neighborhood and the identification of biosignatures for in situ and remote sensing applications. For further information on the science scope of Astrobiology — within which exobiology is located—please refer to the Astrobiology roadmap, which can be found on the Astrobiology web page https://astrobiology.nasa.gov/research/astrobiology-at-nasa/astrobiology-strategy/. EXO17 Step-1 Proposals Due by Aug 17, 2017 and Step-2 Proposals by Oct 17, 2017.

New (Early Career) Investigator Program in Earth Science - The New (Early Career) Investigator Program (NIP) in Earth Science is designed to support outstanding scientific research and career development of scientists and engineers at the early stage of their professional careers. The program aims to encourage innovative research initiatives and cultivate scientific leadership in Earth system science. The Earth Science Division (ESD) places particular emphasis on the investigators' ability to promote and increase the use of space-based remote sensing through the proposed research. The NIP supports all aspects of scientific and technological research aimed to advance NASA's mission in Earth system science (http://science.nasa.gov/about-us/science-strategy/). NIP17 NOIs Due by Jul 31, 2017. NIP17 Proposals Due by Aug 31, 2017.

Astrophysics Theory - Proposals submitted for this program must both: Be directly relevant to space astrophysics goals by facilitating the interpretation of data from space astrophysics missions or by leading to predictions that can be tested with space astrophysics observations; and Consist predominantly of theoretical astrophysics studies or the development of theoretical astrophysics models. ATP proposals satisfying both of the above requirements may involve development of data analysis methods for astrophysics missions and may incidentally include actual data analysis as a test of the theory or the method. ATP17 NOIs Due by Jun 01, 2017. ATP17 Proposals Due by Jul 27, 2017.

Return to top