West Virginia Science & Research
HIGHER EDUCATION POLICY COMMISSION

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.

GRANT OPPORTUNITIES

Division of Science and Research

NSF
NIH
DOD
NASA

National Science Foundation

Big Data Regional Innovation Hubs: Establishing Spokes to Advance Big Data Applications (BD Spokes) - The first set of BD Spokes was funded in FY 2016. This solicitation calls for new BD Spoke proposals to be awarded in FY 2018. Collaborating with BD Hubs, each BD Spoke will focus on a particular topic that requires Big Data approaches and solutions. The set of activities managed by a BD Spoke will promote progress towards solutions in the chosen topic area. The regional BD Hub Steering Committee will provide general guidance to each BD Spoke and will assist the BD Spoke in coordinating with the national BD Hub network, with other BD Spokes, and with the broader innovation ecosystem. Full Proposal Deadline Date: September 18, 2017.

Software Infrastructure for Sustained Innovation (SSE, SSI, S2I2) - For 2017, and in addition to regular SI2 proposals, the SI2 solicitation welcomes proposals that advance the objectives of the National Strategic Computing Initiative (NSCI), an effort aimed at sustaining and enhancing the U.S. scientific, technological, and economic leadership position in high-performance computing (HPC) research, development, and deployment. Information about the NSCI together with the strategic plans, results of community workshops, background studies and other relevant resources, which suggest priority areas in both the domain sciences and the HPC and software infrastructure, are available at http://www.nsf.gov/nsci/. Proposers are encouraged to review these materials for priority areas identified by the research community. As in previous rounds of this program, SI^2 includes three classes of awards: **Scientific Software Elements (SSE)**: SSE awards target small groups that will create and deploy robust software elements for which there is a demonstrated need that will advance one or more significant areas of science and engineering; **Scientific Software Integration (SSI)**: SSI awards target larger, interdisciplinary teams organized around the development and application of common software infrastructure aimed at solving common research problems faced by NSF researchers in one or more areas of science and engineering. SSI awards will result in a sustainable community software framework serving a diverse community or communities; and **Scientific Software Innovation Institutes** (S^2I^2): S^2I^2 awards are intended to establish long-term hubs of excellence in software infrastructure and technologies, which will serve a research community of substantial size and disciplinary breadth. S^2I^2 includes two subclasses of awards: Conceptualization Awards, which are planning awards aimed at organizing an interdisciplinary community and understanding their software requirements and challenges; and Implementation Awards, which will be made to implement community activities that support software infrastructure, for example, such as those developed by the conceptualization awards. **Only Conceptualization proposals will be accepted for this solicitation cycle.** Full Proposal Deadline Date: September 19, 2017.

The Division of Earth Sciences (EAR) invites the submission of proposals for collaborative, interdisciplinary studies of the Earth's interior within the framework of the community-based initiative known as Cooperative Studies of the Earth's Deep Interior (CSEDI). Funding will support basic research on the character and dynamics of the Earth's mantle and core, their influence on the evolution of the Earth as a whole, and on processes operating within the deep interior that affect or are expressed on the Earth's surface. Full Proposal Deadline Date: September 25, 2017.

The goal of the Research in the Formation of Engineers (RFE) program is to advance our understanding of professional formation. It seeks to both deepen our fundamental understanding of the underlying processes and mechanisms that support professional formation and to demonstrate how professional formation is or can be accomplished. Ultimately, RFE aims to transform the engineering formation system. Therefore, the impact of proposed projects on this system must be described in the proposal. Proposers should provide a roadmap detailing how they

envision the proposed research will eventually broadly impact practice within the engineering formation system, even if these activities are not within the scope of the submitted proposal. RFE welcomes proposals in two categories: 1) Research Projects and 2) Design and Development Projects. Full Proposal Deadline Date: September 27, 2017.

Return to top

National Institutes of Health

Family-Centered Self-Management of Chronic Conditions (R21) - This funding opportunity announcement seeks to build the science of family-centered self-management (FCSM) in chronic conditions. Companion Funding Opportunity is PA-14-112, R01 Research Project Grant. Application Due Date(s): Standard dates apply.

Community Partnerships to Advance Research (CPAR) (R21) - This funding opportunity announcement seeks to encourage researchers to partner with communities using Community Engaged Research (CEnR) methodologies that will enhance relationships leading to better interventions and positive health outcomes. Companion Funding Opportunities are PA-14-142, R01 Research Project Grant and PA-14-140, R15 Academic Research Enhancement Award (AREA). Application Due Date(s): Standard dates apply.

Healthy Habits: Timing for Developing Sustainable Healthy Behaviors in Children and Adolescents (R21) - This Funding Opportunity Announcement (FOA) seeks to encourage applications that employ innovative research to identify mechanisms of influence and/or promote positive sustainable health behavior(s) in children and youth (birth to age 21). Applications to promote positive health behavior(s) should target social and cultural factors, including, but not limited to: schools, families, communities, population, food industry, age-appropriate learning tools and games, social media, social networking, technology and mass media. Topics to be addressed in this announcement include: effective, sustainable processes for influencing young people to make healthy behavior choices; identification of the appropriate stage of influence for learning sustainable lifelong health behaviors; the role of technology and new media in promoting healthy behavior; identification of factors that support healthy behavior development in vulnerable populations, identification of barriers to healthy behaviors; and, identification of mechanisms and mediators that are common to the development of a range of habitual health behaviors. Given the many factors involved in developing sustainable health behaviors, applications from multidisciplinary teams are strongly encouraged. The ultimate goal of this FOA is to promote research that identifies and enhances processes that promote sustainable positive behavior or changes social and cultural norms that influence health and future health behaviors. Companion Funding Opportunity is PA-14-177, R01 Research Project Grant. Application Due Date(s): Standard dates apply.

mHealth Tools for Underserved Populations with Chronic Conditions to Promote Effective Patient-Provider Communication, Adherence to Treatment and Self-Management (R01) - The purpose of this initiative is to stimulate research utilizing Mobile Health (mHealth) tools aimed at the improvement of effective patient-provider communication, adherence to treatment and self-management of chronic diseases in underserved populations. With the rapid expansion of cellular networks and substantial advancements in Smartphone technologies, it is now possible - and affordable - to transmit patient data digitally from remote areas to specialists in urban areas, receive real-time feedback, and capture that consultation in a database. These mHealth tools, therefore, may facilitate more timely and effective patient-provider communication through education communication around goal setting, treatment reminders, feedback on patient progress and may improve health outcomes. This announcement encourages the development, testing and comparative effective analysis of interventions utilizing mHealth technologies. There is also an interest in studying mHealth technologies in underserved populations. Companion Funding Opportunity is PA-14-181, R21 Exploratory/Developmental Grant. Application Due Date(s): Standard dates apply.

Innovative Mental Health Services Research Not Involving Clinical Trials (R01) - The purpose of this funding announcement is to encourage innovative research that will inform and support the delivery of high-quality, continuously improving mental health services to benefit the greatest number of individuals with, or at risk for developing, a mental illness. This announcement invites applications for non-clinical trial R01-level projects that address NIMH strategic priorities for mental health services research (see http://www.nimh.nih.gov/about/strategic-planning-reports/strategic-research-priorities/srp-objective-4/index.shtml). Letter of Intent Due Date(s): 30 days prior to the application due date. Application Due Date(s): Standard dates apply.

Revision Applications for Regenerative Medicine Innovation Projects (RMIP) (R43/R44) - The National Institutes of Health (NIH) and participating NIH Institutes and Centers (ICs) and the U.S. Food and Drug Administration (FDA), through this Funding Opportunity Announcement (FOA), invite revision applications from investigators with active

R43/R44 Small Business Innovation Research Grants (SBIR) awards that will support clinical research studies aimed at furthering the field of regenerative medicine (RM) using adult stem cells. A competing revision is a request for an increase in support in a current budget period for expansion of the project's approved scope or research protocol. These revision applications are expected to focus on innovative projects that propose solutions to widely recognized issues in the development of safe and effective regenerative medicine therapies. Emphasis will be given to projects that address critical issues in product development relevant for regulatory submissions. Areas of focus may include improved tools, methods, standards, or applied science that support a better understanding and improved evaluation of product manufacturing, quality, safety, or effectiveness. Companion Funding Opportunities are: RFA-HL-17-024, R41/R42 Small Business Technology Transfer (STTR) Grant - Phase I, Phase II, Phase IIB, and Fast Track; RFA-HL-17-025, U54 Specialized Center- Cooperative Agreements; RFA-HL-17-026, UM1 Research Project with Complex Structure Cooperative Agreement; RFA-HL-17-027, UC4 High Impact Research and Research Infrastructure - Cooperative Agreement Programs; RFA-HL-17-028, U24 Resource-Related Research Projects – Cooperative Agreements; RFA-HL-17-029, R01 Research Project Grant; RFA-HL-17-030, R24 Resource-Related Research Projects; RFA-HL-17-031, UM2 Program Project or Center with Complex Structure Cooperative Agreement; RFA-HL-17-032, P50 Specialized Center; RFA-HL-17-033, P41 Biotechnology Resource Grants; and RFA-HL-17-034, U01 Research Project – Cooperative Agreements. Letter of Intent Due Date(s): May 26, 2017. Application Due Date(s): June 26, 2017.

Epidemiology of Drug Abuse (R01) - This Funding Opportunity Announcement (FOA) is intended to support research projects to enhance our understanding of the nature, extent, distribution, etiology, comorbidities, and consequences of drug use, abuse, and addiction across individuals, families, communities, and diverse population groups. This FOA strongly encourages applications that reflect the breadth of epidemiology research by addressing multiple levels of risk, resilience, and causation across scientific disciplines; by applying novel methods to advance knowledge of the interplay among genetic, environmental, and developmental factors and between social environments and associated health and disease outcomes; and by building on the research investments of NIH and sister HHS agencies to harness existing data on the epidemiology and etiology of drug abuse to improve public health prevention and treatment programs. Companion Funding Opportunities are PA-15-001, R21 Exploratory/Developmental Grant and PA-15-002, R03 Small Grant Program. Application Due Date(s): Standard dates apply.

NIDA Mentored Clinical Scientists Development Program Award in Drug Abuse and Addiction (K12) - This funding opportunity announcement (FOA) encourages applications for institutional research career development (K12) programs that propose to support intensive supervised research training and career development experiences for clinician scientists (scholars) leading to research independence in the area of drug abuse and addiction. For this FOA, clinician scientists may include (but are not limited to) physicians, clinical psychologists, epidemiologists, doctoral-level social workers, pharmacists, and behavioral scientists. Scholars are expected to be supported for 3-5 years on consecutive 12-month appointments. Candidates selected for support as scholars must hold a doctorate and commit a minimum of 9 person-months (equivalent to 75% of full-time professional effort) to conducting clinical research and career development activities associated with the proposed program. Letter of Intent Due Date(s): 30 days prior to the application due date. Application Due Date(s): June 12, 2017.

Role of Myeloid Cells in Persistence and Eradication of HIV-1 Reservoirs from the Brain (R01) - This Funding Opportunity Announcement (FOA) invites research grant applications studying mechanisms of HIV-1 persistence in myeloid cells and strategies to target this reservoir in the central nervous system. Basic and translational research in domestic and international settings are of interest. Multidisciplinary research teams and collaborative alliances are encouraged but not required. RFA-MH-18-300 uses the R01 grant mechanism while RFA-MH-18-301 uses the R21 mechanism. High risk/high payoff projects that lack preliminary data or utilize existing data may be most appropriate for the R21 mechanism, while applicants with preliminary data may wish to apply using the R01 mechanism. Letter of Intent Due Date(s): August 7, 2017. Application Due Date(s): September 6, 2017.

Mechanistic Ancillary Studies to Ongoing Interventional Clinical Trials (R01) - This Funding Opportunity Announcement (FOA) solicits applications that propose to conduct time-sensitive mechanistic ancillary studies related to the NIAMS mission in conjunction with privately or publicly funded, ongoing interventional clinical trials. The ongoing parent project has to be an interventional clinical trial that can provide a cohort of well-characterized patients, infrastructure, data, and biological samples. Applications submitted in response to this FOA will undergo an accelerated review and award process. The objective of this FOA is to provide a flexible mechanism to leverage established resources and maximize the return on existing investments in parent projects. Successful ancillary studies will enhance the scientific content and value of the parent projects, improve the research community's understanding of a disease or organ system in the NIAMS portfolio, and thus may identify novel targets for diagnosis, treatment, and prevention of disease. Companion Funding Opportunity is RFA-AR-18-003, R21 Exploratory/Developmental Grant. Letter of Intent Due Date(s): 30 days prior to the application due date. Application Due Date(s): August 7, 2017; December 4, 2017; April 2, 2018.

Initiation of a Mental Health Family Navigator Model to Promote Early Access, Engagement and Coordination of Needed Mental Health Services for Children and Adolescents (R01) - The purpose of this Funding Opportunity Announcement (FOA) is to encourage research applications to develop and test the effectiveness and implementation of family navigator models designed to promote early access, engagement and coordination of mental health treatment and services for children and adolescents who are experiencing early symptoms of mental health problems. For the purposes of this FOA, NIMH defines a family navigator model as a health care professional or paraprofessional whose role is to deploy a set of strategies designed to rapidly engage youth and families in needed treatment and services, work closely with the family and other involved treatment and service providers to optimize care and monitor the trajectory of mental health symptoms and outcomes over time. Applicants are encouraged to develop and test the navigator models ability to promote early access, engagement and coordination of mental health treatment and services for children and adolescents as soon as symptoms are detected. Of interest are navigator models that coordinate needed care strategies, determine the personalized match to the level of needed service amount, frequency and intensity, and harness novel technologies to track and monitor the trajectory of clinical, functional and behavioral progress toward achieving intended services outcomes. Companion Funding Opportunity is PAR-17-266, R34 Planning Grant. Letter of Intent Due Date(s): 30 days prior to the application due date. Application Due Date(s): Standard dates apply.

Cystic Fibrosis Research and Translation Center (P30) - This Funding Opportunity Announcement (FOA) invites applications for Cystic Fibrosis (CF) Research and Translation Core Centers. CF Research and Translation Core Centers are designed to support both basic and clinical research on Cystic Fibrosis. CF Research and Translation Core Centers support three primary research-related activities: Research Core services; a Pilot and Feasibility program; and an Administrative Core with an enrichment program. Core Centers provide shared resources to support research to develop and test new therapies for CF and to foster collaborations among institutions with a strong existing research base in CF. The NIDDK currently supports seven CF Research and Translation Centers located at institutions with documented programs of research excellence in basic and clinical CF Research. Information about the currently funded CF Research and Translation Centers may be found at https://www.niddk.nih.gov/research-funding/research-programs/Pages/cystic-fibrosis-research-translation-centers.aspx. Letter of Intent Due Date(s): June 20, 2017. Application Due Date(s): July 20, 2017.

Planning Grants for Clinical Trials of High Relevance to the NIGMS Mission (R34) - The purpose of this funding opportunity announcement is to provide time and support for the applicant to develop plans for the design and execution of clinical trials that are highly relevant to the NIGMS mission. Activities supported by a planning grant could include development of a Manual of Procedures, creation of a Data Safety and Monitoring Board charter, development of data handling and statistical analysis plans, establishment of recruitment sites, preparation of preliminary submissions for regulatory approvals, development of training materials, and other tasks essential to a trial. Following funding and successful completion of a planning grant, an application for a clinical trial that is highly relevant to the institute's mission may be submitted to NIGMS via an appropriate clinical trial funding opportunity announcement. Letter of Intent Due Date(s): 30 days prior to the application due date. Application Due Date(s): August 7, 2017; August 1, 2018; August 1, 2019.

Center for Inherited Disease Research (CIDR) High Throughput Sequencing and Genotyping Resource Access (X01) - The Center for Inherited Disease Research (CIDR) high-throughput genotyping, sequencing and supporting statistical genetics services are designed to aid the identification of genes or genetic modifications that contribute to human health and disease or to enhance existing collections of well-phenotyped specimens by the addition of genotype or next-generation sequence data. The laboratory specializes in genomic services that cannot be efficiently carried out in individual investigator laboratories. CIDR provides the most up-to-date platforms, services and statistical genetic support. This is an NIH-wide initiative that is managed by NHGRI. Information about the current services offered can be accessed via: http://www.cidr.jhmi.edu. Application Due Date(s): Applications are accepted by continuous receipt)by 5:00 PM local time of applicant organization. Expiration Date: July 11, 2020.

NIDDK Central Repositories Non-renewable Sample Access (X01) - The NIDDK Central Repositories house valuable samples and data from numerous major clinical studies. This FOA allows investigators to apply for access to non-renewable samples from one or more of these studies. Information about the samples available can be found at www.niddkrepository.org. Applicants must provide information from the NIDDK Central Repositories documenting sample availability. Letter of Intent Due Date(s): 30 days prior to the application due date. Application Due Date(s): October 31, 2017; March 2, 2018; June 29, 2018; October 30, 2018; March 1, 2019; June 28, 2019; October 31, 2019; March 3, 2020; and June 30, 2020.

Drug Abuse Prevention Intervention Research (R03) - This Funding Opportunity Announcement (FOA) encourages R03 grant applications for research that will employ rigorous scientific methods to test theoretically derived hypotheses to increase understanding of the science of drug use prevention within diverse populations and settings

and across the lifespan. The FOA seeks applications that encompass investigations of cognitive, behavioral, and social processes as they relate to: 1) development of novel prevention approaches; 2) efficacy and effectiveness of prevention interventions or programs; 3) processes that optimize the selection, integration, implementation and sustainability of science-based prevention, including systems-level and health economic factors; and 4) methodologies appropriate for studying complex aspects of prevention science. Companion Funding Opportunities are PA-15-082, R01 Research Project Grant and PA-15-080, R21 Exploratory/Developmental Grant. Application Due Date(s): Standard dates apply.

Effectiveness Trials for Post-Acute Interventions and Services to Optimize Longer-term Outcomes (R01) - NIMH seeks applications for research projects to evaluate the effectiveness of therapeutic and service delivery interventions for the post-acute management of mental health conditions affecting youth, adults, and older adults. This FOA encourages clinical trials to establish the effectiveness and test hypotheses regarding moderators, mediators, and mechanisms of action of post-acute phase therapeutic and services interventions that are matched to the stage of illness in terms of both their focus (e.g., consolidating and maintaining gains from initial treatment, managing residual symptoms/impairment, preventing relapse, promoting adherence and appropriate service use) and intensity/burden for promoting optimal longer-term outcomes. Companion Funding Opportunity is PAR-17-271, R34 Planning Grant. Letter of Intent Due Date(s): 30 days prior to the application due date. Application Due Date(s): Standard dates apply.

Return to top

Department of Defense

DARPA Biological Technologies Office Open BAA - This announcement seeks revolutionary research ideas for topics not being addressed by ongoing BTO programs or other published solicitations. Proposal Abstracts and Full Proposals will be submitted on a rolling basis
until April 26, 2018, 4:00pm ET.

Composite Airframe Life Extension (CALE) - The Composite Airframe Life Extension (CALE) program will concentrate on identifying, developing, demonstrating and validating technology that will allow USAF airframe structural integrity managers to safely extend the certified service lives of airframes currently in the USAF fleet that contain advanced composite primary structure, without widespread replacement of aged structure with new, and without repeating an extensive, complex building block demonstration process. The CALE program will identify and develop technology to know and/or predict the residual strength, durability and damage tolerance, and reliability of advanced composite structure throughout the original, and if required new service life of the airframe. Closing Date for Applications: Apr 09, 2018.

Return to top

NASA

Computational Modeling Algorithms and Cyberinfrastructure (CMAC) - In this funding cycle, the CMAC program is focusing on the following two challenges: (1) creating a high-performance, service-based cyberinfrastructure to support large-scale Earth science analytics, and (2) adapting an atmospheric model to a distributed heterogeneous multicore computing architecture. CMAC17 NOIs Due by May 25, 2017. CMAC17 Proposals Due by Jul 27, 2017.

Return to top