NIH funding opportunities

Faculty of Medicine and Health Sciences: Research Development and Support 15 Mar 2016 (#9)

[Click on blue hyperlink for further information]

*The NIH funding opportunities listed below are only a **selection** of pre-screened, currently open health funding opportunities for which **South African institutions are eligible to apply**. For a comprehensive selection of NIH funding opportunities, please visit www.grants.nih.gov.*

*Please be advised that you **must contact the Research Grants Management Office (RGMO) Pre-Awards** (Dr Christa Coetsee cdevries@sun.ac.za) **as soon as possible to inform of your intent to apply and then confirm at least 30 days before the submission date**. The NIH grant is submitted institutionally. **All final application documents MUST reach the RGMO seven (7) workdays before NIH application due date.***

Important notices

- **Notice of Intent to Publish a Funding Opportunity Announcement for Dissemination and Implementation Research in Health (R01) (NOT-CA-16-025) and (R21) (NOT-CA-16-026)**
- **Request for Information (RFI): Strategies for Non-Invasive Imaging of HIV Reservoirs (NOT-DA-16-015)**
- **Notice To Announce Continued Funding and Updated Research Objectives for PAS-16-033 "Stimulating Hematology Investigation: New Endeavors (SHINE) (R01)" (NOT-DK-16-007)**
- **AHRQ Announces Interest in Research on Health IT Safety (NOT-HS-16-009)**

1. Immunity in Neonates and Infants

Letter of Intent due date: 30 days prior to the application due date **Hyperlink:** (RFA-AI-16-001) **Type: UO1**

Application Due Date: July 29, 2016. Apply by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date. ***Applicants should be aware that on-time submission means that an application is submitted error free*** (of both Grants.gov and eRA Commons errors) on the application due date.

Purpose: This Funding Opportunity Announcement (FOA) invites applications from institutions and organizations to participate in a cooperative research group, focusing on elucidating mechanisms regulating the development and function of the immune system in neonates (0-28 days) and infants (29 days – 12 months), including immune mechanisms triggered by non-pathogenic or pathogenic microbes (including HIV), vaccines, exposure to allergens, or alterations in immune function due to environmental exposures to pollutants. The purpose of this FOA is to advance current knowledge of the developing immune system during the first year of life and to encourage innovative approaches to more fully understand the distinct characteristics of neonatal/infant immune responses. Better understanding of infant and neonatal immune development has the potential to improve public health by providing a foundation for guiding the maturation of a healthy (protective) immune system and reducing the development of immune-mediated disorders, reducing susceptibility to infections and allergens, and improving immune responses to vaccines in these vulnerable populations.

Budget: Issuing IC and partner components intend to commit an estimated total of $8.05 million to fund 10-12 awards. Application budgets for studies proposing to use non-human primates are capped at $350,000 (direct costs) per year. Application budgets for all other applications are capped at $300,000 (direct costs) per year. The scope of the proposed project should determine the project period. The maximum period is 5 years.

2. NIDA Translational Avant-Garde Award for Development of Medication to Treat Substance Use Disorders

Letter of Intent due date: 30 days prior to the Application Due Date(s) **Hyperlink:** (RFA-DA-17-015) **Type: UG3/UH3**

Application Due Date: July 28, 2016. Apply by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date. ***Applicants should be aware that on-time submission means that an application is submitted error free*** (of both Grants.gov and eRA Commons errors) on the application due date.

Purpose: The purpose of this award is to support outstanding basic and/or clinical researchers with the vision and expertise to translate research discoveries into medications for the treatment of Substance Use Disorders (SUDs) stemming from tobacco, cannabis, cocaine, methamphetamine, heroin, or prescription opiate use. Eligible applicants must demonstrate the ability to develop molecules with the potential to treat SUDs and advance them in the drug development continuum. The ultimate goal of this FOA is to bring molecules closer to FDA approval. The UG3/UH3 Phased-Innovation Awards Cooperative Agreement involves 2 phases. Investigators responding to this FOA must address both the UG3 and UH3 phases. The UG3 will support a project with specific milestones to be accomplished at the end of the 2-year period. The UH3 will provide funding for 3 years to a project that successfully completed the milestones set in the UG3. UG3 projects that have met their milestones will be administratively considered by NIDA and prioritized for transition to the UH3 phase. Through this FOA, NIDA seeks to attract exceptionally talented investigators to the mission of expanding the number and breadth of lead molecules in the pipeline for drug addiction treatment, optimizing these leads, and/or advancing them to clinical testing.

Budget: NIH intends to commit $2,000,000 in FY17 to fund up to 2 awards. Application budgets are limited to $1,000,000 direct costs per year and need to reflect the actual needs of the proposed project. The project period is limited to 2 years for the UG3 phase and 3 years for the UH3 phase.

3. The Application of Big Data Analytics to Drug Abuse Research

Letter of Intent due date: 30 days prior to the Application Due Date(s) **Hyperlink:** (PA-16-119) **Type: RO1**

Application Due Date: Standard dates and Standard AIDS dates apply. Apply by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date. ***Applicants should be aware that on-time submission means that an application is submitted error free*** (of both Grants.gov and eRA Commons errors) on the application due date.

Purpose: The purpose of this FOA is to encourage the application of Big Data analytics to reveal deeper or novel insights into the biological and behavioral processes associated with substance abuse and addiction. NIDA recognizes that to accelerate progress toward understanding how the human brain and behavior is altered by chronic drug use and addiction, it is vital to develop more powerful analytical methods and visualization tools that can help capture the richness of data being generated from genetic, epigenetic, molecular, proteomic, metabolomic, brain-imaging, micro-electrode, behavioral, clinical, social, services, environmental studies as well as data generated from electronic health records. Applications for this FOA should develop and/or utilize computational approaches for analyzing large, complex datasets acquired from drug addiction research. The rapid increase of technologies to acquire unprecedented amounts of neurobiological and behavioral data, and an expanding capacity to store those data, results in great opportunity to bring to bear the power of the computational methods of Big Data analytics on drug abuse and addiction.

Budget: The number of awards is contingent upon NIH appropriations and the submission of a sufficient number of meritorious applications. Application budgets are not limited but need to reflect the actual needs of the proposed project. The maximum project period is 5 years.

4. NIGMS Program of Administrative Supplements for Equipment

Letter of Intent due date: 30 days prior to the Application Due Date(s) **Hyperlink:** (PA-16-125) **Type:** Admin

Application Due Date: No later than May 20, 2016. Apply by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date. ***Applicants should be aware that on-time submission means that an application is submitted error free*** (of both Grants.gov and eRA Commons errors) on the application due date.

Purpose: The National Institute of General Medical Sciences (NIGMS) announces the availability of funds for Administrative Supplements to NIGMS-funded R01, R37, P01, and U01 grants. These funds are intended for the purchase of single pieces of equipment with requested direct costs between $50,000 and $250,000. Equipment in this price range is often difficult to purchase under the parent grant. Two or more NIGMS grantees at the same institution with similar equipment needs are encouraged to submit separate requests (each between $50,000 and $250,000) that cross-reference each other. It is expected that the amount of funds requested for such joint purchases will reflect the actual proportion of the time that the shared equipment would be used by each PD/PI. However, under no circumstances may a joint request exceed $400,000 direct costs. NIGMS encourages requests that reflect institutional commitment.

Budget: The number of awards is contingent upon NIH appropriations and the submission of a sufficient number of meritorious applications. NIGMS intends to commit up to $10,000,000 in FY 2016 to fund 75-125 awards. Application budgets are limited to no more than the amount of the current parent award, and must reflect the actual needs of the proposed project. The funding mechanism being used to support this program, administrative supplements, can be used to cover cost increases that are associated with achieving certain new research objectives, as long as the research objectives are within the original scope of the peer reviewed and approved project, or the cost increases are for unanticipated expenses within the original scope of the project. Funds may only be requested for the equipment. These supplements will not support staff or service contracts.

5. Early-Stage Preclinical Validation of Therapeutic Leads for Diseases of Interest to the NIDDK

Letter of Intent due date: 30 days prior to the Application Due Date(s) **Hyperlink:** (PAR-16-121) **Type: RO1**

Application Due Date: Standard dates apply. Apply by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date. ***Applicants should be aware that on-time submission means that an application is submitted error free*** (of both Grants.gov and eRA Commons errors) on the application due date.

Purpose: The overarching goal of this Funding Opportunity Announcement (FOA) is to translate basic science research into knowledge and tools that can be utilized to provide strong justification for later-phase therapeutics discovery and development efforts in health-related outcomes relevant to the National Institute of Diabetes and Digestive and Kidney Diseases. This includes outcomes relevant to obesity, diabetes and related aspects of endocrinology and metabolism, digestive diseases, liver diseases, nutrition, kidney and urological diseases, hematology, and specific aspects of cystic fibrosis. Additional information concerning programmatic areas at NIDDK is available at: www.niddk.nih.gov/ .Its objective is to stimulate research and technology development to promote the early-stage preclinical validation of therapeutic leads (that need not be finalized therapeutics, henceforth called "therapeutic leads") such as small molecules or non-viral biologics (e.g. antibodies, cell-based therapies, engineered tissue constructs, probiotic or commensal microbes) that are not currently a focus within the biotechnology and pharmaceutical industries. It is expected that there is significant novelty in either the target, small molecule, or non-viral biologic itself, or in the approaches used to pursue further therapeutic lead validation, and that this is articulated clearly in the application. It is not intended to support research focused on understanding normal biology, disease processes, or generating lists of putative new targets.At the end of the project period, a successful project will have provided a significant contribution to the data supporting the validity of modulating a target's activity for safe, efficacious treatment of a disease using a small molecule or non-viral biologic approach.

Budget: Application budgets are not limited but need to reflect the actual needs of the proposed project. The scope of the proposed project should determine the project period. The maximum project period is 5 years

6. Physical Activity and Weight Control Interventions Among Cancer Survivors: Effects on Biomarkers of Prognosis and

Letter of Intent due date: 30 days prior to the Application Due Date(s) **Hyperlink:** (PAR-16-122) **Type: RO1**
(PAR-16-123) **R21**

Application Due Date: Standard dates and Standard AIDS dates apply. Apply by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date. ***Applicants should be aware that on-time submission means that an application is submitted error free*** (of both Grants.gov and eRA Commons errors) on the application due date.

Purpose: This Funding Opportunity Announcement (FOA) encourages transdisciplinary and translational research that will identify the specific biological or biobehavioral pathways through which physical activity and/or weight control (either weight loss or avoidance of weight gain) may affect cancer prognosis and survival. Research applications should test the effects of physical activity, alone or in combination with weight control (either weight loss or avoidance of weight gain), on biomarkers of cancer prognosis among cancer survivors identified by previous animal or observational research on established biomarkers other than insulin/glucose metabolism, especially those obtained from tumor tissue sourced from repeat biopsies where available. Because many cancer survivor populations will not experience recurrence but will die of comorbid diseases or may experience early effects of aging, inclusion of biomarkers of comorbid diseases (e.g., cardiovascular disease) and of the aging process are also sought. Applications should use experimental designs (e.g., randomized controlled clinical trials (RCTs), fractional factorial designs), and include transdisciplinary approaches that bring together behavioral intervention expertise, cancer biology, and other basic and clinical science disciplines relevant to the pathways being studied.

Budget: Application budgets are not limited but need to reflect the actual needs of the proposed project. The maximum project period is 5 years.

7. Methods for Prevention Packages Program IV (MP3 IV)

Letter of Intent due date: 30 days prior to the Application Due Date(s) **Hyperlink:** (PAR-16-124) **Type: RO1**

Application Due Date: June 7, 2016; June 7, 2017; June 7, 2018. Apply by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date. ***Applicants should be aware that on-time submission means that an application is submitted error free*** (of both Grants.gov and eRA Commons errors) on the application due date.

Purpose: The purpose of this Funding Opportunity Announcement (FOA) is to promote multidisciplinary research programs that (1) devise optimal HIV prevention packages (combination interventions) for specific populations and (2) perform feasibility and acceptability studies to demonstrate that the proposed prevention package is acceptable to the target population and the study design is appropriate and feasible. This FOA is intended to encourage collaborations between behavioral and biomedical clinical specialists, epidemiologists, mathematical modelers, and clinical research specialists.

Budget: Application budgets are not limited but need to reflect the actual needs of the proposed project. The scope of the proposed project should determine the project period. The maximum project period is 4 years.

8. Emerging Questions in Cancer Systems Biology

Letter of Intent due date: 30 days prior to the Application Due Date(s) **Hyperlink:** (PAR-16-131) **Type: UO1**

Application Due Date: June 24, 2016; November 18, 2016; June 23, 2017; November 24, 2017; June 22, 2018; November 23, 2018. Apply by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date. ***Applicants should be aware that on-time submission means that an application is submitted error free*** (of both Grants.gov and eRA Commons errors) on the application due date.

Purpose: The National Cancer Institute (NCI) is sponsoring a new Cancer Systems Biology Consortium (CSBC) that includes U54 CSBC Research Centers (RFA-CA-15-014), a U24 CSBC Coordinating Center (RFA-CA-15-015) and, through this FOA, well-defined, discrete and circumscribed Research Projects addressing emerging problems in cancer. The CSBC initiative aims to address challenges in cancer research through the use of experimental biology or population science combined with in silico modeling, multi-dimensional data analysis, and systems engineering. This Funding Opportunity Announcement (FOA) invites cooperative agreement applications for Research Projects that utilize systems biology approaches to address emerging questions in cancer initiation, progression, and treatment. CSBC Research Projects are expected to involve interdisciplinary teams of physical scientists (e.g., engineers, chemists, computer scientists, mathematicians, physicists, population scientists, statisticians, epidemiologists) and cancer researchers (e.g., cancer biologists, oncologists, pathologists and clinicians in relevant disciplines) who collaborate to advance our understanding of cancer biology and oncology. CSBC Research Projects proposed in response to this FOA must demonstrate explicit integration of experimental biology and computational modeling to test and validate novel hypotheses in cancer research.

Budget: Application budgets are not limited but need to reflect the actual needs of the proposed project. The maximum project period is 5 years.

Brief definitions of some NIH grant mechanisms: *comprehensive list of extramural grant and cooperative agreement activity codes*

D71 - International Research Training Planning Grant: To plan for the preparation of an application for a D43 international research training grant or for a U2R international research training cooperative agreement.

D43 - International Research Training Grants: To support research training programs for US and foreign professionals and students to strengthen global health research and international research collaboration.

DP1 – NIH Director's Pioneer Award (NDPA): To support individuals who have the potential to make extraordinary contributions to medical research. The NIH Director's Pioneer Award is not renewable.

DP3 – Institutional Training and Director Program Projects -Type 1 Diabetes Targeted Research Award: To support research tackling major challenges in type 1 diabetes and promoting new approaches to these challenges by scientific teams.

P20 – Research Program Projects and Centers -Exploratory Grant: To support planning for new programs, expansion or modification of existing resources, and feasibility studies to explore various approaches to the development of interdisciplinary programs that offer potential solutions to problems of special significance to the mission of the NIH. These exploratory studies may lead to specialized or comprehensive centers.

R01 – NIH Research Project Grant Program: most common NIH program; to support a discrete, specified, circumscribed research project; generally 3-5 years; budget may be specified, but generally <$500,000 p.a. (direct costs).

R21 – NIH Exploratory/Developmental Research Grant: encourages new, exploratory and developmental research projects (could be used for pilot or feasibility studies); up to 2 years; budget total generally <$275,000 (direct costs).

R03 – NIH Small Grant Program: limited funding for short period to support e.g. pilot / feasibility study, collection of preliminary data, secondary analysis of existing data, small-contained research projects, development of new research technology, etc.; normally for "new investigators"; not renewable; up to 2 years; budget generally <$50,000 (direct costs).

R21/R33 - Phased Innovation: The R33 award is to provide a second phase for the support for innovative exploratory and development research activities initiated under the R21 mechanism. Although only R21 awardees are generally eligible to apply for R33 support, specific program initiatives may establish eligibility criteria under which applications could be accepted from applicants demonstrating progress equivalent to that expected under R33.

R25 – NIH Education Projects: used in a wide variety of ways to promote an appreciation for and interest in biomedical research, provide additional training in specific areas, and/or to develop ways to disseminate scientific discovery into public health and community applications.

R34 - Clinical Trial Planning Grant Program: To provide support for the initial development of a clinical trial, including the establishment of the research team; the development of tools for data management and oversight of the research; the development of a trial design and other essential elements of the study, such as the protocol, recruitment strategies, and procedure manuals; and to collect feasibility data.

U01 – NIH Research Project Cooperative Agreement: supports discrete, specified, circumscribed projects to be performed by investigator(s) in an area representing their specific interests and competencies; many types of cooperative agreements, e.g. Clinical Trials Centers; generally no budget upper limit but may be specified.

U24 – Resource-Related Research Projects – Cooperative Agreements: To support research projects contributing to improvement of the capability of resources to serve biomedical research.

U01 – NIH Research Project Cooperative Agreement: supports discrete, specified, circumscribed projects to be performed by investigator(s) in an area representing their specific interests and competencies; many types of cooperative agreements, e.g. Clinical Trials Centers; generally no budget upper limit but may be specified.

UH2/UH3 – NIH Phase Innovation Awards Cooperative Agreement: To support the development of new research activities in categorical program areas. (Support generally is restricted in level of support and in time.) The UH3 award is to provide a second phase for the support for innovative exploratory and development research activities initiated under the UH2 mechanism. Although only UH2 awardees are generally eligible to apply for UH3 support, specific program initiatives may establish eligibility criteria under which applications could be accepted from applicants demonstrating progress equivalent to that expected under UH2.

U2R – International Research Training Cooperative Agreements: Cooperative agreement mechanism for D43 to support research training programs for US and foreign professionals and students to strengthen global health research and international research collaboration.

U19 - **Research Program-Cooperative Agreements:** supports a research program of multiple projects directed toward a specific major objective, basic theme or program goal, requiring a broadly based, multidisciplinary and often long-term approach. A cooperative agreement research program generally involves the organized efforts of large groups, members of which are conducting research projects designed to elucidate the various aspects of a specific objective.

Glossary of selected acronyms:

FOA Funding Opportunity Announcement

PA Program Announcements *(click on "PA" to search for further funding opportunities)*

RFA Request for Applications *(click on "RFA" to search for further funding opportunities)*

Complete Glossary and acronym list of NIH Terms