

Faculty of Medicine and Health Sciences: Research Development and Support 03 Jun 2019 (#18)

[Click on blue <u>hyperlink</u> 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 or www.sun.ac.za/RDSfunding (current & archive).

Confirm your intent to apply ASAP, but not later than **60 days** before the submission date.

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Building in vivo Preclinical Assays of Circuit Engagement for Application in Therapeutic Development (Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date **Hyperlink:** PAR-19-289

Application Due Date: Standard dates Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: The overall goal of this Funding Opportunity Announcement (FOA) is to identify, in animals, in vivo neurophysiological and behavioral measures for use as assays in the early screening phase of treatment development. The FOA will support efforts to optimize and evaluate measures of neurophysiological and behavioral processes that may serve as surrogate markers of neural processes of clinical interest based on available knowledge of the neurobiology of mental illnesses. The screening assays thus developed from this FOA are expected to build upon systems neurobiology and clinical neuroscience to enhance the scientific value of preclinical animal data contributing to a therapeutic development pipeline by assessing the impact of therapeutic targets and treatment candidates on neurobiological mechanisms of clinical relevance to mental illnesses. The objectives of the FOA will be accomplished by supporting basic and translational neuroscientists who are committed to improving the efficiency and scientific value of the therapeutic development pipeline by advancing the discovery of in vivo physiological and behavioral measures reflecting circuit engagement as tools for early phase target validation and therapeutic screening for mental illness treatment development. The efforts supported by this initiative focus on measures in animals as a first step in generating translational assay measures that are adaptable across early therapeutic screens in animals to evaluation in humans. As such, this FOA may be considered a prequel to build a suite of assays that are evaluated in future projects for coherence of assay performance between the preclinical species and healthy humans. In summary, this FOA will support efforts to improve the tool kit of assays available for early phase testing of novel therapeutic agents by incorporating measures proximal to neural systems that impact mental health.

Budget: Application budgets are not limited but need to reflect the actual needs of the proposed project. It is expected that budgets of \$250,000 direct costs per year or less will be adequate for most projects proposing to optimize just one measure. The scope of the proposed project should determine the project period. The maximum period is 5 years.

2. Oscillatory Patterns of Gene Expression in Aging and Alzheimers Disease (Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date

Hyperlink: RFA-AG-20-040

Type: R01

Type: R01

Application Due Date: October 23, 2019 Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) invites applications that seek to enhance existing transcriptome and proteome data sets by revealing oscillatory patterns of gene expression in aging and in Alzheimer's disease (AD), by uncovering their molecular significance, and by identifying rhythmic gene and/or protein profiles associated with the risk for AD. Outcomes of this research may suggest novel opportunities for translational research to allow development of individualized, optimized treatment based on circadian phase and amplitude.

Budget: NIA intends to commit \$2 million in FY 2020 to fund 2-3 awards. Applications may request no more than \$600,000 in direct costs in any one year. The scope of the proposed project should determine the project period. The maximum project period is 5 years.

Exploiting In Vivo Precision Pharmacology Techniques to Understand Opioid Receptor Signaling in Specific Circuits, Cell Types, and Subcellular Compartments (Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: RFA-DA-20-019 Type: R61/R33

Application Due Date: October 17, 2019. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This funding opportunity aims to support the development and the application of novel pharmacological approaches to manipulate signaling mediated by endogenous opioid receptors in defined circuits, cell-types or subcellular compartments in live organisms.

Budget: NIDA intends to commit \$2.5 M in FY 2020 to fund up to 5 awards. Application direct costs are limited to \$300,000 during each year of the R61 phase and \$400,000 during each year of the R33 phase. The total project period for a combined R61/R33 application submitted in response to this FOA may not exceed five years, with no more than three years for the R61 phase and no more than two years for the R33 phase. The R61 and the R33 cannot be awarded in the same fiscal year.

Adipogenesis, Adipocyte Function and Obesity Following HIV Infection, Antiretroviral Therapy, or Pre-Exposure Prophylaxis (Clinical Trial Optional)

Letter of Intent: 30 days prior to the application due date Hyperlink: RFA-DK-19-008 Type: R01

Application Due Date: November 7, 2019 Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: The prevalence of obesity is increasing in people with HIV (PWH), contributing to multiple complications associated with this condition. There is mounting evidence that unique mechanisms contribute to the development of obesity in PWH versus people without HIV. Alterations in fat tissue biology may be central to these differences. This FOA seeks applications to elucidate the underlying mechanisms of how HIV and antiretroviral drugs used for therapy or pre-exposure prophylaxis contribute to the development of obesity and alter adipocyte and adipose tissue function as well as the effects of these processes on metabolic and physiological processes within the mission of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). Budget: NIDDK intends to commit \$1,500,000 in FY 2020 to fund 2-3 awards. Application budgets are limited to \$500,000 direct costs per year and need to reflect the actual needs of the proposed project. The scope of the project should determine the project period. The maximum project period is 5 years.

Implementation of U.S. Food Safety Modernization Act - Identifying, Researching, and Implementing Alternative Methods to Expand the Reach across the Global Supply Chain - Clinical Trials Not Allowed

Letter of Intent: 30 days prior to the application due date Hyperlink: RFA-FD-19-022

Application Due Date: July 29, 2019 11:59 PM Eastern Time

Funding Opportunity Announcement: The purpose of this cooperative agreement is to support research and needs assessments in order to identify, develop and implement alternative approaches and methods to current training modalities in support of the Food Safety Modernization Act (FSMA) Rules implementation focusing on Produce Safety Rule and the Spanish language.

Budget: FDA/Office of International Programs intends to fund up to \$750,000 for fiscal year 2019 in support of this grant program. It is anticipated that up to one award will be made, not to exceed \$750,000 in total costs (direct plus indirect), per award. Application budgets need to reflect the actual needs of the proposed project and should not exceed the following in total costs (direct and indirect): YR 01: \$750,000; YR 02: \$500,000; YR 03: \$500,000; YR 04: \$500,000; YR 05: \$500,000. The scope of the proposed project should determine the project period. The maximum project period is FIVE (5) years.

Brain Initiative: Research to Develop and Validate Advanced Human Cell-Based Assays To Model Brain Structure and Function (Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: RFA-MH-20-140

Application Due Date: November 1, 2019. Apply by 5:00 PM local time of applicant organization. Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) encourages research grant applications directed toward developing next-generation human cell-derived assays that replicate complex nervous system architectures and physiology with improved fidelity over current capabilities. This includes technologies that do not rely on the use of human fetal tissue, as described in

NOT-OD-19-042. Supported projects will be expected to enable future studies of complex nervous system development, function and aging in healthy and disease states.

Budget: Issuing IC and partner components intend to commit an estimated total of \$10 million in FY2020 to fund up to 7 awards. Application budgets are limited to \$500,000 in direct costs in any project year and need to reflect the actual needs of the proposed project. The total project period may not exceed 3 years.

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

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Afdeling Navorsingsontwikkeling/Division for Research Development (DRD)

Type: U01

Type: R01