NIH funding opportunities

Faculty of Medicine and Health Sciences: Research Development and Support 05 Mar 2018 (#6)

[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.*

Confirm your intent to apply ASAP, but not later than 30 days before the submission date.

Contact: RGMO Pre-Awards cdevries@sun.ac.za

1. Developmental Pharmacodynamics and Models of Drug Effects in Pediatrics (Clinical Trial Optional)

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (PA-18-687) **Type:** ***R03***
(PA-18-688) ***R01***

Application Due Date: Standard dates and Standard AIDS dates. Apply by 5:00 PM local time of applicant organization.
Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) encourages grant applications from institutions or organizations that propose multidisciplinary, investigator-initiated basic translational and clinical research in developmental pharmacodynamics. This FOA encourages grant applications that propose studies to increase and establish data on developmental pharmacodynamic in the pediatric age groups and allows the determination of pharmacokinetic-pharmacodynamic relationship of drugs used in this population.
Budget: R03 - Application budgets are limited to $50,000 in direct costs per year. The scope of the proposed project should determine the project period. The maximum project period is 2 years. R01 - 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.

2. Fundamental Mechanisms of Affective and Decisional Processes in Cancer Control (Clinical Trial Optional)

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (PAR-18-681) **Type:** ***R01***
Application Due Date: April 11, 2018; October 10, 2018Apply by 5:00 PM local time of applicant organization.
Funding Opportunity Announcement: The purpose of this Funding Opportunity Announcement (FOA) is to encourage projects to generate fundamental knowledge of affective processes. Basic affective science projects should have key consequences for single (e.g., cancer screening) and multiple (e.g., adherence to oral chemotherapy regimen) event decisions and behaviors across the cancer prevention and control continuum. The FOA is expected to encourage collaboration among cancer control researchers and those from scientific disciplines not traditionally connected to cancer control applications (e.g., affective and cognitive neuroscience, decision science, consumer science) to elucidate perplexing and understudied problems in affective and decision sciences with downstream implications for cancer prevention and control.
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 period is 5 years.

3. Innovative Therapies and Tools for Screenable Disorders in Newborns (Clinical Trial Optional)

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (PAR-18-689) **Type:** ***R01***
(PAR-18-690) ***R03***
(PAR-18-691) ***R21***

Application Due Date: Standard dates and Standard AIDS dates. Apply by 5:00 PM local time of applicant organization.
Funding Opportunity Announcement: This FOA encourages research relevant to the development of therapeutic interventions for potentially fatal or disabling conditions that have been identified through newborn screening, as well as "high priority" genetic conditions where screening may be possible in the near future. Demonstrating the benefits of treatment is often a primary criterion for including a condition on a newborn screening panel; therefore, for this FOA, a "high priority" condition is one where screening is not currently recommended but would significantly benefit from early identification and treatment.
Budget: R01 - 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. R03 - Application budgets are limited to $50,000 in direct costs per year. The scope of the proposed project should determine the project period. The maximum project period is 2 years. R21 - The combined budget for direct costs for the two-year project period may not exceed $275,000. No more than $200,000 may be requested in any single year.

4. BRAIN Initiative: New Concepts and Early - Stage Research for Large - Scale Recording and Modulation in the Nervous System (Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (RFA-EY-18-001) **Type:** ***R21***

Application Due Date: May 1, 2018, October 29, 2018. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: A central goal of the BRAIN Initiative is to understand how electrical and chemical signals code information in neural circuits and give rise to sensations, thoughts, emotions and actions. While currently available technologies can provide some understanding, they may not be sufficient to accomplish this goal. For example, non-invasive technologies are low resolution and/or provide indirect measures such as blood flow, which are imprecise; invasive technologies can provide information at the level of single neurons producing the fundamental biophysical signals, but they can only be applied to tens or hundreds of neurons, out of a total number in the human brain estimated at 85 billion.

Other BRAIN FOAs seek to develop novel technology (RFA-NS-17-003) or to optimize existing technology ready for in-vivo proof-of-concept testing and collection of preliminary data (RFA-NS-17-004) for recording or manipulating neural activity on a scale that is beyond what is currently possible. This FOA seeks applications for unique and innovative technologies that are in an even earlier stage of development than that sought in other FOAs, including new and untested ideas that are in the initial stages of conceptualization.

In addition to experimental approaches, the support provided under this FOA might enable calculations, simulations, computational models, or other mathematical techniques for demonstrating that the signal sources and/or measurement technologies are theoretically capable of meeting the demands of large-scale recording or manipulation of circuit activity in humans or in animal models. The support might also be used for building and testing phantoms, prototypes, in-vitro or other bench-top models in order to validate underlying theoretical assumptions in preparation for future FOAs aimed at testing in animal models.

Invasive or non-invasive approaches are sought that will ultimately enable or reduce the current barriers to large-scale recording or manipulation of neural activity, and that would ultimately be compatible with experiments in humans or behaving animals. Applications are encouraged from any qualified individuals, including physicists, engineers, theoreticians, and scientists, especially those not typically involved with neuroscience research.

Budget: NIH intends to fund an estimated 10-15 awards per fiscal year, corresponding to a total of $5 million over the two-year project period. The combined direct cost budget for the two-year project period may not exceed $300,000. No more than $200,000 may be requested in any single year. Awards are for two years of support.

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

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).