NIH funding opportunities

Faculty of Medicine and Health Sciences: Research Development and Support 25 July 2017 (#26)

[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 de Vries cdevries@sun.ac.za) **to inform of your intent to apply.***

Timelines:

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

All final documents MUST reach the RGMO seven (7) workdays before NIH application due date.

The application will be submitted four (4) workdays before the application due date.

Important Notices

- **Notice of Change to Key Dates for "Global Brain and Nervous System Disorders Research Across the Lifespan (R01)" (NOT-TW-17-007)**
- **Notice of Early Expiration of PAR-15-281 "Multidisciplinary Studies of HIV and Aging (R03)" (NOT-AG-17-011)**

1. Central Neural Mechanisms of Age-Related Hearing Loss

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (RFA-AG-18-017) **Type:** ***R01***

Application Due Date: 8 November 2017. Apply by 5:00 PM local time of applicant organization.

This Funding Opportunity Announcement encourages basic or clinical research applications that investigate central neural mechanisms of age-related hearing loss in older adults and/or in relevant animal models. This FOA is driven by the need to address a major gap in our understanding of the central pathways and neural networks that are involved in hearing loss and how these may be altered in the context of the aging brain, as well as how natural aging influences central auditory plasticity.

Budget: The following NIH components intend to commit the following amounts in FY 2018: NIA, $1,250,000, up to 3 awards. NIDCD, $750,000, up to 2 awards. Application budgets are limited to $500,000 in direct costs per year. The maximum project period is 5 years.

2. Tobacco Regulatory Science

Letter of Intent: For the first application due date (September 18, 2017), the letter of intent is due 30 days prior to the application due date. For the subsequent application due dates (February 13, 2018, July 17, 2018, February 13, 2019), the letter of intent is due 60 days prior to the application due date. **Hyperlink:** (RFA-OD-17-013) **Type:** ***R01***

Application Due Date: 18 September 2017, 13 February 2018, 17 July 2018, 13 February 2019 Apply by 5:00 PM local time of applicant organization.

This Funding Opportunity Announcement invites R01 applications to support biomedical and behavioral research that will provide scientific data to inform regulation of tobacco products to protect public health. Research Projects must address the research priorities related to the regulatory authority of the Food and Drug Administration (FDA) Center for Tobacco Products (CTP). The awards under this FOA will be administered by NIH using funds that have been made available through FDA CTP and the Family Smoking Prevention and Tobacco Control Act (P.L. 111-31). Research results from this FOA are expected to generate findings and data that are directly relevant in informing the FDA's regulation of the manufacture, distribution, and marketing of tobacco products to protect public health.

Budget: NIH, via support from the FDA Center for Tobacco products (CTP), intends to fund up to 8 R01s, corresponding to a total of up to $4 million, for fiscal year 2018. Future year amounts will depend on availability of funds. Application budgets are limited to $300,000 in direct costs per year. The scope of the proposed project should determine the project period. The maximum project period is 3 years.

3. BRAIN Initiative: New Concepts and Early - Stage Research for Large - Scale Recording and Modulation in the Nervous System

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (RFA-EY-17-002) **Type:** ***R21***

Application Due Date: 26 October 2017, 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 in Fiscal Year 2018, 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. The total project period may not exceed 2 years.

4. Using Small Molecules and Molecular Genetics to Identify Novel Targets and Mechanisms Contributing to Tumor Immune Evasion

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (PA-17-330) **Type:** ***R01***

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

The purpose of this funding opportunity (FOA) is to stimulate research on the identification of new and novel targets and mechanisms involved in tumor immune evasion, which may be amenable to analysis by small molecules, pharmacological, or molecular genetics approaches. A specific focus of this FOA is to encourage cross disciplinary collaborations between immunologists, cell biologists, medicinal chemists, pharmacologists, and molecular biologists.

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.

5. Discovery of Small Molecule Immunomodulators for Cancer Therapy

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (PAR-17-331) **Type:** ***R01***

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

This Funding Opportunity Announcement promotes the discovery of novel small molecules that may enhance the ability of the immune system to selectively recognize and attack cancer cells. These small molecules could be further developed into stand-alone immunotherapeutics or synergistic partners for existing therapies, or as chemical probes for the discovery and validation of novel targets involved in anti-tumor immunity. Investigators from multiple scientific disciplines (immuno-oncology, tumor biology, screening technology, medicinal chemistry, and pharmacology) are encouraged to establish collaborative teams to discover and develop novel small molecule immunomodulators for cancer therapy. This FOA encourages the design of research projects that utilize the following phases of discovery research: 1) assay development specifically designed for immuno-oncology targets with the intent to screen for novel small molecule compounds that show potential as either probes or drugs, or as pre-therapeutic leads; 2) screen implementation for immunomodulatory targets to identify initial screening hits (from high throughput target-focused approaches or moderate throughput phenotypic- and fragment-based approaches); 3) hit validation through secondary orthogonal and counter screening assays, and hit prioritization; and 4) hit-to-lead optimization.

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 total project period may not exceed 4 years.

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).

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