



# NIH funding opportunities



Faculty of Medicine and Health Sciences: Research Development and Support 20 Dec 2017 (#48)

[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](http://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](mailto:cdevries@sun.ac.za)

## Important Notices:

- Collaborative Research in Computational Neuroscience (CRCNS) NSF Innovative Approaches to Science and Engineering Research on Brain Function ([NOT-MH-18-012](#))
- Notice of National Institute of Neurological Disorders and Stroke (NINDS) and National Institute on Drug Abuse (NIDA) Interest in Blueprint Neurotherapeutic Network Applications Directed at Small Molecule Non-Addictive Pain Therapies ([NOT-NS-18-027](#))

### 1. From Association to Function in the Alzheimers Disease Post-Genomics Era (Clinical Trial Not Allowed)

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

**Hyperlink:** ([RFA-AG-18-026](#))

**Type:** R01

**Application Due Date:** March 28, 2018. Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement:** This Funding Opportunity Announcement (FOA) solicits innovative and collaborative research focused on understanding the structure and function of proteins or protein complexes regulated by different AD genetic variants that have been identified to be associated with the sporadic and late onset Alzheimer's disease (AD). Specifically, NIA is interested in identifying and developing more effective and integrated platforms to screen protein functions, protein-protein interaction, protein complexes and their regulation by AD genetic variants prior to any in-depth mechanistic studies. The program encourages collaborative research projects that will translate initial GWAS discovery into functional and phenotypical insights and ultimately lead to understand the complex biology of AD.

**Budget:** NIA intends to commit \$3.5 million in FY 2018 to fund 6-8 awards. The number of awards is contingent upon NIH appropriations and the submission of a sufficient number of meritorious applications. Application budgets need to reflect the actual needs of the proposed project and should be limited to no more than \$350,000 in direct costs per year. The total project period for an application submitted in response to this FOA may not exceed five years.

### 2. Exosomes: From Biogenesis and Secretion to the Early Pathogenesis of Alzheimer's Disease (Clinical Trial Not Allowed)

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

**Hyperlink:** ([RFA-AG-18-027](#))

**Type:** R01

**Application Due Date:** March 26, 2018. Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement:** This Funding Opportunity Announcement (FOA) invites innovative research focused on understanding the role of exosome biogenesis and secretion in modulating and propagation of early pathogenesis in sporadic and late-onset Alzheimer's disease (AD). Specifically, this FOA encourages collaborative approaches designed to identify and characterize the regulation of molecular machines that are responsible for exosome biogenesis and the secretion of exosomal cargo molecules in AD.

**Budget:** NIA intends to commit \$8 million in FY 2018 to fund 9-11 awards. The number of awards is contingent upon NIH appropriations and the submission of a sufficient number of meritorious applications. Application budgets need to reflect the actual needs of the proposed project and should be limited to no more than \$500,000 in direct costs per year. The maximum project period is 5 years.

### 3. Pragmatic Trials of Managing Multimorbidity in Alzheimers Disease (Clinical Trial Required)

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

**Hyperlink:** ([RFA-AG-18-028](#))

**Type:** R01

**Application Due Date:** March 26, 2018. Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement:** This Funding Opportunity Announcement (FOA) invites applications proposing to conduct research involving pragmatic clinical trials into improving the effectiveness of treatment strategies for comorbid conditions that occur frequently in combination with Alzheimer's disease and related dementia (ADRD).

**Budget:** NIA intends to commit \$3,200,000 in FY 2018 to fund 2-4 awards. 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. Interdisciplinary Research to Understand the Complex Biology of Resilience to Alzheimers Disease Risk (Clinical Trial Not Allowed)

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

**Hyperlink:** [\(RFA-AG-18-029\)](#)

**Type:** R01

**Application Due Date:** March 26, 2018 Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement:** This funding opportunity announcement invites comprehensive, cross-disciplinary studies aimed at building predictive molecular models of cognitive resilience based on high-dimensional molecular data collected in individuals who remain free of dementia despite being at high risk for Alzheimer's disease.

**Budget:** NIA intends to commit \$4.5 million in FY 2018 to fund 3-4 awards. The number of awards is contingent upon NIH appropriations and the submission of a sufficient number of meritorious applications. Annual direct costs are capped at \$750,000. The maximum project period is 5 years.

#### 5. Development of Medications to Prevent and Treat Opioid Use Disorders and Overdose (Clinical Trials Optional)

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

**Hyperlink:** [\(RFA-DA-19-002\)](#)

**Type:** UG3/UH3

**Application Due Date:** beginning on January 25, 2018 and then [Standard dates](#) and [Standard AIDS dates](#) Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement:** The purpose of this Funding Opportunity Announcement is to support the discovery and development of medications to prevent and treat opioid use disorders (OUD) and overdose. The UG3/UH3 Phase Innovation Awards Cooperative Agreement involves 2 phases. The UG3 is to support a project with specific milestones to be accomplished by the end of the 2-year period. The UH3 is to 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. Investigators responding to this FOA must address both UG3 and UH3 phases. Application may include preclinical or clinical research studies that will have high impact and quickly yield the necessary results to advance closer to FDA approval medications that are safe and effective to prevent and treat OUDs and overdose. The compounds to be evaluated can be small molecules or biologics. They can be tested in pre-clinical models and/or for the clinical manifestations of OUDs such as withdrawal, craving, relapse, or overdose. Applications may focus on the development of new chemical entities, new formulations of marketed medications available for other indications, or combinations of medications that hold promise for the treatment of OUDs and overdose. Through this FOA, NIDA seeks to fast-track the discovery and development of medications to prevent and treat OUDs or opioid overdose and to advance them in the FDA's drug development approval pipeline. This project is part of the NIH initiative to establish a public-private partnership to address the opioid crisis via more effective and safe ways to prevent and treat opioid use disorders and overdose. <https://www.nih.gov/opioid-crisis>

**Budget:** NIDA intends to commit \$10M in each fiscal year to a sufficient number of meritorious applications. NIDA intends to commit \$10M in each fiscal year and to fund 3 to 4 grants per fiscal year. Application budgets are limited to \$3 million direct costs per year and they 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

#### 6. BRAIN Initiative: Targeted BRAIN Circuits Planning Projects TargetedBCPP (Clinical Trials Not Allowed)

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

**Hyperlink:** [\(RFA-NS-18-014\)](#)

**Type:** R34

**Application Due Dates:** March 15, 2018; July 17, 2018; July 15, 2019. Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement:** This R34 FOA solicits applications that offer a limited scope of aims and an approach that will establish feasibility, validity, or other technically qualifying results that, if successful, would support, enable, and/or lay the groundwork for a potential, subsequent Targeted Brain Circuits Projects - TargetedBCP R01, as described in the companion FOA (RFA-NS-18-009). Applications should be exploratory research projects that use innovative, methodologically-integrated approaches to understand how circuit activity gives rise to mental experience and behavior.

**Budget:** BRAIN Initiative and partner components intend to commit an estimated total of \$2.5M to fund 10 awards. The combined budget for direct costs for the two-year project period may not exceed \$450,000. No more than \$225,000 may be requested in any single year. The scope of the proposed project should determine the project period. The maximum project period is 2 years.

#### 7. BRAIN Initiative: Biology and Biophysics of Neural Stimulation (Clinical Trials Optional)

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

**Hyperlink:** [\(RFA-NS-18-018\)](#)

**Type:** R01

**Application Due Date:** February 23, 2018, June 6, 2018, October 4, 2018, February 6, 2019, June 4, 2019, October 4, 2019, February 6, 2020, June 4, 2020, and October 6, 2020 Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement:** A central goal of the BRAIN Initiative is to develop new and improved perturbation technologies suitable for controlling specified cell types and circuits to modulate function in the central nervous system. This FOA seeks applications to systematically characterize, model, and validate the membrane, cellular, circuit, and adaptive-biological responses of neuronal and non-neuronal cells to various types of stimulation. Development of new technologies and therapies, as well as of disease models are outside the scope of this FOA. However, activities related to combining multiple recording modalities are allowed. As part of this program, investigators will be required to participate in a consortium to develop standards and model systems for the evaluation of current and next generation neuromodulation technologies.

**Budget:** NIH anticipates providing \$5M per year to fund an estimated 5 to 10 awards. 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.

## 8. Using Information Technology to Support Systematic Screening and Treatment of Depression in Cancer (Clinical Trial Optional)

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

**Hyperlink:** [\(PA-18-492\)](#)  
[\(PA-18-493\)](#)

**Type:** R21  
R01

**Application Due Date:** [Standard dates](#) Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement:** The purpose of this Funding Opportunity Announcement (FOA) is to: identify new, information technology (IT)-enabled delivery models that support systematic screening and treatment of depression in cancer patients; test the feasibility of implementing these new delivery models in a variety of oncology practice settings, especially those serving under-served populations; and test the usability and potential effectiveness of the IT-specific components of these new delivery models.

**Budget:** 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 a single year. The total project period may not exceed 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.

## 9. End-of-Life and Palliative Care Health Literacy: Improving Outcomes in Serious, Advanced Illness (Clinical Trial Optional)

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

**Hyperlink:** [\(PA-18-498\)](#)  
[\(PA-18-499\)](#)

**Type:** R01  
R21

**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) seeks to stimulate research focused on identification of the key barriers to effective end-of-life and palliative care (EOLPC) health literacy in diverse settings and populations, and to create novel strategies, interventions, and models of care to improve EOLPC health literacy, with the goal of improving outcomes for individuals with serious, advanced illness and their families and caregivers.

**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. 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 a single year. The total project period may not exceed 2 years.

## 10. Human Subjects Mechanistic and Minimal Risk Studies (Clinical Trial Optional)

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

**Hyperlink:** [\(PA-18-500\)](#)

**Type:** R21

**Application Due Date:** [Standard dates](#) and [Standard AIDS dates](#) Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement:** The purpose of this FOA is to encourage applications that seek to conduct studies of the visual system. Applications that will be supported may be either:

- Those that involve human subjects, but are not NIH-defined clinical trials (see NOT-OD-15-015); or
- Those that are NIH-defined clinical trials and are designed to address either: 1) mechanisms underlying human vision in health and disease; or 2) interventions that entail procedures with minimal risk to subjects. More information about eligibility can be found in Part 2 Section III.3.

A mechanistic trial is defined as "A study designed to understand a biological or behavioral process, the pathophysiology of a disease, or the mechanism of action of an intervention. "Minimal risk" means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests. NIH-defined clinical trial applications that are neither mechanistic nor minimal risk are not eligible for this FOA. Large-scale clinical trials, human gene-transfer and stem cell therapy trials, and other complex or high resource- or safety-risk clinical trials are not appropriate for this FOA. Applicants are strongly advised to consult with NEI program staff prior to submitting an application with human subjects to determine the appropriate funding opportunity.

**Budget:** 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. The total project period may not exceed 2 years.

## 11. Advancing the Science of Geriatric Palliative Care (Clinical Trial Optional)

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

**Hyperlink:** [\(PA-18-502\)](#)  
[\(PA-18-503\)](#)

**Type:** R01  
R21

**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 research grant applications focused on palliative care in geriatric populations. This FOA covers studies in a variety of settings including hospitals (and specific sites within hospitals including specialty medical or surgical wards, intensive care units, and emergency departments), post-acute care settings, outpatient clinics and doctors' offices, patients' homes and other residential settings, assisted living facilities, nursing homes, hospices, and other healthcare or community settings. This FOA encourages both prospective studies and analyses of existing datasets, health and medical records, claims data, or other sources. Leveraging ongoing cohorts, intervention studies, networks, data and specimen repositories, and other existing research resources and infrastructure are encouraged. Study designs may include observational approaches, quasi-experimental designs, and interventional studies.

**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. 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 a single year. The total project period may not exceed 2 years.

## 12. National Institute of Biomedical Imaging and Bioengineering Exploratory/Developmental Research Grant Program (Clinical Trial Optional)

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

**Hyperlink:** [\(PAR-18-433\)](#)

**Type:** 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 will support exploratory/developmental research projects of interest to the NIBIB (<https://www.nibib.nih.gov/research-funding>). These studies are expected to lead to breakthroughs in development of innovative techniques, agents, methodologies, models, or their applications. These studies may involve considerable risk that should be balanced by the potential high impact on human-health and related research. Applicants are expected to propose novel biomedical research approaches for which there is no preliminary data to demonstrate the feasibility of the proposed project. A project may be exploratory, developmental, proof of concept, or high risk-high impact, and may be technology design-directed, discovery-driven, or hypothesis-driven.

**Budget:** Application budgets may not exceed \$275,000 direct costs over a maximum two-year funding period. No more than \$200,000 in direct costs may be requested in any single year.

## 13. Synthetic Biology for Engineering Applications (Clinical Trial Optional)

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

**Hyperlink:** [\(PAR-18-434\)](#)

**Type:** 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) invites applications to conduct research to advance the understanding and application of synthetic biology for human health. It will support 1) the development of innovative tools and technologies in synthetic biology and 2) their application in biomedical research and human health. An integrative research plan based on collaborations of synthetic biologists with computational scientists, cell biologists, engineers, and/or physician scientists is strongly recommended. Early Stage Investigators in Synthetic Biology are especially encouraged to apply.

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

## 14. Device-Based Treatments for Substance Use Disorders (Clinical Trial Optional)

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

**Hyperlink:** [\(PAR-18-494\)](#)

**Type:** UG3/UH3

**Application Due Date:** March 27, 2018; July 24, 2018; March 27, 2019; July 24, 2019; March 27, 2020; July 24, 2020 Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement:** The purpose of this Funding Opportunity Announcement (FOA) is to accelerate the development of devices to treat Substance Use Disorders (SUDs). The continuing advances in technologies offer unprecedented opportunities to develop neuromodulatory or neurophysiological devices that are safe and effective SUD treatments. The objective is to move devices to their next step in the FDA approval process, with the ultimate goal of generating new, FDA approved device-based treatments for SUDs. Applications may focus on the pre-clinical and/or clinical development and testing of new devices or existing devices approved for other indications. Applications may evaluate the mechanism of action of a device. The UG3/UH3 Cooperative Agreement involves 2 phases. The UG3 phase, for up to 2 years, is designed to support a project with specific milestones to be accomplished by the end of the period. The UH3 phase is to provide funding for up to 3 additional years following successful completion of the UG3. UG3 projects that meet their milestones will be administratively considered by NIDA and prioritized for transition to the UH3 phase. Investigators submitting to this FOA must address both UG3 and UH3 phases in the application.

**Budget:** NIH intends to fund an estimate of 3-4 awards per year. Application budgets are limited to \$500,000 direct costs for the entire UG3 phase, but are not limited for the UH3 phase. However, budgets 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

## 15. Sleep disorders and circadian clock disruption in Alzheimers disease and other dementias of aging (Clinical Trial Not Allowed)

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

**Hyperlink:** [\(PAR-18-497\)](#)

**Type:** R01

**Application Due Date:** The first application due date is March 26, 2018. Subsequent due dates for new applications are June 6, 2018; October 7, 2018; February 7, 2019; June 7, 2019; October 7, 2019; February 7, 2020; June 8, 2020; and October 8, 2020, Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement:** This FOA is aimed at molecular, cellular, genetic, epigenetic, and systems biology approaches to advance basic and clinical research on the causes and consequences of sleep deficiency and circadian clock dysfunction in Alzheimer's disease, and the roles of sleep and the circadian clock as modifiers of the progression of neurodegeneration.

**Budget:** Issuing IC and partner components intend to commit an estimated total of \$5 million in FY 2018 to approximately 5-6 awards. The number of awards is contingent upon NIH appropriations and the submission of a sufficient number of meritorious applications. Application budgets are limited to \$500,000 in direct costs per year. The maximum project period is 5 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).