NIH funding opportunities

Faculty of Medicine and Health Sciences: Research Development and Support 16 April 2018 (#12)

[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 <u>www.grants.nih.gov</u>.

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

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

Important Notices:

Findings of Research Misconduct (NOT-OD-18-169)

1. Targeted In Vivo Delivery of Gene Therapeutics for HIV Cure (Clinical Trial Not Allowed)

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

Type: *R01*

Application Due Date: July 31, 2018 Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) will support research on the development and validation of innovative strategies to deliver anti-HIV gene therapies efficiently to specific target cells in vivo.

Budget: Issuing IC and partner components intend to commit an estimated total of \$ 3.01 million to fund 5-7 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.

2. Novel Nucleic Acid Sequencing Technology Development (Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due dateHyperlink: (RFA-HG-18-001)Type: R01Application Due Date: Standard Dates:June 27, 2018; June 27, 2019; June 26, 2020 AIDS dates:September 10, 2018; September 10, 2019;September 10, 2020 Apply by 5:00 PM local time of applicant organization.September 10, 2020 Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) solicits R01 grant applications to develop novel technologies that will enable no less than one order of magnitude improvement in DNA sequencing, and practical methods for di rect RNA sequencing. Advances in genomics and more broadly in biomedical research have been greatly facilitated by significant and sustained DNA sequencing throughput increases and cost decreases. The goal now is to improve the quality and efficiency of DNA sequencing and enable direct RNA sequencing (e.g., longer read lengths, faster turn-around time, greater accuracy, and higher-throughput etc.) at reasonable costs with the anticipation that significant advances in any of these and related areas would make significant contributions to the mission of NHGRI and the field of genomics, including to many of NHGRI's other technology development goals.

Budget: NHGRI intends to commit \$1,500,000 in FY19, 20 and 21 to fund 2-4 awards yearly. The actual number of awards and amount are contingent on NIH appropriations, and the submission of a sufficient number of meritorious applications. An applicant may request direct costs of up to \$700,000 per year. Because the nature and scope of the proposed research will vary from application to application, it is anticipated that the size and duration of each award will also vary. The scope of the proposed project should determine the project period. The maximum project period is 4 years.

3. Novel Nucleic Acid Sequencing Technology Development (Clinical Trial Not Allowed)

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

Hyperlink: (RFA-HG-18-002)

Hyperlink: (RFA-AI-18-016)

Type: *R21*

Application Due Date: <u>Standard Dates</u>: June 27, 2018; June 27, 2019; June 26, 2020 <u>AIDS Dates</u>: September 10, 2018; September 10, 2019; September 10, 2020Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) solicits R21 grant applications to develop novel technologies that will enable substantive (no less than an order of magnitude) improvement in DNA sequencing, and practical methods for direct RNA sequencing. Applicants may propose to develop novel complete sequencing systems, investigate challenges underlying key novel system components, or propose improvements of at least an order of magnitude improvement to existing systems. Exploration of methods other than those currently in use is highly encouraged. High-risk/high-payoff applications are appropriate to achieve the goals of this FOA.

Budget: NHGRI intends to commit \$500,000 in each of FY19, 20 and 21 to fund 2-4 awards yearly. The actual number of awards and amount are contingent on NIH appropriations, and the submission of a sufficient number of meritorious applications. An applicant may request direct costs of up to \$200,000 per year and no more than \$400,000 for the entire budget period. Because the nature and scope of the proposed research will vary from application to application, it is anticipated that the size and duration of each award will also vary. The scope of the proposed project should determine the project period. The maximum project period is 3 years.

4. BRAIN Initiative: Targeted BRAIN Circuits Projects- TargetedBCP (Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: (RFA-NS-18-030) Type: R01 Application Due Date: July 3, 2018; November 6, 2018; July 3, 2019; November 6, 2019; July 1, 2020; November 10, 2020Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This FOA solicits applications for research projects that use innovative, methodologicallyintegrated approaches to understand how circuit activity gives rise to mental experience and behavior. The goal is to support projects that can realize a meaningful outcome within 5 years. Applications should address circuit function in the context of specific neural systems such as sensation, perception, attention, reasoning, intention, decision-making, emotion, navigation, communication or homeostasis. Projects should link theory and data analysis to experimental design and should produce predictive models as del iverables. Projects should aim to improve the understanding of circuits of the central nervous system by systematically controlling stimuli and/or behavior while actively recording and/or manipulating dynamic patterns of neural activity. Projects can use non-human and human species, and applications should explain how the selected species offers ideal conditions for revealing general principles about the circuit basis of a specific behavior.

Budget: Issuing IC and partner components intend to commit an estimated total of \$15 M to fund 20 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.

5. In Vivo Synaptic Function in Alzheimers Disease and Related Dementias (Clinical Trial Not Allowed) Letter of Intent: 30 days prior to the application due date Hyperlink: (PAR-18-760) Type: R21

Application Due Dates: <u>Standard dates</u> Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: To study in vivo synaptic structure and function in Alzheimer's and related dementia; and to advance development of methods to study synapses in animal models and humans.

Budget: NIH intends to fund an estimate of 3-5 awards, corresponding to a total of \$1.5 million, for fiscal year 2018. Future year amounts will depend on annual appropriations. 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.

6. Innovation Grants to Nurture Initial Translational Efforts (IGNITE): Neurotherapeutic Agent Characterization and In vivo Efficacy Studies (Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due dateHyperlink: (PAR-18-761)Type: R61/R33Application Due Date: June 19, 2018, October 17, 2018, February 20, 2019, June 19, 2019, October 17, 2019, February 19, 2020, June 17,
2020, October 20, 2020 and February 17, 2021 and <u>Standard AIDS dates.</u> Apply by 5:00 PM local time of applicant organization.Funding Opportunity Announcement: This FOA provides funding to conduct pharmacodynamic, pharmacokinetic, and in vivo efficacy
studies to demonstrate that proposed therapeutic agent(s) have sufficient biological activity to warrant further development to treat
neurological disorders that fall under the NINDS mission. Therapeutic agents may include but are not limited to small molecules,
biologics or biotechnology-derived products. This FOA is part of a suite of Innovation Grants to Nurture Initial Translational Efforts
(IGNITE) to advance projects to the point where they can meet the entry criteria for the NINDS Cooperative Research to Enable and
Advance Translational Enterprises for Biologics program (CREATE Bio) program for biologics, biotechnology products, Bluep rint
Neurotherapeutics Network for small molecules, or other translational programs.

Budget: Direct costs cannot exceed \$499,000 in any one year . Cumulative direct costs for the entire 3-year project period may not exceed \$750,000. The total project period for a combined R61/R33 application submitted in response to this FOA may not exceed three years, with no more than two 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.

7. Innovation Grants to Nurture Initial Translational Efforts (IGNITE): Assay Development and Neurotherapeutic Agent Identification (Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due dateHyperlink: (PAR-18-762)Type: R61/R33Application Due Date: June 19, 2018, October 17, 2018, February 20, 2019, June 19, 2019, October 17, 2019, February 19, 2020, June 17,
2020, October 20, 2020 and February 17, 2021 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 to develop in
vitro and/or ex vivo assays and conduct iterative screening efforts to identify and characterize potential therapeutic agents for neurological
disorders. This FOA is part of a suite of Innovation Grants to Nurture Initial Translational Efforts (IGNITE) to advance projects to the point
where they can meet the entry criteria for the NINDS Cooperative Research to Enable and Advance Translational Enterprises for Biologics
(CREATE Bio) program for biologics, biotechnology products, the Blueprint Neurotherapeutics Network (BPN) for small molecules, or other
translational programs.

Budget: Direct costs cannot exceed \$499,000 in any one year . Cumulative direct costs for the entire 3-year project period may not exceed \$750,000. The total project period for a combined R61/R33 application submitted in response to this FOA may not exceed three years, with no more than two 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.

8. Innovation Grants to Nurture Initial Translational Efforts (IGNITE): Development and Validation of Model Systems and/or Pharmacodynamic Markers to Facilitate Neurotherapeutic Discovery (Clinical Trial Not Allowed)

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

Hyperlink: (PAR-18-763)

Type: *R61/R33*

Application Due Date: June 19, 2018, October 17, 2018, February 20, 2019, June 19, 2019, October 17, 2019, February 19, 2020, June 17, 2020, October 20, 2020 and February 17, 2021 and <u>Standard AIDS dates</u>. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This funding opportunity announcement (FOA) encourages the development and validation of: 1) animal models and human tissue ex vivo systems that recapitulate the phenotypic and physiologic characteristics of a defined neurological disorder and/or 2) clinically feasible pharmacodynamic markers for therapeutics designed to treat neurological disease. The goal of this FOA is to promote a significant improvement in the translational relevance of animal models, ex vivo systems, and pharmacodynamic markers that will be utilized to facilitate the development of neurotherapeutics. Ideally, models, model systems and pharmacodynamic markers proposed in applications for this FOA would have the potential to provide feasible and meaningful assessments of efficacy following therapeutic intervention that would be applicable in both preclinical and clinical settings. This FOA is part of a suite of Innovation Grants to Nurture Initial Translational Efforts (IGNITE) focused on enabling the exploratory and early stages of drug discovery.

Budget: Direct costs cannot exceed \$499,000 in any one year . Cumulative direct costs for the entire 3-year project period may not exceed \$750,000. The total project period for a combined R61/R33 application submitted in response to this FOA may not exceed three years, with no more than two 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.

9. Harnessing Big Data to Halt HIV (R01 Clinical Trial Optional)

 Letter of Intent: 30 days prior to the application due date
 Hyperlink: (PAR-18-764)

 Application Due Date:
 Standard AIDS dates.

 Apply by 5:00 PM local time of applicant organization.

Type: *R01*

Funding Opportunity Announcement: The purpose of this Funding Opportunity Announcement (FOA) is to promote research that transforms understanding of HIV transmission, the HIV care continuum, and HIV comorbidities using Big Data Science (BDS). This FOA will support projects to assemble diverse big data sources, conduct robust and reproducible analyses, and create meaningful visualizations of big data, as well as, engage ethical experts where appropriate to ensure the development of this scientific area is guided by ethical principles.

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.

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

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