NIH funding opportunities

Faculty of Medicine and Health Sciences: Research Development and Support 21 Jan 2020 (#1)

[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** 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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Important Notices & News

- **NIH Budget Appropriation for Fiscal Year 2020:** NIH receives $41.68 billion in funding, an increase of $2.6 billion from FY 2019. For NIH, the bill includes $500 million for the All of Us precision medicine study, a $25 million increase for HIV/AIDS research. NIAID receives $5.89 billion, up 6.6 percent from FY 2019's $5.52 billion. It includes $511 million for research related to combating antimicrobial resistance, an increase of $50 million. The appropriation also provides not less than $200 million to advance basic, translational, and clinical research to develop a universal influenza vaccine, an increase of $60 million.
- **Highlight Preliminary Data in Your Application:** When you're crafting your grant application, high-quality preliminary data can make all the difference. Use preliminary data to your advantage. Bolster your application with strong preliminary data to demonstrate two key factors:
  - Approach—your proposed research is promising.
  - Feasibility—your ability to carry it out is credible.
- Apply for grant funds to advance research and development of rapid point-of-care diagnostics for hepatitis C virus (HCV) detection and treatment through a new **Notice of Special Interest (NOSI): Advancing Development of Rapid Point-of-Care Hepatitis C Virus Diagnostics** issued by NIAID and the National Institute of Biomedical Imaging and Bioengineering.
- **NIAID Paylines and Budget Information Changes Throughout the Year:** When NIAID begins the new fiscal on October 1, operating under a continuing resolution, some grants are paid using *interim paylines*. These are not true paylines because they are not based on budget calculations. An interim payline is simply an administrative measure to get some top-scoring grants out the door while NIAID awaits their appropriation. For R01s, NIAID typically use the payline until August. At that point, they start funding applications nominated for selective pay and applications that missed the payline until all remaining money runs out.
  - This information might influence your decision in which review cycle to apply: Cycle 1 with submission dates between 25 January and 7 May might be the best time to submit your application. The advisory council review takes place during August. Because NIAID sets conservative paylines, they generally have extra money at the end of the fiscal year.
- **Details on Human Fetal Tissue Policy Implementation:** NIH policy on Human Fetal Tissue (HFT) Research requires that applications and proposals involving HFT that fall within a fundable scoring range be assessed for policy compliance by an ethics advisory board.
- **NOT-OD-20-053** Notification of HHS Plan to Publish a Statement Announcing the Intention to Convene an NIH Human Fetal Tissue Research Ethics Advisory Board for Fiscal Year 2020 and Soliciting Nominations
- **NIAID Sets Interim Paylines for R03 and R21 Activity Codes:** NIAID's interim paylines for both small grant (R03) and exploratory/developmental research grant (R21) awards are set at a ***28 overall impact score***. We maintain a list of interim and fiscal year paylines at **NIAID Paylines**.
- **NOT-CA-20-015 Notice of Intent to Publish a Funding Opportunity Announcement for Strengthening Institutional Capacity to Conduct Global Cancer Research (D43).** The National Cancer Institute (NCI) intends to

publish a Funding Opportunity Announcement (FOA) as a Request for Applications (RFA) that will invite applications from U.S.-based cancer-research intensive institutions who propose research training programs working in collaboration with a low-and middle-income country (LMIC) institution to strengthen capacity to conduct global research. The overarching goal of this research training program is to provide investigators and health professionals with the scientific expertise, mentorship, and leadership skills needed to conduct innovative and collaborative global research projects that will contribute to the advancement of basic, clinical, translational, and population-based cancer research. Estimated Publication Date of Funding Opportunity Announcement: January 28, 2020.

- **NOT-OD-20-043 Publication of the Revised NIH Grants Policy Statement** (Rev. December 2019) for FY 2020. A document is available that summarizes the significant changes that are implemented
- **NOT-OD-20-018 UPDATE: NIH HIV/AIDS Research Priorities and Guidelines for Determining HIV/AIDS Funding.** The Notice informs the scientific community about the NIH HIV/AIDS research priorities and guidelines for allocation of HIV funding for fiscal years (FY) 2021-2025.
- **NOT-LM-20-003 Request for Information (RFI): ClinicalTrials.gov Modernization.** The purpose of this Request for Information is to solicit public input to guide the National Library of Medicine (NLM) in planning infrastructure enhancements aimed at users and submitters of ClinicalTrials.gov as part of a multi-year modernization initiative.

1. Novel Therapeutics Directed to Intracellular HIV Targets (R21 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date **Hyperlink:** RFA-AI-19-072 **Type: R21**
Application Due Date: April 1, 2020**.** Apply by 5:00 PM local time of applicant organization.
Funding Opportunity Announcement: The purpose of this Funding Opportunity Announcement (FOA) is to support the development of novel therapeutics which are directed to intracellular HIV targets. During the HIV life cycle multiple viral associated proteins are expressed in the infected cell. All are critical to support assembly, release and maturation of the virus. Considering each protein has a defined role in the life cycle, therapeutically targeting one or more may be an effective strategy to obtain potent antiviral activity.
Budget: NIAID intends to commit $3.0M in FY2021 to fund 9-12 awards. **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.**

2. HIV-associated Non-Communicable Diseases Research at Low- and Middle-Income Country Institutions (R21 Clinical Trial Optional)

Letter of Intent: 30 days prior to the application due date **Hyperlink:** PAR-20-030 **Type: R21**
Application Due Date: December 3, 2020. Apply by 5:00 PM local time of applicant organization.
Funding Opportunity Announcement: The goal of this program is to support locally relevant research in critical areas of HIV-associated non-communicable diseases (NCDs) at Low- and Middle-Income Country (LMIC) Institutions, to enhance research capacity and build a network of researchers both within and across LMICs to address this critical burden. This initiative is expected to stimulate new research on the interplay between HIV and development of NCDs in persons living with HIV (PLWH). This includes exploratory studies to uncover the extent to which HIV infection influences the etiopathogenesis of the NCDs; and to identify and develop appropriate approaches for effective diagnosis, prevention, therapeutic interventions and integrated clinical care for PLWH with the comorbid conditions. Applicants should develop their studies in keeping with the NIH HIV/AIDS Research Priorities (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-137.html). Research teams should contain an appropriate mix of expertise to accomplish the proposed studies, including partnerships between HIV and NCD researchers who can initiate new ideas and determine feasibility of novel approaches to understand and reduce the long-term suffering from the comorbid disorders. Applicants will also be asked to address the needs of collaborating LMIC institutions to develop capacity for carrying out research in this field.
Budget: The combined budget for direct costs for the two-year project period may not exceed $275,000. No more than $150,000 may be requested in any single year.

3. Secondary Analysis of Existing Datasets in Heart, Lung, and Blood Diseases and Sleep Disorders (R21 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date **Hyperlink:** PAR-20-078 **Type: R21**
Application Due Date: February 26, 2020, October 28, 2020, February 26, 2021, October 28, 2021, February 26, 2022, October 28, 2022. **AIDS dates:** April 20, 2020, November 25, 2020, April 20, 2021, November 26, 2021, April 20, 2022, November 25, 2022 Apply by 5:00 PM local time of applicant organization.
Funding Opportunity Announcement: The goal of this funding opportunity is to stimulate the use of existing human datasets for well-focused secondary analyses to investigate novel scientific ideas or new models, systems, tools, methods, or technologies that have the potential for significant impact on biomedical or biobehavioral research in areas relevant to the NHLBI mission. This FOA actively supports the use of existing database resources to conduct additional analyses secondary to a project's originally-intended primary purpose. Applications may be related to, but must be distinct from, the specific aims of the original data collection. It will not support the collection of new data.
Budget: NHLBI may fund up to eighteen awards per year. Direct costs must be limited to $75,000 in direct costs in any single year, with no more than $150,000 over the R21 two-year period.

4. Glial Plasticity in the Aging Brain (R01 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date **Hyperlink:** RFA-AG-21-010 **Type: R01**

Application Due Date: June 17, 2020. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: Recent reports highlight the enormous spatial and temporal diversity of glia, even within the same glial cell type. This within-glial-cell-type heterogeneity evolves during aging, suggesting that subtypes of glia with distinct physiological roles could emerge to influence brain aging processes. The goal of this Funding Opportunity Announcement is to support research addressing critical knowledge gaps in our understanding of how these glial subpopulations could contribute to vulnerability and resilience to brain aging.

Budget: NIA intends to commit $2,000,000 in FY 2021 to fund 4-6 awards. Application budgets are limited to $250,000 in direct costs per year. The maximum project period is 5 years

5. Novel Imaging Approaches for detection of Persistent HIV and Neuroimmune dysfunction associated with HIV In the Central Nervous System (CNS) (R01 Clinical Trial Optional)

Letter of Intent: 30 days prior to the application due date **Hyperlink:** RFA-MH-20-330 **Type: R01**

Application Due Date: March 11, 2020. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) invites research applications to elucidate mechanisms of neuroimmune dysfunction caused by HIV-1 and to detect persistent/latent/reactivated HIV using novel imaging/neuroimaging approaches in the central nervous system from anti-retroviral therapy (ART) suppressed individuals. Applications testing a fully conceptualized and hypothesis-based solid premise founded with adequate preliminary data should consider applying to the companion R21 announcement, RFA MH-20-331 . Basic and preclinical research in domestic and international settings are of interest. Multidisciplinary research teams and collaborative alliances are encouraged but not required.

Budget: NIMH intends to commit an estimate of $2,000,000 (Total Costs) in FY 2020 to fund 3-5 awards in response to this FOA and the companion FOA. Future year amounts will depend on annual appropriations. NINDS intends to commit approximately $1,500,000 (Total Costs) in FY 2020 to fund 2-3 awards in response to this FOA . Future year amounts will depend on annual appropriations. Application budgets are not limited but need to reflect the actual needs of the proposed project. The maximum project period is 5 years

6. Engineering Next-Generation Human Nervous System Microphysiological Systems (R01 Clinical Trials Not Allowed)

Letter of Intent: 30 days prior to the application due date **Hyperlink:** PAR-20-055 **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) encourages research grant applications directed toward developing next-generation human cell-derived microphysiological systems (MPS) and related assays that replicate complex nervous system architectures and physiology with improved fidelity over current capabilities. Supported projects will be expected to enable future studies of complex nervous system development, function and aging in healthy and disease states. This FOA is intended to provide support for the further development of projects where preliminary data supports the feasibility of the line of investigation. Applicants without preliminary data may wish to apply to the companion R21 FOA (PAR-20-082).

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

7. Discovery of Early Type 1 Diabetes Disease Processes in the Human Pancreas [HIRN Consortium on Beta Cell Death and Survival (CBDS)] (U01 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date **Hyperlink:** RFA-DK-19-024 **Type: U01**

Application Due Date: April 1, 2020. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) requests applications to explore human pancreatic tissues for the discovery of specific signaling or processing pathways that may contribute to the asymptomatic phase of T1D, the discovery of early biomarkers of T1D pathogenesis, the development of diagnostic tools for the detection and staging of early T1D in at-risk or recently-diagnosed individuals, and/or the identification and biological validation of therapeutic targets for the development of preventative or early treatment strategies. Successful applicants will join the Consortium on Beta Cell Death and Survival (CBDS), whose mission is to better define and detect the mechanisms of beta cell stress and destruction central to the development of T1D in humans, with- the long-term goal of protecting the residual beta cell mass in T1D patients as early as possible in the disease process, and of preventing the progression to autoimmunity. The CBDS is part of a collaborative research framework, the Human Islet Research Network (HIRN, https://hirnetwork.org/), whose overall mission is to support innovative and collaborative translational research to understand how human beta cells are lost in T1D, and to find innovative strategies to protect and replace functional beta cell mass in humans. This FOA will only support studies with a primary focus on increasing our understanding of human disease biology (as opposed to rodent or other animal models). This FOA will not accept applications proposing a clinical trial.

Budget: NIDDK intends to commit up to $3.5 million to fund 4-6 awards in FY 2020. The number of awards is contingent upon availability of funds and the submission of a sufficient number of meritorious applications. Application budgets are limited to $550,000 in direct costs per year. Budgets are expected to reflect the actual needs of the proposed project. The maximum project period is 4 years.

8. Development and Integration of Novel Components for Open and Closed Loop Hormone Replacement Platforms for T1D Therapy (R01 Clinical Trial Optional)

Letter of Intent: 30 days prior to the application due date **Hyperlink:** RFA-DK-19-029 **Type: R01**

Application Due Date: April 7, 2020. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) encourages applications from institutions/organizations proposing original research addressing barriers that limit progress toward effective open- and closed-loop glucose control systems. Proposed research should tackle important obstacles at the level of sensing, hormone formulation and delivery, self-management decision support systems, and/or design of automated controllers/algorithms able to manage an integrated platform. This research may contribute to development of affordable and user friendly technologies to improve glucose control in patients with type 1 diabetes.

Budget: The NIDDK intends to commit up to $3 million dollars in FY 2020 to fund 4-6 awards. Application budget is limited to $500,000 direct costs per year to be used over a project period of up to 4 years. Budgets are expected to reflect the actual needs of the proposed project. The maximum project period is 4 years.

9. BRAIN Initiative: Biology and Biophysics of Neural Stimulation and Recording Technologies (R01 Clinical Trials Optional)

Letter of Intent: 30 days prior to the application due date **Hyperlink:** RFA-NS-20-006 **Type: R01**

Application Due Date: March 24, 2020, June 2, 2020, October 1, 2020, February 2, 2021, June 1, 2021, October 1, 2021, February 1, 2022, June 1, 2022, and October 3, 2022 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 technologies suitable for recording from as well as controlling specified cell types and circuits to modulate and understand function in the central nervous system. In order to accomplish these goals, further information is needed to understand the function of current technologies used for recording or stimulating the nervous system. This RFA accepts grant applications in two related but distinct areas. The first is 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 technologies. The second is to understand the biological and bioinformatic content of signals recorded from neuronal and non-neuronal cells and circuits. Development of new technologies, therapies and disease models is outside the scope of this FOA. Activities related to enabling the simultaneous use of multiple recording or stimulation technologies are allowed.

Budget: NIH anticipates providing $10M per year to fund an estimated 10 to 15 awards. Application budgets are not limited but need to reflect the actual needs of the proposed project. 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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