

Faculty of Medicine and Health Sciences: Research Development and Support 15 April 2019 (#12)

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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> or <u>www.sun.ac.za/RDSfunding</u> (current & archive).

Confirm your intent to apply ASAP, but not later than **60 days** before the submission date. Tygerberg Campus: <u>cdevries@sun.ac.za</u> • Stellenbosch Campus <u>lizelk@sun.ac.za</u>

Important Notices & News

• New FAQs for NIH-MRC U.S.-South Africa Collaborative Research

1. Feasibility of Novel Diagnostics for TB in Endemic Countries (FEND for TB) (Clinical Trial Not Allowed) Letter of Intent: 30 days prior to the application due date Hyperlink: (RFA-AI-19-030) Type: U01 Application Due Date: July 22, 2019. Apply by 5:00 PM local time of applicant organization. Funding Opportunity Announcement: The objective of this Funding Opportunity Announcement (FOA) is to support the evaluation of early stage diagnostics and novel diagnostic strategies for Tuberculosis (TB) in the context of existing clinical algorithms in TB endemic countries. Evaluation studies should: 1) perform proof-of principle studies of novel diagnostic tests and strategies and 2) provide feedback to diagnostic developers on the performance of the technologies and most effective strategies for use of the diagnostic technologies in an endemic setting. U01 = Cooperative Agreement: A support mechanism used when there will be substantial Federal scientific or programmatic involvement. Substantial involvement means that, after award, NIH scientific or program staff will assist, guide, coordinate,

or participate in project activities. **Budget**: NIH intends to fund an estimate of 1-2 awards, corresponding to a total of \$4,000,000 for fiscal year 2020. 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.

2. Oral Health in People Living with HIV and Additional Non-Communicable Diseases (R01 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: (<u>RFA-DE-20-001</u>) Application Due Date: July 29, 2019 Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This funding opportunity announcement (FOA) encourages research to address gaps in our knowledge of the oral health status of people living with HIV (PLWH) with an emphasis on PWLH who also have non-communicable diseases (NCDs). It supports efforts to understand the combined effects of HIV, antiretroviral therapy (ART), and NCDs on oral health, and it encourages identification of approaches for prevention and treatment of oral diseases and assessment of treatment outcomes in PLWH with or without NCDs. These efforts could help to generate evidence for oral health treatment guidelines tailored to the needs of dental patients with HIV.

Budget: National Institute of Dental and Craniofacial Research (NIDCR) intends to commit \$2,500,000 in FY 2020 to fund 3-4 awards. Application budgets are not limited but need to reflect the actual needs of the proposed project. The maximum project period is 5 years

3. International Bioethics Research Training Program (Clinical Trial Optional)

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

Hyperlink: (PAR-19-243)

Type: D43

Type: R01

Application Due Date: June 4, 2019; June 4, 2020, June 4, 2021. Apply by 5:00 PM local time of applicant organization. Funding Opportunity Announcement: The overall goal of this initiative is to support the development of a sustainable critical mass of bioethics scholars in low and middle-income country (LMIC) research intensive institutions with the capabilities to conduct original empirical or conceptual ethics research that addresses challenging issues in health research and research policy in these countries as well as provide research ethics leadership to their institutions, governments and international research organizations. FIC will support LMIC-U.S. collaborative institutional bioethics doctoral and postdoctoral research training programs that incorporate didactic, mentored research and training components to prepare multiple individuals with ethics expertise for positions of scholarship and leadership in health research institutions in the LMIC. This Funding Opportunity Announcement (FOA) allows support of trainees as the lead investigator of an independent clinical trial; or a separate ancillary study to an existing trial; or to gain research experience in a clinical trial led by another investigator, as part of their research and career development.

Budget: Applicants may request up to \$230,000 direct costs per year. The total project period for an application submitted in response to this funding opportunity may not exceed 5 years.

4. Late-Stage Implementation Research Addressing Hypertension in Low- and Middle-Income Countries: Scaling Up Proven-Effective Interventions (Clinical Trial Optional)

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

Hyperlink: (RFA-HL-20-005) Type: UG3/UH3

Application Due Date: July 8, 2019. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) seeks grant applications to optimally and sustainably address late-stage implementation research questions to address scaling up evidence-based interventions at the population level for prevention and management of hypertension in low- and middle-income countries and small island developing states. For the purposes of this FOA, late-stage implementation research is defined as research to identify strategies to achieve sustainable uptake of proven-effective interventions in routine clinical, public health, and community-based settings and maximize the positive impact on population health. Each awarded project is to conduct late-stage implementation research in one of six geographical regions (e.g., East Asia and the Pacific; Europe and Central Asia; Latin America and the Caribbean; Middle East and North Africa; South Asia; Sub-Saharan Africa). As a group, awardees will constitute a research alliance for hypertension implementation science research in low-resource settings with capabilities for addressing scale-up of evidence-based interventions at the population level for the prevention and management of hypertension. This program is not intended to support research that will be conducted primarily in and/or by the United States or other high-income institutions that do not meet eligibility criteria. This FOA uses the bi-phasic, milestone driven UG3/UH3 cooperative agreement mechanism. Awards made under this FOA will initially support a two-year milestone-driven needs assessment and planning, with possible transition to an implementation (UH3) phase of up to 4 additional years. Only UG3 projects that meet the scientific milestones and award requirements of the UG3 phase may transition to the UH3 phase. Applications submitted in response to this FOA must address both the UG3 and UH3 phases and are expected to include plans for project management and performance milestones for each phase.

Budget: The following NIH components intend to commit the following amounts in FY 2020: National Heart, Lung, and Blood Institute (NHLBI)= \$2,000,000 total costs to fund 4 awards & National Institute of Neurological Disorders and Stroke (NINDS): \$500,000 total costs to fund 1 award. Application budgets are limited to \$460,000 direct costs in Fiscal Year 2020, and \$460,000 direct costs per year in FY2021, \$1,150,000 direct costs through FY2022-FY2024, and \$552,000 in FY2025. Budgets should reflect the actual needs of the proposed project. The scope of the project should determine the project period. The project period is limited to up to 2 years for the UG3 phase and up to 4 years for the UH3 phase. The maximum project period is up to 6 years.

5. BRAIN Initiative: Secondary Analysis and Archiving of BRAIN Initiative Data (Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: (RFA-MH-20-120) Type: R01 Application Due Date: September 6, 2019 and June 11, 2020. Apply by 5:00 PM local time of applicant organization. Funding Opportunity Announcement: The BRAIN Initiative and the neuroscience field as a whole are generating massive and diverse research data across different modalities, spatiotemporal scales and species in efforts to advance our understanding of the brain. The data types are being produced through development and application of innovative technologies in high-throughput -omics profiling, optical microscopy, electron microscopy, electrophysiological recording, macroscale neuroimaging, neuromodulation, and others. The BRAIN Initiative has made significant investments in the development of an infrastructure to make data available to the research community in a useful way. This infrastructure includes data archives, data standards, and software for data integration, analysis and machine learning. This Funding Opportunity Announcement (FOA) encourages secondary analysis of the large amounts of existing data related to the BRAIN Initiative. The data do not need to be held in one of the funded BRAIN Initiative data archives, but the data must be held in a data archive that is readily accessible to the research community. Support will be provided for innovative analysis of relevant existing datasets using conventional or novel analytic methods, data science techniques, and machine learning approaches. Support may also be requested to prepare and submit existing data into any of the BRAIN Initiative data archives. Investigators should not underestimate the time and effort that may be necessary to curate or harmonize data. Analyzed data, models and analytical tools generated under this FOA are expected to be deposited into an appropriate data archive. Since the BRAIN Initiative data archives are mostly making the data available to the research community through cloud-based storage, depositing the analyzed data, models and tools are expected to enhance opportunities to create a data sandbox where investigators can easily compare the results of their analysis with those from other research groups. The goal of this FOA is to promote studies that will significantly advance new discoveries and accelerate the pace of research of the BRAIN Initiative through harnessing the big data and machine learning opportunities. Awardees are expected to enhance the value of existing data, improve the overall data integration and analysis capability, and strengthen the statistical power and rigor and reproducibility of BRAIN Initiative related data.

Budget: Issuing IC and partner components intend to commit an estimated total of \$4,000,000 to fund 8 awards in FY2020. Application budgets are limited to \$300,000 (direct costs) each year 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 3 years

6. Research Projects to Improve the Predictive Value of Animal Models in Recapitulating Human Immunity to Influenza Infection and Vaccination

Letter of Intent: 30 days prior to the application due date	Hyperlink: <u>(PAR-19-247)</u>	Type: R21
	<u>(PAR-19-248)</u>	R01

Application Due Date: June 10, 2019, June 10, 2020, and June 10, 2021. Apply by 5:00 PM local time of applicant organization. Funding Opportunity Announcement: The purpose of this Funding Opportunity Announcement (FOA) is to support research to improve existing animal models or develop novel animal models that more accurately represent influenza immunity in humans, with an emphasis on increasing the predictive value of models for evaluating novel universal influenza vaccines.

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 any single year. Application budgets are limited to less than \$500,000 direct costs per year. The maximum project period is 5 years.

7. BRAIN Initiative: Tools to Facilitate High-Throughput Microconnectivity Analysis (Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: (RFA-MH-20-135) Type: R01 Application Due Date: September 27, 2019 and September 30, 2020. Apply by 5:00 PM local time of applicant organization. Funding Opportunity Announcement: The purpose of this Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative is to encourage applications that will develop and validate tools and resources to facilitate the detailed analysis of brain microconnectivity. Novel and augmented techniques are sought that will ultimately be broadly accessible to the neuroscience community for the interrogation of microconnectivity in healthy and diseased brains of model organisms and humans. Development of technologies that will significantly drive down the cost of connectomics would enable routine mapping of the microconnectivity on the same individuals that have been analyzed physiologically, or to compare normal and pathological tissues in substantial numbers of multiple individuals to assess variability. Advancements in both electron microscopy (EM) and super resolution light microscopic approaches are sought. Applications that propose to develop approaches that break through existing technical barriers to substantially improve current capabilities are highly encouraged. Proof-of-principle demonstrations and/or reference datasets enabling future development are welcome, as are improved approaches for automated segmentation and analysis strategies of neuronal structures in EM images. Budget: Issuing IC and partner components intend to commit an estimated total of \$4 million to fund 3-7 awards in FY2020. 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 3 years.

8. International Research Ethics Education and Curriculum Development Award (Clinical Trial Not Allowed)

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

Hyperlink: (PAR-19-244)

Type: R25

Application Due Date: June 4, 2019, June 4, 2020, June 4, 2021. Apply by 5:00 PM local time of applicant organization. Funding Opportunity Announcement: The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The over-arching goal of this R25 program is to support educational activities that foster a better understanding of biomedical, behavioral and clinical research and its implications.

- Courses for Skills Development
- Mentoring Activities
- Curriculum or Methods Development

The goal of this initiative is to support educational activities that foster a better understanding of the ethics of international biomedical, behavioral and clinical research and enhance the application of research ethics principles in low - and middle-income countries (LMICs). This program aims to increase the number of LMIC research intensive institutions that can provide advance d education in international research ethics. Education programs supported by this initiative will equip scientists, health professionals and academics in these countries with in-depth knowledge of the ethical principles, processes and policies related to international clinical and public health research. Programs should be designed to strengthen the critical competencies needed to provide re search ethics education, ethical review leadership and expert consultation to LMIC researchers, their institutions, governments and international research organizations. To accomplish this goal, this FOA will support innovative LMIC masters level research ethics education programs proposing integrated activities to develop curriculum, courses for skills development, including practicum experiences, and creative mentoring approaches.

Budget: Applications may request up to \$230,000 direct costs per year. The total project period may not exceed 5 years.

9.	. Basic and Translational Research on Adducts in Cancer Risk Identification and Prevention (Clinical Trial Optional)		
Lett	er of Intent: 30 days prior to the application due date	Hyperlink: <u>(PAR-19-251)</u>	Type: R01
		<u>(PAR-19-252)</u>	R21

Application Due Date: July 2, 2019; November 6, 2019; July 2, 2020; November 6, 2020; July 8, 2021; November 8, 2021. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: The overall objective of this Funding Opportunity Announcement (FOA) is to support innovative research on adducts to cellular macromolecules as indicators of exposures to endogenous and exogenous cancer risk factors relevant to exposures in human populations. The priority is on projects that will focus on adductomic approaches, i.e., address some aspects of the totality of adducts. The ultimate goal is to discover and characterize the utility of adductomic-based exposure indicators for cancer detection, cancer prevention, and/or assessing cancer risks. In well-justified cases, innovative studies using the adductomic approaches in the context of cancer etiology and/or gene-environment interaction research may also be appropriate. For projects intended for NIEHS support, the focus may be on innovative technology and method development.

Budget: R01 - Application budgets are not limited but need to reflect the actual needs of the proposed project. 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 any single year.

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

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