

Faculty of Medicine and Health Sciences: Research Development and Support 05 Feb 2019 (#4)

[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 **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.

Contact: RGMO Pre-Awards <a href="mailto:cdevries@sun.ac.za">cdevries@sun.ac.za</a>

# **Important Notices**

- Request for Information (RFI): Inviting Comments and Suggestions on NIAIDs Antibacterial Resistance Research Framework (NOT-AI-19-033)
- Notice of Clarification in Eligibility Requirements for PAR-19-098 Emerging Global Leader Award (K43 Independent Clinical Trial Not Allowed) and PAR-19-051 Emerging Global Leader Award (K43 Independent Clinical Trial Required) (NOT-TW-19-002)

## 1. Computational Models of Immunity (U01 Clinical Trial Not Allowed)

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

Hyperlink: (RFA-Al-19-011)

**Application Due Date:** June 10, 2019. Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement**: This Funding Opportunity Announcement (FOA) solicits applications developing computational models of immunity that advance understanding of the mechanisms required to induce and/or maintain protective immunity to infectious pathogens, other than HIV, and/or vaccines against such pathogens. The main goal of this FOA is to advance development and application of computational models of immunity that are refined through iterative immunological experimentation to validate and improve the utility and robustness of the computational models. Another goal of this FOA is to make the computational models and data developed under this initiative readily available to the broader research community for further refinement or direct use in biological experimentation. This program will also support workshops and symposia to foster the use of computational models of immunity by the broader research community.

**Budget:** NIAID intends to commit \$4.0 million in FY 2020 to fund 3 - 4 awards. Application budgets are limited to \$750,000 direct costs per year and 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. The scope of the proposed project should determine the project period. The maximum project period is 5 years.

## 2. Advanced Clinical Trials to test Artificial Pancreas Device Systems in Type 1 Diabetes (U01 Clinical Trial Required)

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

Hyperlink: (RFA-DK-18-025)

Type: U01

Type: U01

**Application Due Date:** April 10, 2019. Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement**: This FOA will support the conduct of advanced clinical trials designed to test the outpatient clinical safety and efficacy of artificial pancreas (AP) device systems in type 1 diabetes with the objective of improving glycemic control, reducing acute complications and improving quality of life. These trials should generate data able to satisfy safety and efficacy requirements by regulatory agencies regarding the clinical testing of AP device systems.

**Budget:** NIDDK intends to commit up to \$3 million to fund 1-2 awards in FY 2019. 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 a maximum of \$2.4 million direct costs, exclusive of indirect costs on subcontracts, per year. Budgets are expected 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.

#### 3. High Quality Human Reference Genomes (HQRG) (U01 Clinical Trial Not Allowed)

**Letter of Intent:** 30 days prior to the application due date **Hyperlink:** (RFA-HG-19-002)

Application Due Date: April 2, 2019. Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement**: The National Human Genome Research Institute (NHGRI) seeks applications for the production of High Quality Human Reference Genomes (HQRG) as a component of the NHGRI Human Genome Reference Program (HGRP). One aim of the HGRP is to develop a genome reference that is representative of human population genetic diversity. To help achieve this goal, this HQRG initiative is expected to establish metrics for high quality-genome assemblies; collaborate with other HGRC awardees on sample selection and prioritization; produce on the order of 350 high quality haplotype-resolved human genomes, using diverse samples consented for full data release; and provide capacity to help resolve error reports received by the HGRC.

**Budget:** Application budgets are not limited but need to reflect the actual needs of the proposed project. NHGRI intends to commit up to \$3,500,000 in FY 2019 to fund one award. Future year amounts will depend on annual appropriations.

#### 4. Research and Development for Genome Reference Representations (GRR) (U01 Clinical Trial Not Allowed)

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

Hyperlink: (RFA-HG-19-003)

Type: U01

Application Due Date: April 2, 2019. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: The National Human Genome Research Institute (NHGRI) seeks to support research and development for a next-generation genome reference representation. This pan-genome model will be able to capture all human genome variation and support scalable analysis in a software framework that will set a robust foundation for open science. Projects will develop improved representations for computing on the information contained within the increasing numbers of diverse genome assemblies that will make up the human reference sequence going forwards. Further research and development is needed to refine and implement a practical and robust representation with software to demonstrate the ability of the reference to enable active use of population-scale variation. The pan-genome representation will need to demonstrate efficiency, scalability, computational speed, ease of use, foster adoption of the reference, and support analysis tool development by other contributors for a wide range of purposes. The FOA will fund multiple projects that will together help set benchmarks and standards in this domain. A primary requirement is to adhere to a high level of open science including open-source tools, standards, specifications, and robust software engineering to enable this core resource to be sustainable, widely integrated in the larger community and encourage outside contributions. Robust design is also expected to provide a foundation for independent efforts that may have enhanced privacy and security requirements.

**Budget**: NHGRI intends to commit \$1.25 M in FY 2020 to fund 2-4 awards. Application budgets are not limited but need to reflect the actual needs of the proposed project. The maximum project period is 3 years.

### 5. Addressing the Role of Violence on HIV Care and Viral Suppression (Clinical Trial Optional)

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

Hyperlink: (RFA-MH-20-200)

Type: R01

(RFA-MH-20-201) R21 (RFA-MH-20-202) R34

Type: U01

Application Due Date: April 10, 2019. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This funding opportunity announcement (FOA) invites applications on violence and the HIV care continuum, including: (1) research that will advance understanding of the role of exposure to violence on engagement and retention in HIV care, HIV medication adherence, and viral suppression, and (2) research to develop and test novel interventions to improve HIV care continuum outcomes for individuals who have experienced violence. RFA-MH-20-200 uses the R01 grant mechanism, while RFA-MH-20-201 uses the R21 mechanism and RFA-MH-20-202 uses the R34 mechanism. High risk/high payoff projects that lack preliminary data or utilize existing data may be most appropriate for the R21 mechanism. Applications with preliminary data and/or those including longitudinal analysis should consider using the R01 mechanism. Applicants proposing to develop and pilot test an intervention should consider the R34 mechanism.

**Budget**: NIH intends to fund an estimate of 4-6 awards, corresponding to a total of \$2,000,000 for fiscal year 2020 to fund these FOA's Future year amounts will depend on annual appropriations. R01 - Direct costs are limited to \$500,000 in any single year. 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. R34 - Direct costs are limited to \$450,000 over the entire project period, with no more than \$225,000 in direct costs in any single year. The total project period for an application submitted in response to this funding opportunity may not exceed three years.

## 6. Comparative Effectiveness Research in Clinical Neurosciences (UG3/UH3 Clinical Trial Not Allowed)

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

Hyperlink: (PAR-19-171)

Type: UG3/UH3

Application Due Date: New applications: March 29, 2019; June 18, 2019; October 18, 2019; February 19, 2020; June 18, 2020; October 14, 2020; February 18, 2021; June 18, 2021; October 14, 2021, by 5:00 PM local time of applicant organization. Resubmission or Revision applications: April 30, 2019; July 18, 2019; November 14, 2019; March 18, 2020; July 14, 2020; November 18, 2020, March 18, 2021; July 14, 2021; November 18, 2021, by 5:00 PM local time of applicant organization. Standard AIDS dates Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement**: The purpose of this Funding Opportunity Announcement (FOA) is to encourage grant applications for investigator-initiated prospective observational comparative effectiveness research (CER) to the National Institute of Neurological Disorders and Stroke (NINDS) (note: only prospective observational studies will be considered)). The study must address questions within the mission and research interests of the NINDS and may evaluate preventive strategies, diagnostic approaches, or interventions including drugs, biologics, and devices, or surgical, behavioral, and rehabilitation therapies. NINDS is particularly interested in pragmatic study designs that utilize a cost-effective means of prospectively collecting observational data important to current clinical practice.

**Budget**: Application budgets are not limited but need to reflect the actual needs of the proposed project. Up to 2 years for the UG3; up to 5 years for the UH3.

#### 7. Achieving Tissue Robustness Through Harnessing Immune System Plasticity (R01 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: (PAR-19-172) Type: R01 (PAR-19-173) R21

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

**Funding Opportunity Announcement**: This funding opportunity announcement (FOA) encourages state-of-the-art, systematic research approaches to elucidate the role of immune system plasticity in health and in the pathogenesis of dental, oral, and craniofacial (DOC) diseases. This FOA encourages applications that will seek to determine mechanisms underlying the ability or inability of the immune system to dynamically maintain its functional role against internal and external perturbations. The expectation is that new knowledge derived from this research will facilitate development of novel, personalized immunomodulatory-based therapies that shift the balance between degenerative and regenerative processes toward regeneration disease management in a patient-specific manner across the lifespan.

**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

Research Development and Support Division (RDSD), Faculty of Medicine and Health Sciences, Stellenbosch University

5th Floor, Teaching Block, Tygerberg Campus. • Enquiries: Christa • Tel: 9838 • Email: cde vries@sun.ac.za