Faculty of Medicine and Health Sciences: Research Development and Support

02 Mar 2020 (#10)

[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 <a href="www.grants.nih.

Confirm your intent to apply ASAP, but not later than 60 days before the submission date.

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Important Notice

- NIH mobilizes research to address new coronavirus
 At NIH, scientists are working to develop a vaccine,
 identify existing therapeutics and encourage coronavirus research.
- Coronavirus news and resources
- Resource allocation for biomedical research: analysis of investments by major funders. Data on grants for biomedical research by 10 major funders of health research were collected from the World RePORT platform to explore what is being funded, by whom and where. This analysis is part of the World Health Organization Global Observatory on Health Research and Development's work with the overall aim to enable evidence-informed deliberations and decisions on new investments in health research and development. Out of a total of 69,420 grants in 2016, the United States of America's National Institutes of Health (NIH) funded the greatest number of grants (52,928; 76%) and had the longest average grant duration (6 years and 10 months). Grants for research constituted 70.4% (48,879) of all types of grants, followed by grants for training (13,008; 18.7%) and meetings (2907; 4.2%). Of grant recipients by income group, low-income countries received only 0.2% (165) of all grants. Almost three-quarters of all grants were for non-communicable diseases (72%; 40,035), followed by communicable, maternal, perinatal and nutritional conditions (20%; 11,123), and injuries (6%; 3056). Only 1.1% of grants were for neglected tropical diseases and 0.4% for priority diseases on the WHO list of highly infectious (R&D blueprint) pathogens.

Funding organisation	Number of grants in 2016	Average grant duration
National Institutes of Health (NIH)	52,928 (76%)	6 years, 10 months
Canadian Institutes of Health Research (CIHR)	5567 (8%)	4 years, 4 months
Wellcome Trust	5273 (7.6%)	3 years, 8 months
Medical Research Council (MRC)	2649 (3.8%)	4 years, 7 months
European Commission (EC)	1076 (1.6%)	2 years, 11 months
Swedish Research Council (SRC)	999 (1.4%)	3 years, 7 months
Bill & Melinda Gates Foundation (BMGF)	783 (1.1%)	3 years, 7 months
Institut Pasteur	99 (0.14%)	1 years, 6 months
Swedish International Development Cooperation Agency (Sida)	25 (0.04%)	2 years, 11 months
European & Developing Countries Clinical Trials Partnership (EDCTP)	21 (0.03%)	2 years, 9 months

- Prioritizing research training and medical education in Africa: Q and A with Dr Jean Nachega
- NIH, Fogarty receive funding hikes for Fiscal Year 2020: NIH received a \$2.6 billion rise over the previous year, with an appropriation of \$41.68 billion, an increase of 6.65%. Fogarty's allocation was boosted by 3.4%, bringing its total to \$80.76 million.
- Focus on mobile health: Developing health solutions to improve health. Since its inception in 2014, Fogarty's Mobile Health: Technology and Outcomes in Low and Middle Income Countries program has supported projects to catalyze innovation through multidisciplinary research that addresses global health problems. Through more than 60 grants Fogarty is helping develop an evidence base for the use of mobile technology solutions to improve health, as well as to strengthen mHealth research capacity in low- and middle-income countries (LMICs).
- Many researchers fail to report results on ClinicalTrials.gov. A study of data in ClinicalTrials.gov published in The Lancet showed fewer than half of all trials are in full compliance with FDA regulations to report results within one year. Failure to report the results of a clinical trial can distort the evidence base for clinical practice, breaches researchers' ethical obligations to participants, and represents an important source of research waste. The Food and Drug Administration Amendments Act (FDAAA) of 2007 now requires sponsors of applicable trials to report their results directly onto ClinicalTrials.gov within 1 year of completion.
- NIH announces \$1 million prize competition to target global disease diagnostics. Bill & Melinda Gates Foundation to offer supplementary support for designs that can be developed into products on a rapid timeframe. The National Institutes of Health has launched a \$1 million Technology Accelerator Challenge to spur the design and development of non-invasive, handheld, digital technologies to detect, diagnose and guide therapies for diseases with high global and public health impact. The challenge is focused on sickle cell disease, malaria and anemia and is led by NIH's National Institute of Biomedical Imaging and Bioengineering (NIBIB).

1. Mobile Health: Technology and Outcomes in Low and Middle Income Countries (R21/R33 - Clinical Trial Optional)

Letter of Intent: 30 days prior to the application due date Hyperlink: PAR-19-376 Type: R21/R33

Application Due Date: September 24, 2020. AIDS date: Dec 3, 2020. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: The purpose of this Funding Opportunity Announcement (FOA) is to encourage exploratory/developmental research applications that propose to study the development, validation, feasibility, and effectiveness of innovative mobile health (mHealth) interventions or tools specifically suited for low- and middle-income countries (LMICs) that utilize new or emerging technology, platforms, systems, or analytics. The overall goal of the program is to catalyze innovation through multidisciplinary research that addresses global health problems, develop an evidence base for the use of mHealth technology to improve clinical and public health outcomes, and strengthen mHealth research capacity in LMICs. Applicants are required to propose partnerships between at least one U.S. institution and one LMIC institution. This FOA provides support for up to two years (R21 phase) for technology development and feasibility studies, followed by a possible transition to expanded research support (R33 phase) for validation, larger-scale feasibility, and effectiveness studies. Transition to the R33 depends on the completion of applicant-defined milestones, as well as program priorities and the availability of funds. All applicants must address both the R21 and R33 phases.

Budget: The R21 phase may not exceed \$125,000 in direct costs in any single year of the R21 phase. The R33 phase may not exceed \$200,000 in direct costs in any single year of the R33 phase. The project period is limited to 2 years for the R21 phase and up to 3 years for the R33 phase. The total project period may not exceed 5 years.

2. Partnerships for the Development of Universal Influenza Vaccines (Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: RFA-Al-20-003 Type: R21/

Application Due Date: July 2, 2020. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: The purpose of this Funding Opportunity Announcement (FOA) is to solicit applications to support development of promising universal influenza vaccine candidates that protect against both influenza A and B viruses.

Budget: NIAID intends to commit \$3M in FY2021 to fund 12-14 awards. Application budgets are limited to \$275,000 in direct costs over the two-year project period for the R21 phase, with a maximum of \$200,000 in direct costs allowed in any single year. The R33 award phase is limited to \$300,000 in direct costs per year. The total project period cannot exceed five years. Applicants should plan for two years of support for the R21 phase and up to 3 years of support for the R33 phase. The NIAID anticipates approximately 50% of the funded R21 phase awards will transition to the R33 award.

Multidisciplinary Studies to ImproveUnderstanding of Influenza Transmission (Clinical Trial Optional)

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

Hyperlink: RFA-AI-20-008

Application Due Date: June 23, 2020. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: The purpose of this Funding Opportunity Announcement (FOA) is to solicit applications for collaborative, multidisciplinary research to comprehensively investigate the dynamics and drivers of influenza transmission between humans. This FOA will support research to: (1) improve detection and sampling of influenza viral particles from the air; (2) develop novel assays to assess viability and infectivity of influenza viral particles collected from the air; and (3) comprehensively evaluate the contribution of viral, host, physical, and environmental factors to influenza transmission between humans.

Budget: NIAID intends to commit \$6 million in FY2021 to fund up to3 awards. Recommended budgets of up to \$2 million in direct costs per year may be requested. The scope of the proposed project should determine the project period. The maximum project period is 5 years.

Rational Design of Vaccines Against Hepatitis C Virus (Clinical Trial Not Allowed)

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

Hyperlink: RFA-AI-20-019

Type: U19

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Application Due Date: June 15, 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 novel strategies for the rational design of vaccines against hepatitis C virus (HCV), to assess the vaccines for their ability to induce protective immune responses, and to select candidates for preclinical development and clinical testing. To this end, it will be critical to advance knowledge of the structural basis for broad immunological protection, and to elucidate correlates of HCV protection by leveraging samples from existing human cohorts and vaccine studies. This information will serve as a guide for the construction of new and improved candidate prophylactic HCV vaccines that will be assessed for immunogenicity and efficacy in appropriate animal models.

Budget: NIAID intends to commit \$8,000,000 in FY 2021 to fund 3-4 awards. Application budgets are not limited but need to reflect theactual needs of the proposed project. The scope of the proposed research program should determine the project period. The maximum project period is 5 years.

Exploring the Roles of Biomolecular Condensates (BMCs) in HIV replication, latency, or pathogenesis in the context of substance use disorders (Clinical Trial Not Allowed)

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

Hyperlink: RFA-DA-21-004

Type: R21/R33

Application Due Date: July 20, 2020. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: To support research projects exploring the roles of biomolecular condensates (BMCs) and their regulators in processes relevant to HIV/SIV infection, replication, latency, or pathogenesis in the context of substance use disorders. These processes could include studies exploring BMC involvement in HIV infection, HIV replication (including viral gene expression), HIV latency formation or maintenance (including chromatin structure), or HIV pathogenesis (including neurodegenerative processes). Studies could also include investigation of roles for BMCs or their regulators on host cell functions in the context of HIV infection, antiretroviral therapy, and/or exposure to addictive substances.

Budget: National Institute on Drug Abuse (NIDA) intends to commit \$1.2M in FY 2021 to fund 5-6 awards. Applicants may request up to \$125k direct costs for each year of the R21 phase and up to \$250k direct costs for each year of the R33 phase. The proposed R21 project period may not exceed two years, while the proposed R33 project period may not exceed three years.

BRAIN Initiative: Standards to Define Experiments Related to the BRAIN Initiative (Clinical Trial Not Allowed)

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

Hyperlink: RFA-MH-20-128

Type: R01

Application Due Date: September 3, 2020 and September 2, 2021. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) solicits applications to develop standards that describe experimental protocols that are being conducted as part of the BRAIN Initiative. It is expected that applications will solicit community input at all stages of the process. It is recommended that the first step of standard development will involve sharing data between different key groups in the experimental community in order to ensure that the developing standard will encompass the data collection efforts of those groups. The developed standard is expected to be broadly disseminated for use and widely available.

Budget: Issuing IC and partner components intend to commit an estimated total of \$3 million to fund 2-3 awards in FY 21. 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 2 years.