**NIH funding opportunities** 

## Faculty of Medicine and Health Sciences: Research Development and Support 4 July 2018 (#20)

[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 <u>cdevries@sun.ac.za</u>

### **Important Notices:**

- <u>Do NIAID Career Development Awards Increase Likelihood of Research Funding Success?</u> Whether you're a postdoc or junior faculty, consider applying for a mentored career development (K) award from NIAID. Analyses show a correlation between K awards and future success rates for independent NIH research awards.
- <u>Need Project Funding To Harness Big Data To Halt HIV?</u> This initiative funds innovative methods in Big Data Science to identify gaps in rare, unseen, and otherwise undiscovered biomedical, behavioral, social patterns, and other social determinants that shed light on HIV acquisition, transmission, and long-term control using Big Data Science
- Lessons Learned: Human Subjects System (HSS) and Inclusion Find tips and reminders: For example, for multiproject awards—you should provide inclusion enrollment reports at the level of the subproject and not associated with the parent grant.
- Your R01 Application Timeline and the Fiscal Year Get a refresher on the timeline for an investigator-initiated R01 application and how that timing relates to the fiscal year's three review cycles.
- Update in Funds Application Due Date(s) & Expiration Date Sections for Strengthen Regulatory Systems to Ensure the Safety and Quality of Food and Medical Products (U01) (NOT-FD-18-012)
- Notice of U.S. Department of Agriculture (USDA) Participation in PAR-17-482 Comparative Genomics Research Program (R01) (NOT-HG-18-007)
- Request for Information (RFI): Inviting Comments and Suggestions on a Framework for the NIAID Tuberculosis Strategic Plan (NOT-AI-18-043) National Institute of Allergy and Infectious Diseases.
- Notice of Intent to Publish a Funding Opportunity Announcement for Reproductive Medicine Clinical Trials Program (R01 Clinical Trial Required) (NOT-HD-18-012) Eunice Kennedy Shriver National Institute of Child Health and Human Development

1. Global Brain and Nervous System Disorders Research Across the Lifespan (Clinical Trials Optional)			
Letter of Intent: 30 days prior to the application due date	Hyperlink: <u>(PAR-18-835)</u>	Type: <i>R01</i>	
	<u>(PAR-18-836)</u>	R21	
Application Due Date: November 7, 2018; November 7, 2019 Apply by 5:00 PM local time of applicant organization.			

**Funding Opportunity Announcement**: This Funding Opportunity Announcement (FOA) encourages grant applications for the conduct of innovative, collaborative research projects between U.S. and low- and middle-income country (LMIC) scientists, on brain and other nervous system function and disorders throughout life, relevant to LMICs (including neurological, mental, behavioral, alcohol and substance use disorders and spanning the full range of science from basic to implementation research). Scientists in upper middle-income LMICs (UMICs) are also eligible to partner directly with scientists at other LMIC institutions with or without out a US partner. Income categories are defined by the World Bank at http://data.worldbank.org/about/country-classifications/country-and-lending-groups.

The collaborative research programs are expected to contribute to the long-term goals of building and strengthening sustainable research capacity in LMICs to address nervous system development, function and impairment throughout life and to lead to diagnostics, prevention, treatment and implementation strategies. The proposed work will also contribute to developing a base for research networking and evidence-based policy beyond the specific research project.

**Budget**: R01 - Application budgets are not limited but need to reflect the actual needs of the proposed project. Applicants may request a project period of up to five years. R21 - Application budgets are limited to \$125,000 per year in direct costs, but must reflect the actual needs of the proposed project. The project period may be up to 2 years.

#### 2. Modeling and Simulation to Optimize HIV Prevention Research (MS OPR) (R01 Clinical Trial not allowed)

Letter of Intent: 30 days prior to the application due dateHyperlink: (RFA-AI-18-026)Application Due Date: December 13, 2018. Apply by 5:00 PM local time of applicant organization.

Type: *R*01

**Funding Opportunity Announcement**: The purpose of this Funding Opportunity Announcement (FOA) is to support the development and validation of modeling and simulation methods and related tools to examine HIV transmission dynamics, make epidemic projections, and estimate the impact of HIV treatment and prevention. Investigators are expected to share these resources with other researchers. Funding for the final fourth year is dependent upon achieving applicant-proposed and pre-award negotiated "Go/No-Go criteria". **Budget**: NIAID intends to commit \$2.4M in FY 19 to fund 2-4 awards. Application budgets are limited to \$400,000 per year in direct costs. The scope of the proposed project should determine the project period. The maximum project period is 4 years.

## 3. Integrative Omics to Enhance Therapeutics Development for Healthy Aging (Clinical Trial Not Allowed)

 Letter of Intent: 30 days prior to the application due date
 Hyperlink: (RFA-AG-19-011)

 Application Due Date: November 14, 2018. Apply by 5:00 PM local time of applicant organization.
 Hyperlink: (RFA-AG-19-011)

Type: UH2/UH3

**Funding Opportunity Announcement**: This Funding Opportunity Announcement (FOA) is a phased innovation initiative to facilitate multi-omics/integrative approaches to identify omics profiles associated with protection against multiple aging conditions, with exceptional health span, and to refine strategies for utilizing these profiles for therapeutics development. Specifically, a phased innovation cooperative agreement mechanism (UH2/UH3) involving an interdisciplinary research team will be used to sup port a single project that will conduct integrative analysis of person-specific multiple omics measurements (e.g., transcriptomics, proteomics, metabolomics) generated across multiple tissues; the multi-omic profiling should be conducted on individuals from extensively phenotyped cohorts with substantial numbers of long-lived individuals with characteristics of exceptionally healthy aging and appropriate controls. It will also: 1) harmonize and extend the use of existing phenotypic data from these studies to apply phenomics to transcriptomic, proteomic, metabolomic findings; 2) select animal model species or strains with varying life spans for comparative omics studies and identify potential determinants of species differences in longevity and rates of disease development; 3) develop appropriate computational and analytical tools to identify omics profiles associated with exceptional longevity and healthy aging; 4) app ly translational bioinformatics approaches and leverage existing publicly available drug signatures databases to identify molecules that could produce profiles associated with exceptionally healthy aging; 6) exchange data with other NIH/NIA-supported related omics activities and other public-private partnerships (e.g., Trans-Omics for Precision Medicine (TOPMed), Accelerating Medicines Partnership-Alzheimer's Disease (AMP-AD)) for data harmonization and analysis.

**Budget:** NIA intends to commit up to \$5 million per year, starting in FY 2019, to fund one award. Application budgets should not exceed \$3.3 million in direct costs. Applicants may request a total project period of up to 5 years. The maximum project period is 2 years for the UH2 phase and 3 years for the UH3 phase.

Letter of Intent: 30 days prior to the application due date	Hyperlink: <u>(RFA-AI-18-025)</u>	Type: <i>R21</i>
Application Due Date: November 15, 2018. Apply by 5:00 PM local tim	e of applicant organization.	
Funding Opportunity Announcement: The purpose of this Funding	Opportunity Announcement (FOA) is to supp	ort
Exploratory/Developmental Grant (R21) applications to uncover fun	ctional roles of non-coding RNAs (ncRNAs) ir	viral infectious
diseases. Importantly, studies should focus on functional characteriz	zation and mechanistic studies of previously	identified n cRNAs.
Budget: NIAID intends to commit \$2 million in FY19 to fund up to 10 av	wards. The combined budget for direct costs f	or the two-year project
period may not exceed \$275,000. No more than \$200,000 may be requ	uested in any single year. The total project per	iod may not exceed 2
years.		

## 5. Limited Competition: Human Heredity and Health in Africa Consortium Biorepository (Clinical Trial Not Allowed)

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

Hyperlink: (RFA-RM-18-020)

Type: U24

Application Due Date: October 3, 2018. Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement**: The purpose of this FOA is to call for U24 cooperative agreement applications that will request funding to further develop and sustain up to three H3Africa Biorepositories, building upon existing infrastructure. The H3Africa Biorepositories will continue to have the responsibility of maintaining state of the art methods and technologies for DNA collection, processing, quality control, handling, management, and storage and of providing support services needed for bio-specimen collection and dissemination in Africa. They may also propose collection and handling of specimen types including but not limited to PBMCs, plasma, serum etc. Biorepositories will coordinate closely with H3Africa research projects and the H3Africa Bioinformatics network (H3ABioNet) to ensure responsible stewardship of high quality biological specimens linked to well-curated phenotypic and genomic data. **Budget**: The NIH Common Fund intends to commit up to a total of \$2,200,000 and NHGRI \$300,000 in FY 2019 contingent upon receiving scientifically meritorious applications. The Common Fund and NHGRI intend to commit an estimated total of \$6,900,000 over 3 years to fund up to three awards.

# 6. Role of Gut Microbiome in Regulating Reproduction and Its Impact on Fertility Status in Women Living with and Without HIV (Clinical Trial Optional)

Letter of Intent: 30 days prior to the application due day	ite
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Hyperlink: <u>(PA-18-838)</u> (PA-18-839) Type: R01 R21

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

**Funding Opportunity Announcement**: The purpose of this Funding Opportunity Announcement (FOA) is to encourage applications from the scientific community to support outstanding research related to the role of the gut microbiome in regulating metabolism and reproduction, and its impact on fertility status. The overarching goal is to gain fundamental insight into the possible role of the gut microbiome in regulating reproduction through hypothalamo-pituitary-gonadal (HPG), hypothalamo-pituitary-adrenal (HPA), and hypothalamo-pituitary-thyroid (HPT) axes in the brain. The results of the study could lead to development of diagnostic markers (signature microbiomes) for reproductive and metabolic failure. The project is pertinent to multiple portfolios in the Fertil ity and Infertility Branch, e.g., basic ovarian biology, fertility preservation, assisted reproductive technology, spermatogenesis and sperm function, and therapeutic interventions to infertility. The emphasis on the gut microbiome and its impact on reproduction through its effects on HPG, HPA, and HPT axes leading to obesity, metabolic syndrome, stress disorders, infection and anxiety is also of interest to the Maternal and Pediatric infectious disease Branch, Pediatric Growth and Nutrition Branch and Intellectual and Developmental Disabilities Branch.

**Budget**: R01 - Application budgets should not exceed \$499,999 direct costs per year. Within that limit, applications 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. 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. The scope of the proposed project should determine the project period. The maximum project period is 2 years.

### 7. Global Infectious Disease Research Training Program (Clinical Trial Optional)

Letter of Intent: 30 days prior to the application due dateHyperlink: (PAR-18-840)Type: D43Application Due Date: July 26, 2018; July 25, 2019. Apply by 5:00 PM local time of applicant organization.Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) encourages applications for the Global InfectiousDisease (GID) Research Training Program from U.S. and low- and middle-income country (LMIC) institutions. The application shouldpropose a collaborative training program that will strengthen the capacity of an LMIC institution to conduct infectious disease research.

FIC will support research-training programs that focus on major endemic or life-threatening emerging infectious diseases, neglected tropical diseases, infections that frequently occur as co-infections in HIV infected individuals or infections associated with non-communicable disease conditions of public health importance in LMICs.

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**: Applications budgets are limited to \$230,000 per year for new awards and \$276,000 per year for renewal awards (total direct costs). The maximum project period is up to 5 years.

8.	8. Investigator Initiated Research in Computational Genomics and Data Science (Clinical Trial Not Allowed)		
Let	ter of Intent: 30 days prior to the application due date	Hyperlink: <u>(PAR-18-843)</u>	Type: <i>R21</i>
		<u>(PAR-18-844)</u>	R01

Application Due Date: November 16, 2018; July 16, 2019; November 16, 2019; July 16, 2020; November 16, 2020; July 16, 2021. Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement**: The purpose of this funding opportunity announcement (FOA) is to invite applications for a broad range of research efforts in computational genomics, data science, statistics, and bioinformatics relevant to one or both of basic or clinical genomic science, and broadly applicable to human health and disease. This FOA supports fundamental genomics research developing innovative analytical methodologies and approaches, early stage development of tools and software, and refinement or hardening of software and tools of high value to the biomedical genomics community. Work supported under this FOA should be enabling for genomics and be generalizable or broadly applicable across diseases and biological systems. All applications should address how the methods would scale to address larger and larger data sets.

**Budget**: R21 - Application budgets need to reflect the actual needs of the proposed project. 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. The scope of the proposed project should determine the project period. The maximum project period is 2 years. R01 - Application budgets are not limited but need to reflect the actual needs of the proposed project should determine the project period. The scope of the proposed project should determine the project period. The scope of the proposed project should determine the project period. The maximum project period is 5 years.

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Type: <i>R21</i>
R01

Application Due Date: October 24, 2018; June 27, 2019; October 24, 2019; June 27, 2020, Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement**: The purpose of this funding opportunity announcement is to support basic research examining how Electronic Nicotine Delivery Systems (ENDS) aerosols affect normal and disease states relevant to human cells, tissues and organs. **Budget**: R21 - Application budgets need to reflect the actual needs of the proposed project. 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. The scope of the proposed project should determine the project period. The maximum project period is 2 years. R01 - Application budgets are not limited but need to reflect the actual needs of the proposed project should determine the project period. The scope of the proposed project should determine the project period. The scope of the proposed project should determine the project period. The maximum project period is 5 years.

## 10. Electronic Nicotine Delivery Systems (ENDS): Population, Clinical and Applied Prevention Research ( Clinical Trial Optional)

Letter of Intent: 30 days prior to the application due date	Hyperlink: <u>(PAR-18-848)</u>	Type: <i>R21</i>
	<u>(PAR-18-847)</u>	R01

Application Due Date: October 24, 2018; June 27, 2019; October 24, 2019; June 27, 2020. Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement**: The purpose of this funding opportunity announcement is to support studies on electronic nicotine delivery systems (ENDS) that examine population-based, clinical and applied prevention of disease, including etiology of use, epidemiology of use, potential risks, benefits and impacts on other tobacco use behavior among different populations. **Budget**: R21 - Application budgets need to reflect the actual needs of the proposed project. 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. The scope of the proposed project should determine the project period. The maximum project period is 2 years. R01 - Application budgets are not limited but need to reflect the actual needs of the proposed project should determine the project period. The scope of the proposed project should determine the project period. The scope of the proposed project should determine the project period. The scope of the proposed project should determine the project period. The maximum project period is 5 years.

## 11. Halting TB Transmission in HIV-Endemic and Other High-Transmission Settings (Clinical Trial Not Allowed)

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

Hyperlink: (RFA-AI-18-037)

Type: *R01* 

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

**Funding Opportunity Announcement**: The objectives of this Funding Opportunity Announcement are to promote research to: 1) understand the critical drivers of TB transmission at the individual and population levels in high-burden settings, particularly where high incidence of HIV co-infection contributes to TB rates. (This may include the aerobiology of infectious particles and environmentaland population-based factors.)

2) develop potential interventions to prevent TB transmission in HIV-endemic and other high-transmission settings and to measure the rate of transmission underpinned by an increased understanding of the biomedical basis of transmission and related risk factors. **Budget**: NIAID intends to commit \$5.8 million in FY 2019 to fund 4-6 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.

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

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