

NIH funding opportunities

Faculty of Medicine and Health Sciences: Research Development and Support 24 Jan 2020 (#2)

[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 <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

- Important Reminder: We encourage everybody from graduate students to senior scientists to register for an ORCID account and link it to their eRA Commons personal profile (see this eRA video for a quick step-by-step). But for some grant applicants, it's an absolute must. ORCID iDs are required for PD/PIs on individual fellowship and career development applications submitted for due dates on or after January 25, 2020.
- <u>Grantees are required to obtain NIAID's prior approval before changing the scope of their research activities.</u> Over the course of a grant's project period, you may adjust the scope of work with approval from NIAID staff. Learn what is the <u>NIH</u> <u>definition of Scope of Work (SOW)</u>. For a given award, NIAID staff determine scope based on the original application and any negotiated reductions in funding, removal of Specific Aims, bars to award, or other issues. Learn more about negotiated reductions in the section Your Award May Differ From Your Request on <u>Negotiation and Initial Award</u>.
- Investigators who have an existing grant or cooperative agreement ("parent award") and are interested in bioethics may want to check out the December 30, 2019 Notice of Special Interest (NOSI): Administrative Supplement for Research on Bioethical Issues (Admin Supp, Clinical Trial Optional). You may propose to supplement parent awards focused on bioethics or add a component related to bioethics to a parent award in which bioethics was not the focus. Applications must be within the general scope of the parent award. Application Due Date: March 20, 2020, by 5:00 PM local time of applicant organization. Budget: The Office of the Director intends to commit at least \$2,000,000 in FY 2020 to fund approximately 10 awards. Application budget cannot exceed a maximum direct cost of \$100,000. Period 1 year. Only one application per parent award may be submitted. The Research Strategy section of the application is limited to 6 pages
 - The National Cancer Institute (NCI) is interested in bioethics issues relevant to cancer research and care, such as issues raised in cancer clinical trials, cohort studies, cancer prevention studies, cancer centers, prospective biobanking, or projects using existing samples/tissues. Bioethical issues of interest include but are not limited to issues raised by new therapies/technologies; issues raised by the use of ancestry markers vs. ethnicity/race in research and treatment; innovative methods for recruitment and retention of participants who are underserved, "hard to reach," or otherwise underrepresented in research; participant, community, or patient engagement; return of research results; participant and patient perception and comprehension; effective communication (including patient-provider and to/within families); increasing access to care for populations with cancer disparities.
 - National Institute of Allergy and Infectious Diseases (NIAID) is interested in supporting supplemental projects that focus on ethical issues relevant to domestic and international collaborative research on HIV/AIDS or its co-morbidities (TB, malaria, hepatitis, sexually transmitted infections), other infectious diseases, immunologic and allergic diseases; ethics of clinical trials and implementation science; other ethical issues relevant to NIAID's scientific mission. Applications may include conceptual work in bioethics, or empirical work gathering and analyzing data relevant to ethical issues in research, or a combination of the two. Applications addressing empirical research on informed consent are not of interest.
 - National Institute of Mental Health (NIMH) is interested in bioethics applications that address topics relevant to its mission and research priorities as provided in its strategic plan. For information, please see: <u>https://www.nimh.nih.gov/about/strategic-planning-reports/index.shtml</u>
- Data are Available on NIH Funding Plans: Funding decisions rely heavily on peer review scores, but there is more to the story. Some ICs, though not all, set percentile-based paylines each fiscal year. R01 applications that fall below the payline are likely to be funded, while those above may not. Moreover, not every application scored within the payline, it should be noted, may be selected for funding (see here for some reasons why). ICs can also use a small portion of their discretionary annual budget to support meritorious applications that did not meet the payline, a process called select pay.

- <u>Request for Information on Inclusion Across the Lifespan II Workshop</u> NIH is particularly interested in hearing about challenges to enrollment of individuals of all ages in clinical research studies and strategies for including other underrepresented populations that were not addressed in the first workshop (e.g., sex/gender minorities, racial/ethnic minorities, people with disabilities, rural/isolated populations, language minority individuals, pregnant and lactating women, and others who are not well- represented in clinical research). Submit your comments via email to NIAplanning@mail.nih.gov before February 15, 2020.</u>
- Podcast on Certificates of Confidentiality The people who volunteer to participate in NIH-funded research trust that the sensitive information they provide will be protected. To help ensure this protection, NIH issues certificates of confidentiality for awarded studies. Certificates of Confidentiality protect the privacy of research subjects by prohibiting disclosure of identifiable, sensitive research information to anyone not connected to the research except when the subject consents or in a few other specific situations.
- NIH has updated its human subjects research decision tool to reflect changes effective in the 2018 Revised Common Rule.
- <u>NOT-NS-20-033</u> Notice of Intent to Publish a Funding Opportunity Announcement for Blueprint Neurotherapeutics Network (BPN): Small Molecule Drug Discovery and Development of Disorders of the Nervous System (UG3/UH3 Clinical Trial Optional). First Estimated Application Due Date: August 08, 2020.
- <u>NOT-DA-20-012</u> Notice of Special Interest (NOSI): Biomarkers and Biotypes of Drug Addiction. The purpose of this Notice
 is to inform potential applicants to the National Institute on Drug Abuse (NIDA) about a special interest in research project
 applications focusing on discovery, development and validation of drug addiction biomarkers, biosignatures and elucidation
 of substance use disorder biotypes, with an emphasis on machine learning and artificial intelligence (AI) based analytical
 approaches.
- <u>NOT-DA-20-007</u> Notice of Special Interest (NOSI): Preclinical and Clinical Studies of the Interactions of Opioids and Stimulants. The National Institute on Drug Abuse is issuing this Notice to highlight its interest in preclinical and clinical research to advance the understanding of the effects of concomitant use of opioids and stimulants. Identifying how opioids and stimulants interact in combination to produce increased toxicity will enhance our ability to develop medications to prevent and treat comorbid opioid and stimulant use disorders and overdoses associated with this combination of drugs.
- NOT-CA-20-021 Notice of Special Interest (NOSI): De-implementation of Ineffective or Low-value Clinical Practices along the Cancer Care Continuum. The purpose of this Notice is to inform potential applicants to the National Cancer Institute (NCI) of special interest in research on the de-implementation of ineffective or low-value clinical practices, programs, treatments, or interventions ("practices") along the cancer care continuum from detection to end-of-life. Deimplementation research is broadly defined as the scientific study of factors, processes, and strategies for reducing, replacing, or stopping the use of ineffective or low-value clinical practices in healthcare delivery settings. Studies supported by this Notice should propose to use rigorous methods and study designs to better understand predictors, moderators, and mediators of de-implementation and/or test strategies to affect de-implementation processes and outcomes.
- <u>NOT-OD-20-056</u> Findings of Research Misconduct: Office of Research Integrity (ORI) found that respondent engaged in research misconduct by intentionally, knowingly, and/or recklessly falsifying and/or fabricating data in the clinical records of research supported by six (6) NIMH grants, resulting in the inclusion of falsified and/or fabricated research methods and results in four (4) published papers. The actions, including debarment for a period of two (2) years, followed by supervision for a period of two (2) years.
- <u>NOT-CA-20-024</u> Request for Information (RFI) Seeking Stakeholder Input on Scientific Gaps and Research Needs to Address Associations between Environmental Exposures and Cancer Risk. This RFI seeks information on scientific gaps that need to be addressed and how these may be addressed with existing resources, for example, exiting prospective cohort studies, or what new resources or approaches may be needed to address these gaps.
- <u>NOT-DK-20-004</u> Request for Information (RFI) on Improved Understanding of Risk and Mechanisms for Developing Obesity in Infants and Young Children. The purpose of this Request for Information (RFI) is to solicit innovative ideas to better characterize risk factors and understand the underlying mechanisms through which these factors contribute to the development of obesity during early childhood. The goal is to develop innovative, targeted and more effective strategies for childhood obesity prevention.
- NOT-CA-20-022 Notice of Special Interest (NOSI): Use of Biological "High" or "Medium" Priority AIDS Research on Non-AIDS-defining or AIDS-defining Cancers. The purpose of this Notice is to continue advancing our understanding of the risks, development, progression, diagnosis, and treatment of malignancies observed in individuals with an underlying human immunodeficiency virus (HIV) infection or acquired immunodeficiency syndrome (AIDS), particularly the non-AIDS defining malignancies which are now a leading cause of death in HIV-infected individuals. Research efforts that identify specific contributions of HIV infection and its potential interaction with other pathogens towards the development and pathogenesis of these cancers and provide information on the clinical outcomes of such cancers in the HIV-infected population are sought. Ultimately, such efforts could inform screening approaches and therapies targeted to the HIV-infected population.

- NOT-HG-20-010 Notice of Special Interest: Development of Statistical, Population Genetics and Computational Methods Related to Polygenic Prediction of Health and Disease in Diverse Populations. The purpose of this Notice is to solicit investigator-initiated applications to develop statistical, computational, and population genetics approaches to modeling polygenic risk in human populations, especially in genetically diverse populations.
- Can your research support therapeutic strategies that do the following: overcome the limitations of small molecule inhibitors to HIV proteins, expand druggability to all intracellular HIV proteins, and inhibit HIV replication? If so, apply for funds to develop novel therapeutics targeted towards intracellular HIV proteins to obtain potent antiviral activity. NIAID's funding opportunity announcement (FOA) RFA-AI-19-072 (number 1 below) supports innovative therapeutics targeted at intracellular HIV proteins to overcome issues with druggability and off-target side effects. The goal is to restore the antiviral activity of the restriction factors and inhibit viral propagation.

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

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

Hyperlink: RFA-AI-19-072

Hyperlink: RFA-FD-20-007

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.

Development and Application of PET and SPECT Imaging Ligands as Biomarkers for Drug Discovery and for Pathophysiological Studies 2. of CNS Disorders (R01 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: PAR-20-037 Type: R01 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: This Funding Opportunity Announcement (FOA) invites research grant applications that propose the preclinical development of novel radioligands for positron emission tomography (PET) or single photon emission computed tomography (SPECT) imaging in rodent and nonhuman primate brain and incorporation of pilot or clinical feasibility evaluation in pre-clinical studies and appropriate model development. Projects proposing clinical assessments of novel radioligands should respond to FOA PAR-20-038. Budget: Direct costs are limited to \$275,000 per budget period. The total project period may not exceed 3 years.

Center for Collaborative Research on Complex Generics (U18) Clinical Trials Optional 3.

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

Application Due Date: April 13, 2020, by 11:59 PM Eastern Time. Funding Opportunity Announcement: The Food and Drug Administration (FDA) seeks to establisha Center for Research on Complex Generics under the terms and conditions of accoperative agreement. The Center for Research on Complex Generics will support the FDA's efforts to enhance research collaborations with the genericindustry to further the FDA's mission of increasing access to safe and effective generic drugs. Budget: FDA/CDER/OGD intends to fund up to \$1,000,000, for fiscal year 2020 in support of this grant program. It is anticipated that 1 award will be made, not to exceed \$1,000,000 in total costs (direct plus indirect), per year. The maximum project period is five (5) years.

Development and Application of PET and SPECT Imaging Ligands as Biomarkers for Drug Discovery and for Pathophysiological Studies 4. of CNS Disorders (R01 Clinical Trial Optional)

Letter of Intent: 30 days prior to the application due date Hyperlink: PAR-20-038 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) invites research grant applications that propose the development and evaluation of novel radioligands for positron emission tomography (PET) or single photon emission computed tomography (SPECT) imaging in human brain and the incorporation of pilot or clinical feasibility evaluation from previously collected data in pre-clinical studies. These studies are expected to provide the requisite data needed to advance promising PET ligands for use in clinical research. Projects proposing only preclinical animal studies should consider the companion FOA PAR-20-037.

Budget: Application budgets are not limited but need to reflect the actual needs of the proposed project. The total project period may not exceed 4 years.

Enhancing Regulatory Science for Advancing Pharmaceutical Quality and Manufacturing (U01) Clinical TrialsOptional 5.

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

Hyperlink: PAR-20-083

Type: U01

Type: U18

Type: R01

Application Due Date: April 10, 2020, by 11:59 PM Eastern Time.

Funding Opportunity Announcement: The goal of this program is to support the advancement of regulatory science that can (1) facilitate the implementation and the assessment of emerging manufacturing technology in the pharmaceutical sector;(2) expand the knowledge base related to complex products and formulation development, analysis, and manufacturing control to advance risk-based quality assessment of new and generic drug products.

Budget: FDA/CDER intends to fund up to \$2,000,000, for Fiscal Year2020 in support of this grant program. It is anticipated that up to two (2) awards will be made, not to exceed \$1,000,000 in total costs (direct plus indirect), per award, per year. The maximum project period is five (5) years

Radiobiology of High Linear Energy Transfer (High LET) Exposure in Cancer Treatment (R01, Clinical Trial Not Allowed) 6.

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

Hyperlink: <u>RFA-CA-20-032</u> Type: R01

Application Due Date: March 19, 2020 Apply by 5:00 PM local time of applicant organization. Funding Opportunity Announcement: Through this Funding Opportunity Announcement (FOA), the National Cancer Institute (NCI) invites the submission of meritorious applications, which are expected to be well-balanced in terms of interdisciplinary science that spans approaches in both radiation biology and radiation physics research, describing research projects that have substantial potential to 1) to enhance the understanding of mechanisms related to high linear energy transfer (high LET) radiation effects in both cancer and normal tissues; and 2) identify and characterize high LET effects that usefully inform treatment strategies for cancers resistant to conventional radiation and other combined modality treatments. The proposed research projects are expected to be multidisciplinary with the ultimate aim of examining the relative biological effectiveness (RBE) of high linear energy transfer (high LET) radiation on cell and tissue targets in comparison to low linear energy transfer (low LET) radiation. The overall goal of the research is to establish a firm scientific basis for RBE models of high LET radiation and determine potential benefits in cancer treatment. Pre-Application Webinar on Thursday, January 30, 2020 at 1:00 PM (ET) To join the webinar, click the highlighted link: High LET RFA-CA-20-032 Webinar

Budget: NCI intends to commit up to \$3.84 million (total costs) in FY 2021 to fund up to three to fiveR01 awards in the fiscal year 2021. Future year amounts will depend on annual appropriations. Application budgets are not to exceed \$499,000 (direct costs) and must reflect the actual needs of the proposed project. Not to exceed 5 years.

7. Translational Research in Pediatric and Obstetric Pharmacology and Therapeutics (R01 Clinical Trial Optional)

Letter of Intent: 30 days prior to the application due date Hyperlink: PAR-18-215 Type: R01 Application Due Date: New Extended dates: April 3, 2020, August 7, 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 applications for translational and clinical research as well as clinical trials that will advance our knowledge about the underlying mechanisms of drug action, response, and safety in children at various developmental stages, and in women during pregnancy and lactation. The overall goals of the FOA are to improve the safety and effectiveness of current drugs for pediatric or obstetric patients, and to enhance the development of new drugs or a safer usage of the existing drugs for tailored therapies to meet emerging clinical needs for these special populations. Budget: Application budgets are not limited but need to reflect theactual needs of the proposed project. The maximum project period is five years.

Biomedical Data Repository (U24 - Clinical Trials Not Allowed) 8.

Letter of Intent: 30 days prior to the application due date Hyperlink: PAR-20-089 Type: U24 Application Due Date: September 25, 2020; January 25, 2021; September 24, 2021; January 25, 2022; September 26, 2022; January 25, 2023. Aids Dates: January 7, 2021; May 7, 2021; January 7, 2022; May 6, 2022; January 6, 2023; May 8, 2023. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This funding opportunity announcement is designed to support biomedical data repositories. Biomedical data repositories under this announcement should have the primary function to ingest, archive, preserve, manage, distribute, and make accessible the data related to a particular system or systems. Support for data curation must be limited to that which improves the efficiency and accessibility of data ingestion, management, and use and reuse by the user communities. Support for software and tool development must be limited to that which provides essential functions or significantly increases the efficiency of operation of the repository. Applications that have a significant focus on software and tool development are not appropriate for this activity.

Budget: NINDS intends to support up to 2 awards per fiscal year in FYs 2021, 2022, and 2023. Application budgets are not limited but need to reflect the actual needs of the proposed project. Applications may request up to five years of support for a biomedical data repository.

9. Biomedical Knowledgebase (U24 - Clinical Trials Not Allowed)

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

Hyperlink: PAR-20-097 Application Due Date: September 25, 2020; January 25, 2021; September 24, 2021; January 25, 2022; September 26, 2022; January 25, 2023. Aids Dates: January 7, 2021; May 7, 2021; January 7, 2022; May 6, 2022; January 6, 2023; May 8, 2023. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This funding opportunity announcement is designed to support biomedical knowledgebases. Biomedical knowledgebases under this announcement should have the primary function to extract, accumulate, organize, annotate, and link growing bodies of information related to core datasets. Support for data curation should include efficient and effective methods of curation that scale to the needs of the community and include semi-automated methods. Support for software and tool development must be limited to that which provides essential functions or significantly increases the efficiency of operation of the knowledgebase. Applications that have a significant focus on software or tool development are not appropriate for this activity.

Budget: NINDS intends to support up to 2 awards per fiscal year in FYs 2021, 2022, and 2023. Application budgets are not limited but need to reflect the actual needs of the proposed project. Applications may request up to five years of support for a biomedical knowledgebase.

Type: U24

10. Combating Antibiotic-Resistant Bacteria(CARB) Interdisciplinary Research Units (U19 Clinical Trial Not Allowed)

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

Hyperlink: RFA-AI-20-001

Hyperlink: RFA-CA-20-004

Application Due Date: May 8, 2020. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) solicits applications to establish Combating Antibiotic-Resistant Bacteria (CARB) Interdisciplinary Research Units (CARBIRUs) focused on improving our understanding of bacterial and host factors important for antibacterial resistance and infection to inform development of new approaches to prevent, diagnose, and treat antibacterialresistant infections.

Budget: NIAID intends to commit \$10 million in FY 2021 to fund 5-6awards. Application budgets are limited to up to \$1.5 million 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.

11. Research Answers to National Cancer Institute's (NCI) Provocative Questions (R01 Clinical Trial Optional)

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

Type: R01

Type: U01

Type:

Application Due Date: April 30, 2020; November 17, 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 research projects designed to solve specific problems and paradoxes in cancer research identified by the National Cancer Institute (NCI) Provocative Questions Initiative. These problems and paradoxes phrased as questions are not intended to represent the full range of NCI's priorities in cancer research. Rather, they are meant to challenge researchers to think about and elucidate specific problems in key areas of cancer research that are deemed important but have not received sufficient attention. Some of these "Provocative Questions" (PQs) stem from intriguing but older, neglected observations that have never been adequately explored. Other PQs are built on more recent findings that are perplexing or paradoxical, revealing important gaps in current knowledge. Finally, some PQs reflect problems that traditionally have been thought to be intractable but that now may be open to investigations using new strategies and recent technical advances. The current issuance of the PQ Initiative includes an updated set of 9 PQs. Each research project proposed in response to this FOA must be focused on addressing the research problems defined

an updated set of 9 PQs. Each research project proposed in response to this FOA must be focused on addressing the research problems defined by a specific PQ selected from the list. Projects proposed to address PQs may use strategies that incorporate ideas and approaches from multiple disciplines, as appropriate. Transdisciplinary projects are encouraged if they serve the scientific focus of the selected PQ. **Budget:**

12. Accelerating Medicine Partnership in Parkinson's disease (AMP PD) data use and analysis (U01 Clinical trials not allowed)

 Letter of Intent: 30 days prior to the application due date
 Hyperlink: <u>RFA-NS-20-027</u>

Application Due Date: March 18, 2020. Apply by 5:00 PM local time of applicant organization. Funding Opportunity Announcement: The FOA invites applications that will apply computational approaches to the integration and analysis of clinical, genomic and transcriptomic data from the Accelerating Medicine Partnership in Parkinson's disease (AMP PD) to

advance the identification of algorithms, biomarkers, and disease pathways related to the diagnosis, prognosis and progression of Parkinson's disease. Development of tools and workflows for data visualization and integration across data modalities and their application to AMP PD data are also supported.

Budget: The National Institute of Neurological Disorders and Stroke intends to commit \$2.2 M in FY 2020 to fund 4 to 10awards. Application budgets are limited to \$300K direct costs per year. Award period 1 year.

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

Afdeling Navorsingsontwikkeling/Division for Research Development (DRD)
Stellenbosch University
2038 Wilcocks Building, Ryneveld Street
Enquiries: <i>Lizél</i>
e: <u>lizelk@sun.ac.za</u> t: +27 21 808 2105