

NIH funding opportunities

Faculty of Medicine and Health Sciences: Research Development and Support 31 Jan 2022 (#4)

[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>

Parent Announcements

Parent Announcements (PA) for unsolicited are broad funding opportunity announcements allowing applicants to submit investigator-initiated applications. They are open for up to 3 years and use standard due dates.

- PA-20-185 NIH Research Project Grant (Parent R01 Clinical Trial Not Allowed)
- PA-20-184 Research Project Grant (Parent R01 Basic Experimental Studies with Humans Required)
- PA-20-183 Research Project Grant (Parent R01 Clinical Trial Required)
- PA-20-200 NIH Small Research Grant Program (Parent R03 Clinical Trial Not Allowed)
- PA-20-195 NIH Exploratory/Developmental Research Grant Program (Parent R21 Clinical Trial Not Allowed)
- PA-20-194 NIH Exploratory/Developmental Research Grant Program (Parent R21 Clinical Trial Required)
- <u>PA-20-196</u> NIH Exploratory/Developmental Research Grant Program (Parent R21 Basic Experimental Studies with Humans Required)

Important Notices

- <u>NOT-OD-22-018</u> Reminder: FORMS-G Grant Application Forms & Instructions Must be Used for Due Dates On or After January 25, 2022 New Grant Application Instructions Now Available. This Notice reminds the applicant and recipient community that applicants must use FORMS-G application packages for due dates on or after January 25, 2022 and must use FORMS-F application packages for due dates on or before January 24, 2022 (see <u>NOT-OD-21-169</u> for details). FORMS-G Grant Application Instructions are now posted on the <u>How to Apply-Application Guide</u> page.
- <u>NOT-CA-22-041</u> Notice of Intent to Publish a Funding Opportunity Announcement for Pediatric Immunotherapy Network (PIN) (U01 Clinical Trial Optional). This Notice is to inform the research community that the National Cancer Institute (NCI) intends to issue a Funding Opportunity Announcement (FOA) to solicit applications for the Pediatric Immunotherapy Network (PIN). The purpose of this RFA is to establish a collaborative network consisting of investigators with relevant expertise to develop and advance novel translational immunotherapy approaches for children and adolescents with solid tumors including brain tumors. This Notice is being provided to allow potential applicants sufficient time to develop a responsive grant application. Estimated Award Ceiling: \$450,000 in direct costs per year.
- <u>NOT-CA-22-042</u> Notice of Intent to Publish a Funding Opportunity Announcement for Dissemination and Implementation Research in Health (R01 Clinical Trial Optional). The National Cancer Institute (NCI) intends to reissue a Funding Opportunity Announcement (FOA) to solicit applications for dissemination and implementation (D&I) research in health. This FOA is intended to be a re-issuance of <u>PAR-19-274</u>, Dissemination and Implementation Research in Health (R01 Clinical Trial Optional), which will expire May 8, 2022, following the May

7, 2022 AIDS Application Due date. The re-issuance FOA will be published on May 8, 2022, and the D&I Program will continue without interruption and R01 Research Project Grant applications will be accepted on Standard Application Due date(s) of June 5, 2022, and thereafter. Estimated Publication Date of Funding Opportunity Announcement: May 08, 2022First Estimated Application Due Date: June 05, 2022. The purpose of this Funding Opportunity Announcement (FOA) is to support studies that will identify, develop, and/or test strategies for overcoming barriers to the adoption, adaptation, integration, scale-up, and sustainability of evidence-based interventions, practices, programs, tools, treatments, guidelines, and policies (herein referred to collectively as evidence-based interventions). Studies that promote equitable dissemination and implementation of evidence-based interventions among underrepresented communities are encouraged. Conversely, there is a benefit in understanding circumstances that create a need to stop or reduce ("de-implement") the use of practices that are ineffective, unproven, low-value, or harmful. In addition, studies to advance dissemination and implementation research methods and measures are encouraged. Applications that focus on re-implementation of evidence-based health services (e.g., cancer screening) that may have dropped off amidst the ongoing COVID pandemic are encouraged.

NOT-NS-22-070 Notice of Intent to Publish a Funding Opportunity Announcement for HEAL Initiative: Discovery • of Biomarkers and Biomarker Signatures to Facilitate Clinical Trials for Pain Therapeutics (UG3/UH3 Clinical Trial Optional). The NIH announces its intention to publish a Funding Opportunity Announcement (FOA) to solicit applications on Discovery of Biomarkers and Biomarker Signatures to Facilitate Clinical Trials for Pain Therapeutics. The purpose of this intended Funding Opportunity Announcement (FOA) is to promote the discovery of strong candidate biomarkers or biomarker signatures for pain that can be used to facilitate the testing of non-opioid pain therapeutics in Phase II clinical trials. The biomarkers or biomarker signature will be developed through clinical research specifically focused on the identification of pain biomarkers or biosignatures that predict and/or monitor response to pain therapeutics. The resulting biomarkers or biomarker signatures may be focused on a single pain condition or on several pain conditions with common underlying pathophysiology. Applications to identify biomarkers or biomarker signatures that predict or monitor a therapeutic response across several related pain conditions should feature Multiple Principal Investigator (MPI)led teams that represent each of the related pain conditions and associated clinical networks. The MPI-led teams are expected to decide upon a single set of measures or biomarker modalities including, but not limited to a combination of omics, Quantitative sensory testing (QST), actigraphy, Electroencephalography (EEG), digital measures, etc., as components of the biosignature for all pain conditions represented in the application. Applications should feature centralized resource groups that will coordinate clinical trials and standardize all sample or data collection methods, technology development, statistical analysis, and algorithm development across the pain conditions under investigation. The FOA is expected to be published in February of 2022 with an expected application due date in March 2022.

Notices of Special Interest

- NOT-MH-22-100 Notice of Special Interest (NOSI): COVID-19 Pandemic Mental Health Research. National Institute of Mental Health (<u>NIMH</u>) is issuing this Notice of Special Interest (NOSI) to highlight interest in basic, translational, intervention and services research relevant to the COVID-19 pandemic. NIMH is especially interested in research to provide an evidence base to understand how mental illness contributes to COVID-19 risk and mortality, how incident mental illness develops with COVID-19, and the development of scalable interventions to meet the public mental health needs during and resulting from the pandemic both specifically related to the virus but also at a broader population level that is impacted by stress, disruptions, and loss of lives in the pandemic. *Research addressing the intersection of COVID-19, mental health, and HIV treatment and prevention are also of interest to NIMH*. Research is anticipated to focus on particularly vulnerable populations based on existing evidence of increased mental health symptoms and illness and preexisting and worsening health disparities. Areas of research relevant to COVID-19 and mental illness should be discussed with scientific program staff for technical assistance with NIMH priorities and potential overlap with existing research efforts and other potential funding mechanisms. This notice applies to due dates on or after February 15, 2022 and subsequent receipt dates through January 8, 2025.
- <u>NOT-HL-23-003</u> Notice of Special Interest (NOSI): Enhancing Research on Deciphering Mechanisms of COVID-19-Associated Coagulopathy. This NOSI aims to accelerate a comprehensive understanding of the mechanisms

of COVID-19-Associated Coagulopathy (CAC) which are provoked by vascular endothelial cell injury, hyperimmune responses, and hypercoagulability at genomic, molecular, and cellular levels. Knowledge obtained from such studies may be applied to the future design of early diagnostics and effective treatment for high-risk patients as well as enable CAC research findings to be applied to on-going COVID-19 clinical trials. This NOSI will support research that focuses on the basic mechanisms of COVID-19 associated thrombosis ranging from vascular endothelial cell injury, the host immune responses, to the coagulation and fibrinolysis systems. Identifying risk factors, or co-morbidities that predispose patients to CAC is also of interest.

The scientific objectives of this NOSI include:

- Filling the gaps in our current understanding of the pathophysiology underlying COVID-19-Associated Coagulopathy (CAC) at genomic, molecular and cellular levels
- Elucidating the mechanisms of CAC and its incitement by a hyperinflammatory and immunothrombotic response that is associated with vascular endothelial cell injury following viral entry
- Identifying risk factors predisposing patients to CAC in an effort to develop early diagnostics and more effective treatment for high-risk patients
- Applicants are encouraged to establish collaborations among researchers with a multi-disciplinary background, such as cell biology, molecular biology, immunology, hematology, virology, systems biology, multi-omics, and data science.

This notice applies to due dates on or after June 5, 2022 and subsequent receipt dates through July 5, 2025. Applications proposing clinical trials are not appropriate for this NOSI, will be deemed nonresponsive and will not proceed to review.

- <u>NOT-MH-22-100</u> Notice of Special Interest (NOSI): COVID-19 Pandemic Mental Health Research. NIMH is issuing this Notice of Special Interest (NOSI) to highlight interest in basic, translational, intervention and services research relevant to the COVID-19 pandemic. NIMH is especially interested in research to provide an evidence base to understand how mental illness contributes to COVID-19 risk and mortality, how incident mental illness develops with COVID-19, and the development of scalable interventions to meet the public mental health needs during and resulting from the pandemic both specifically related to the virus but also at a broader population level that is impacted by stress, disruptions, and loss of lives in the pandemic. Research addressing the intersection of COVID-19, mental health, and HIV treatment and prevention are also of interest to NIMH. Research is anticipated to focus on particularly vulnerable populations based on existing evidence of increased mental health symptoms and illness and pre-existing and worsening health disparities. This notice applies to due dates on or after February 15, 2022 and subsequent receipt dates through January 8, 2025.
- NOT-CA-22-037 Notice of Special Interest (NOSI): Validation of Digital Health and Artificial Intelligence Tools • for Improved Assessment in Epidemiological, Clinical, and Intervention Research. The purpose of this Notice of Special Interest (NOSI) is to encourage grant applications to support the evaluation of the utility and validity of digital health and artificial intelligence (AI) tools and technologies in epidemiological, clinical, and intervention research. The intent is to support the addition of new measurement modalities to evaluate existing and recently developed but not yet validated digital health and AI tools such as sensor technologies, smartphone applications, software as a medical device (SaMD), and AI algorithms. Research supported by this NOSI is expected to provide support for validation of recently developed digital health and AI technologies. Digital health and AI technologies are defined broadly to include any health technology leveraging mobile health, health information technology, wearable devices, sensors, telehealth and telemedicine, internet of things (IoT), software as a medical device (SaMD) and/or related AI algorithms and tools to monitor and manage health across the life course. As noted previously, the purpose of this NOSI is not to support development of new technologies. Investigators planning to submit an application in response to this NOSI are strongly encouraged to contact and discuss their proposed research/aims with Program staff/Scientific Contacts listed on this NOSI well in advance of the application receipt date to better determine appropriateness and interest of the relevant Institute. This notice applies to due dates on or after March 7, 2022 and subsequent receipt dates through March 9, 2024.

Funding Opportunity Announcements (FOA)

 Image: Description of the application due date
 Hyperlink: PAR-22-083
 Type: R01

 Application Due Date:
 June 05, 2022 to February 05, 2025. Apply by 5:00 PM local time of applicant organization
 Type: R01

 Funding Opportunity Announcement:
 The purpose of this Funding Opportunity Announcement (FOA) is to promote epidemiologic research investigating novel and innovative hypotheses on emerging risk factors (biological, environmental, and social) and their interplay with

established risk factors (e.g., viral hepatitis) associated with the development of liver cancer (hepatocellular carcinoma and other histological subtypes) in the **United States**.

Companion Funding: <u>PAR-22-084</u>, <u>R21</u> Exploratory/Developmental Grants

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

2. Cancer Tissue Engineering Collaborative: Enabling Biomimetic Tissue-Engineered Technologies for Cancer Research (R01 Clinical Trial Optional)

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

Hyperlink: PAR-22-099

Type: R01

Application Due Date: June 05, 2022 to February 05, 2025. Apply by 5:00 PM local time of applicant organization Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) will support the development and characterization of state-of-the-art biomimetic tissue-engineered technologies for cancer research. Collaborative, multidisciplinary projects that engage the fields of regenerative medicine, tissue engineering, biomaterials, and bioengineering with cancer biology will be essential for generating novel experimental models that mimic cancer pathophysiology in the context of a testable cancer research hypothesis. The projects supported by this

FOA will collectively participate in the Cancer Tissue Engineering Collaborative (TEC) Research Program. The Cancer TEC Program will (1) catalyze the advancement of innovative, well characterized in vitro and ex vivo systems available for cancer research, (2) expand the breadth of these systems to several cancer types, and (3) promote the exploration of cancer phenomena with biomimetic tissue-engineered systems. **Companion Funding:** None

Budget: Application budgets are limited to \$400,000 Direct Costs per year. The budget should reflect the actual needs of the proposed project. The maximum project period is 5 years. The scope of the proposed project should determine the project period.

3. BRAIN Initiative: Standards to Define Experiments Related to the BRAIN Initiative (R01 Clinical Trial Not Allowed)

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

Hyperlink: <u>RFA-MH-22-145</u> Type: R01

Application Due Date: June 14, 2022, June 14, 2023, June 14, 2024. Apply by 5:00 PM local time of applicant organization Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) aims to develop standards that describe experimental protocols 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.

Companion Funding: None

Budget: Issuing IC and partner <u>components</u> intend to commit an estimated total of \$3 million to fund 2-3 awards in FY23. 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.

4. BRAIN Initiative: Development of Novel Tools to Probe Cell-Specific and Circuit-Specific Processes in Human and Non-Human Primate Brain (UG3/UH3 Clinical Trial Optional).

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

Hyperlink: <u>RFA-MH-22-115</u> Type:

Application Due Date: June 07, 2022; June 07, 2023; June 07, 2024. 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 Funding Opportunity Announcement is to encourage applications that will develop and validate novel tools to facilitate the detailed analysis and manipulation of complex circuits in large brains. Critical advances in the treatment of brain disorders in human populations are hindered by our lack of ability to monitor and manipulate circuitry in safe, minimally-invasive ways. Clinical intervention with novel cell- and circuitspecific tools will require extensive focused research designed to remove barriers for targeted circuit manipulation. In addition to identification and removal of barriers, the need to delineate dysfunctional circuitry poses additional challenges. Neuroscience has experienced an impressive influx of exciting new research tools in the past decade, especially since the launch of the BRAIN Initiative. However, the majority of these celland circuit-specific mapping, monitoring, and manipulating tools has been developed for use in model organisms, primarily rodents, fish and flies. These cutting-edge tools are increasingly adaptable to larger mammalian brains and, more importantly, are emerging as potential human therapeutic strategies for brain disorders. A pressing need to develop tools for use in large brains or those that are more directly relevant to the human brain is the focus of this initiative. The initiative will support initial proof of principle studies aimed at demonstrating the feasibility of using the cutting-edge approaches in humans and other mammalian species (e.g., non-human primate [NHP]/sheep/pigs). Companion Funding: None

Budget: Issuing IC and partner <u>components</u> intend to commit an estimated total of \$10,000,000 to fund 6-9 awards. Application budgets are not limited but need to reflect the actual needs of the proposed project. The duration of the UG3 phase cannot exceed 3 years and the total duration of the UG3/UH3 phases combined may not exceed 5 years.

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