

# **NIH** funding opportunities



Faculty of Medicine and Health Sciences: Research Development and Support 28 Feb 2022 (#8)

[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 <a href="www.grants.nih.gov">www.grants.nih.gov</a> or <a href="www.grants.nih.

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**

- Financial Conflict of Interest: All Principal Investigators (PIs) and Key Personnel (KP) of all current NIH grants, direct and subawards, must complete the NIH training and submit the certificate the Grants Management Office) not later than 31 March 2022. For all new applications, all PI's & KP must complete the certificate before the application can be submitted to NIH. This is in addition to the FCOI declarations that must be signed.
  - FHMS contact:<u>cdevries@sun.ac.za</u>
  - Stellenbosch Campus contact lizelk@sun.ac.za.

Link to the training: <a href="https://grants.nih.gov/grants/policy/coi/tutorial2018/story\_html5.html">https://grants.nih.gov/grants/policy/coi/tutorial2018/story\_html5.html</a>

- <u>NOT-OD-21-110</u> Implementation of Changes to the Biographical Sketch and Other Support Format Page. This notice describes implementation of the updated Other Support and Biosketch format pages and associated instructions, as outlined in <u>NOT-OD-21-073</u>. ScienCV: <a href="https://www.ncbi.nlm.nih.gov/sciencv/">https://www.ncbi.nlm.nih.gov/sciencv/</a>
- NOT-NS-22-083 Notice of Intent to Publish a Funding Opportunity Announcement for Clinical Trial Readiness for Rare Neurological and Neuromuscular Diseases (U01 Clinical Trial Not Allowed). The National Institute of Neurological Disorders and Stroke (NINDS), with the National Center for Advancing Translational Sciences (NCATS) intends to reissue a Funding Opportunity Announcement (FOA) to solicit applications for research on Clinical Trial Readiness for Rare Neurological and Neuromuscular Diseases (previously PAR-19-220). Through this FOA, researchers will be invited to submit applications for support of clinical studies that address critical needs for clinical trial readiness in rare neurological and neuromuscular diseases. These studies should result in clinically validated biomarkers and clinical outcome assessment measures appropriate for use in upcoming clinical trials. Through the support of trial readiness studies, NINDS and NCATS expect to enhance the quality and increase the likelihood of success of clinical trials in these rare diseases. This Notice is being provided to allow potential applicants sufficient time to develop meaningful collaborations and responsive projects. First Estimated Application Due Date: 18 August 2022
- NOT-TR-22-017 Notice of Intent to Publish a Funding Opportunity Announcement for the Rare Diseases Clinical Research Consortia (RDCRC) for the Rare Diseases Clinical Research Network (RDCRN). The National Center for Advancing Translational Sciences (NCATS) intends to publish a Funding Opportunity Announcement (FOA) to advance the diagnosis, management, and treatment of rare diseases. Each Rare Diseases Clinical Research Consortium (RDCRC) will promote highly collaborative, multi-site, patient-centric, translational, and clinical research. It is strongly encouraged that the RDCRC study outcome measures include those that address unmet clinical trial readiness needs that will move the field of research forward from its current state. This Notice is being provided to allow potential applicants sufficient time to develop meaningful collaborations and responsive projects.

#### **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)

### **Notices of Special Interest**

- NOT-AI-22-023 Notice of Special Interest (NOSI): Optimizing Vascularized Composite Allograft Survival. The National Institute of Allergy and Infectious Diseases (NIAID) is interested in supporting preclinical studies utilizing animal models or human tissue specimens that focus on 1) optimizing treatment and graft monitoring to reduce incidence of acute rejection and maximize graft survival after vascularized composite allotransplantation (VCA) and 2) minimizing immunosuppression required for long-term VCA acceptance. This notice applies to due dates on or after June 5, 2022 and subsequent receipt dates through May 7, 2026. This NOSI will NOT support:
  - clinical trials;
  - xenotransplantation research (although use of xenogeneic tissue or cells for establishment of humanized mouse models is permitted);
  - studies of intestinal, multi-visceral, or uterine transplantation.
- NOT-CA-22-054 NOSI: Administrative Supplement for Global Integrative Oncology Research. This Notice of Special Interest (NOSI) announces an opportunity for supplemental funding to active, eligible NCI-funded grants and cooperative agreements to support integrative oncology research. These administrative supplements are intended to support NCI-funded investigators to leverage existing relationships/partnerships with investigators in low- and middle-income countries (LMICs) to conduct research that will enhance understanding of the intersection of standard biomedical approaches and traditional, complementary, and alternative medicine (TCAM) for cancer control in LMIC settings. The budget should not exceed \$125,000 in direct costs for the entire allowable 1-year project period of the application/award. Submissions must be received by May 14, 2022 at 5:00 PM local time of applicant organization for FY 2022 funding.
- NOT-DA-22-004 Notice of Special Interest (NOSI): Epidemiology of Drug Abuse. The purpose of this Notice is to encourage the submission of research project applications that enhance our understanding of the nature, extent, distribution, etiology, comorbidities, and consequences of drug use, misuse, and addiction across individuals, families, communities, and diverse population groups. Of interest are applications that address multiple levels of risk, resilience, and causation across scientific disciplines, and that apply novel methods to advance knowledge of the interplay among genetic, environmental, neurobiological, and developmental factors and associated health and disease outcomes. Priority will be given to research with a well described path towards translation and/or public health impact. In addition to novel data collection, approaches are encouraged that build on the research investments of NIH and sister HHS agencies to harness existing data on the epidemiology and etiology of drug misuse to improve public health prevention and treatment programs. This notice applies to due dates on or after June 5 2022 and subsequent receipt dates through September 8, 2025.

### **Funding Opportunity Announcements (FOA)**

#### 1. Inter-Organelle Communication as a Platform to Interrogate the Interactions of Hallmarks of Aging (R01 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: RFA-AG-23-012 Type: R01

Application Due Date: 11 October 2022. Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement**: This Funding Opportunity Announcement (FOA) encourages innovative, mechanistic approaches to identify and characterize interactions of aging hallmarks shaped by inter-organelle communication.

Companion Funding: RFA-AG-23-013, R01 Research Project; RFA-AG-23-015, R01 Research Project

**Budget**: NIA intends to commit \$2.5 million in FY 2023 to fund 5-6 awards. Application budgets must reflect the actual needs of the proposed project and may not exceed \$250,000 per year in direct costs. The maximum project period is five years.

#### 2. Mapping Interconnectivity Among Hallmarks of Aging under Lifespan Modifications (R01 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: RFA-AG-23-013 Type: R0

**Application Due Date:** 11 October 2022Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement:** This Funding Opportunity Announcement (FOA) solicits research projects with the goal of increasing our understanding of the interactions among hallmarks of aging and their regulation. Research supported by this FOA should explore the timing and possible priorities (hierarchy) among the hallmarks in various cells/tissues across the normal lifespan, and whether the interactions between the hallmarks are an adaptive response to maintain health at different stages of life. This is one of three inter-connected FOAs with an overarching focus on the interactions of aging hallmarks as a framework for innovative research in aging biology.

**Budget**: NIA intends to commit \$2.4 million in FY 2023 to fund 4-5 awards. Application budgets must reflect the actual needs of the proposed project and may not exceed \$300,000 per year in direct costs. The maximum project period is five years.

#### 3. Mechanisms of Brain Hypoperfusion in AD/ADRD (R01 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: RFA-AG-23-014

**Application Due Date:** 1 July 2022. Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement:** This Funding Opportunity Announcement (FOA) solicits applications for projects designed to understand molecular and cellular mechanisms underlying cerebral blood flow reduction in Alzheimer's disease (AD) and Alzheimer's disease-related dementias (ADRD).

Type: R01

**Budget**: NIH intends to fund an estimate of 8-10 awards, corresponding to a total of \$8 million, for fiscal year 2023. Future year amounts will depend on annual appropriations. 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.

### 4. Studies of Cytosolic DNAs in the Interactions of Aging Hallmarks (R01 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: RFA-AG-23-015 Type: RI

**Application Due Date**: 11 October 2022. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) invites applications on novel studies of the cytosolic DNA sensing mechanisms in the interactions of aging hallmarks. This FOA supports applications that will lead to an in-depth understanding of the molecular mechanisms that determine the effects of cytosolic DNAs on aging hallmarks in the context of aging and longevity. Research supported by this FOA should lead to new insights to address some critical mechanistic questions relevant to the role of aging hallmarks in aging and aging-related diseases. This FOA encourages innovative, mechanistic approaches to identify and characterize interactions of aging hallmarks mediated by cytosolic DNAs that ultimately modulate the regulation of healthspan and/or longevity.

Companion Funding: RFA-AG-23-012, RO1 Research Project RFA-AG-23-013, RO1 Research Project

**Budget**: NIA intends to commit \$2,560,000 in FY 2023 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.

## 5. Partnerships for Rapid Diagnostics and Phenotypic Antibacterial Susceptibility Testing for Bacteremia or Hospital Acquired Pneumonia (R01 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: RFA-Al-22-010 Type: R0

**Application Due Date:** 1 June 2022Apply 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 focused on development and/or production of medical diagnostics that permit rapid differential species identification, and corresponding phenotypic antibacterial susceptibility profiles for bacteremia or hospital acquired pneumonia. The primary goal of such diagnostics is to facilitate antibacterial stewardship, thereby reducing selective pressure and improving patient outcomes.

**Budget**: NIAID intends to commit \$4.8 million in FY2023 to fund 5-7 awards. Recommended budgets for direct costs of up to \$500,000 per year may be requested. Applicants may also request up to an additional \$150,000 in the first year of the award for major, essential equipment to ensure that research objectives can be met, totaling \$650,000 direct costs for Year 1 only. The scope of the proposed project should determine the project period. The maximum project period is 5 years.

#### 6. Immune Drivers of Autoimmune Disease (IDAD) (U01 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: RFA-AI-22-012 Type: U01

Application Due Date: 1 July 2022Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement**: This Funding Opportunity Announcement (FOA) invites applications to participate in the Immune Drivers of Autoimmune Disease (IDAD) cooperative research program, which will focus on defining the immunologic states and dynamics that drive autoimmune disease. The main objective of this program is to enhance our understanding of the immunologic processes, events, and changes that underlie the clinical manifestations of autoimmune diseases, including disease flare, remission, and progression of established disease, as well as the progression from a state of elevated risk to clinical diagnosis of autoimmune disease.

**Budget**: NIAID plans to commit \$3.6 million overall to IDAD in fiscal year 2023 to support three to four awards. Application budgets must reflect the actual needs of the proposed elements and are limited to \$750,000 direct costs per year. The scope of the proposed project should determine the project period; the maximum project period is five years.

# 7. BRAIN Initiative Connectivity across Scales (BRAIN CONNECTS): Comprehensive Centers for Human and Non-Human Primate Brain (UM1 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: RFA-NS-22-047 Type: UM1

Application Due Date: 13 July 2022; 13 July 2023. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) solicits applications for Comprehensive Centers to develop the research capacity and technical capabilities to map human and non-human primate (NHP) brain connectivity, with goals of brainwide coverage and comprehensive mapping of region-to-region connectivity at the level of axonal projections. Proposals may focus on a subvolume of the central nervous system (CNS), provided the volume is sufficiently large to demonstrate feasibility of collecting, reconstructing, analyzing, integrating, disseminating, and interpreting projection-level connectivity maps of entire brains. The resulting feasibility data from these awards are expected to inform NIH decisions on program continuation in a potential subsequent five-year funding period for production of brain-wide wiring diagrams. Applications may propose limited testing and optimization using additional species beyond human and NHPs for testbed technology development, if strong scientific and cost justification is provided. Applications must address the following five required research activity elements: (1) Sample Processing and Data Acquisition, (2) Data Processing and Management, (3) Integration and Dissemination, (4) Research Discovery, and (5) Feasibility Metrics and Milestones. Successful Centers will establish and scale complete pipelines from sample collection through data integration and dissemination, using state-of-art methods. They will automate and streamline processes for sample collection and data acquisition, optimize protocols for data management, and develop solutions for highly accurate circuit reconstruction. They will incorporate toolsets and infrastructure for seamless integration with other datasets of the same and different modalities, and for easy-access dissemination to the research community for collaborative annotation and analyses. They will apply their data to address research questions of high significance for understanding the relationship between structure and function of brain circuits. Centers will be integrated into the BRAIN CONNECTS Network, consisting of projects from this FOA and its companion announcements, as a coordinated effort aimed at developing wiring diagrams that can span entire brains across multiple scales.

**Companion Funding:** <u>U01</u> Research Project (Cooperative Agreements); <u>RFA-NS-22-048</u>, <u>UM1</u> Research Project Complex Structure Cooperative Agreement <u>RFA-NS-22-049</u>

**Budget**: The NIH BRAIN Initiative intends to commit an estimated total of \$30M in FY2023 for this and companion funding announcements to fund approximately 15 awards. Application budgets are not limited but need to reflect the actual needs of the proposed project. The maximum project period is 5 years.

# 8. BRAIN Initiative Connectivity across Scales (BRAIN CONNECTS): Comprehensive Centers for Mouse Brain (UM1 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: RFA-NS-22-048 Type: UM1

Application Due Date: 13 July 2022; 13 June 2023 Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) solicits applications for Comprehensive Centers to develop the research capacity and technical capabilities to map mouse brain connectivity, with goals of brain-wide coverage and comprehensive mapping of local and long-range cell-to-cell connectivity at the level of synaptic connections. Proposals may focus on a subvolume of the central nervous system (CNS), provided the volume is sufficiently large to demonstrate feasibility of collecting, reconstructing, analyzing, integrating, disseminating, and interpreting synapse-level connectivity maps of entire brains. The resulting feasibility data from these awards are expected to inform NIH decisions on program continuation in a potential subsequent five-year funding period for production of brain-wide wiring diagrams. Applications may propose limited testing and optimization using additional species beyond mouse for testbed technology development, if strong scientific and cost justification is provided. Applications must address the following five required research activity elements: (1) Sample Processing and Data Acquisition, (2) Data Processing and Management, (3) Integration and Dissemination, (4) Research Discovery, and (5) Feasibility Metrics and Milestones. Successful Centers will establish and scale complete pipelines from sample collection through data integration and dissemination, using state-of-art methods. They will automate and streamline processes for sample collection and data acquisition, optimize protocols for data management, and develop solutions for highly accurate circuit reconstruction. They will incorporate toolsets and infrastructure for seamless integration with other datasets of the same and different modalities, and for easy-access dissemination to the research community for collaborative annotation and analyses. They will apply their data to address research questions of high significance for understanding the relationship between structure and function of brain circuits. Centers will be integrated into the BRAIN CONNECTS Network, consisting of projects from this FOA and its companion announcements, as a coordinated effort aimed at developing wiring diagrams that can span entire brains across multiple scales.

**Budget**: The NIH BRAIN Initiative intends to commit an estimated total of \$30M in FY2023 for this and companion funding announcements to fund approximately 15 awards. Application budgets are not limited but need to reflect the actual needs of the proposed project. The maximum project period is 5 years.

# 9. BRAIN Initiative Connectivity across Scales (BRAIN CONNECTS): Specialized Projects for Scalable Technologies (U01 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date Hyperlink: RFA-NS-22-049

**Application Due Date:** 13 July 2022, 13 July 2023, 13 July 2024. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) supports Specialized Projects to develop current or emerging technologies to generate comprehensive atlases of brain connectivity, with an emphasis on human, non-human primate (NHP), and mouse. Projects using other species are also permitted, if their use is well justified and the goal is test and validate approaches that can be generalized across species. Applications may address any aspect(s) of data collection, reconstruction, analysis, integration, dissemination, and interpretation of brain connectivity and associated data pipelines, to enable faster, more precise, and more cost-effective generation and interpretation of brain-wide wiring diagrams. Proposals are encouraged to develop distinct capabilities and competencies that may be expected to complement Comprehensive Centers solicited by the companion FOAs, with aims of further developing and optimizing current technologies, or proposing entirely new, disruptive, and potentially risky approaches. Funded projects will be integrated into the BRAIN CONNECTS Network, consisting of other Specialized Projects from this FOA, and Comprehensive Centers from its companion announcements, as a coordinated effort aimed at developing the capabilities to generate wiring diagrams that can span entire brains across multiple scales.

Budget: The NIH BRAIN Initiative intends to commit an estimated total of \$30M in FY2023 for this and companion funding announcements to

**Budget**: The NIH BRAIN Initiative intends to commit an estimated total of \$30M in FY2023 for this and companion funding announcements to fund approximately 15 awards. Application budgets are not limited but need to reflect the actual needs of the proposed project. The maximum project period is 3 years.