



# NIH funding opportunities



Faculty of Medicine and Health Sciences: Research Development and Support

5 Jul 2021 (#20)

[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 [www.grants.nih.gov](http://www.grants.nih.gov) or [www.sun.ac.za/RDSfunding](http://www.sun.ac.za/RDSfunding) (current & archive).

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

**Tygerberg Campus: [cdevries@sun.ac.za](mailto:cdevries@sun.ac.za) • Stellenbosch Campus [lizek@sun.ac.za](mailto:lizek@sun.ac.za)**

## 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)
- [PA-20-196](#) NIH Exploratory/Developmental Research Grant Program (Parent R21 Basic Experimental Studies with Humans Required)

## Important Notices

### **[NOT-CA-21-092](#) Notice of Special Interest (NOSI): Integration of Individual Residential Histories in Cancer Research.**

This Notice of Special Interest (NOSI) seeks to highlight the interest of NCI's Division of Cancer Control and Population Sciences to support investigation of the role of individual Residential Histories - a record of an individual's places of residence over the life course - relative to cancer risk, etiology, prevention, treatment, and outcomes. This notice applies to due dates on or after October 5, 2021, and subsequent receipt dates through March 08, 2024. Submit applications for this initiative using one of the following funding opportunity announcements

- [PAR-21-190](#) Modular R01s in Cancer Control and Population Sciences (R01 Clinical Trial Optional)
- [PAR-19-309](#) Stimulating Innovations in Behavioral Intervention Research for Cancer Prevention and Control (R21 Clinical Trial Optional)
- [PA-20-185](#) NIH Research Project Grant (Parent R01 Clinical Trial Not Allowed)

### **[NOT-HD-21-040](#) Notice of Special Interest (NOSI): High Priority Areas in Placental Research for Healthy Pregnancies.**

Although the placenta is a short-lived organ limited to pregnancy, its importance is often underappreciated in being a crucial organ for the propagation of our species and future health of our progeny. Perturbations in any one of its many functions may result in many common adverse pregnancy outcomes. These include early pregnancy loss, preeclampsia, fetal growth restriction, stillbirth, and preterm birth. In addition, a poorly functioning placenta can lead to aberrant programming of the fetus that can impact the health of the individual later in adult life. This includes an increased incidence of adult diseases such as obesity, cardiovascular disease, and diabetes. Thus, a more comprehensive understanding of the placenta is necessary to help address a number of major gaps in knowledge. This notice applies to due dates on or after June 5, 2021 and subsequent receipt dates through September 8, 2022. Submit applications for this initiative using one of the following funding opportunity announcements

- [PA-20-185](#) – NIH Research Project Grant (Parent R01 Clinical Trial Not Allowed)

- [PA-20-195](#) – NIH Exploratory/Developmental Research Grant Program (Parent R21 Clinical Trial Not Allowed)
- [PA-20-200](#) – NIH Small Research Grant Program (Parent R03 Clinical Trial Not Allowed)
- [PAR-20-300](#) – Translational Research in Maternal and Pediatric Pharmacology and Therapeutics (R01 Clinical Trial Optional)
- [PAR-20-299](#) – Translational Research in Maternal and Pediatric Pharmacology and Therapeutics (R21 Clinical Trial Optional)

**[NOT-HL-21-017](#) Notice of Special Interest (NOSI): Integrative Omics Analysis of NHLBI TOPMed Data (Parent R01 Clinical Trial Not Allowed).** The symptom-based diagnosis and treatment of heart, lung, blood, and sleep (HLBS) diseases has vastly improved in recent years, yet an understanding of the molecular mechanisms underlying many of these diseases has remained elusive. Furthermore, in most cases the impact of genetic variation on severity of disease and treatment outcomes remains unknown. Therefore, the NHLBI has created the Trans-omics for Precision Medicine (TOPMed) program, which aims to utilize genomics data to characterize a variety of HLBS diseases. TOPMed is well on its way to collecting whole genome sequence (WGS) from over 181,000 well-phenotyped individuals and is currently generating multi-omics data (e.g. over 17,700 RNA sequences, over 26,170 DNA methylation, 7,425 metabolomics profiles) from many of these individuals to complement whole genome sequence information. This notice applies to due dates on or after October 5, 2021 and subsequent receipt dates through May 8, 2023. Submit applications for this initiative using the following funding opportunity announcement

- [PA-20-185](#) - NIH Research Project Grant (Parent R01 Clinical Trial Not Allowed)

## Funding Opportunity Announcements (FOA)

### 1. HIV-associated Non-Communicable Diseases Research at Low- and Middle-Income Country Institutions (R21 Clinical Trial Optional)

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

**Hyperlink:** [PAR-21-246](#)

**Type:** R21

**Application Due Date:** December 08, 2021. December 08, 2022. Apply by 5:00 PM local time of applicant organization

**Funding Opportunity Announcement:** The goals of this program are to support locally relevant research in critical areas of HIV-associated non-communicable diseases (NCDs) at Low- and Middle-Income Country (LMIC) Institutions, to enhance research capacity, and to build a network of researchers both within and across LMICs to address this critical burden. This initiative is expected to stimulate new research on the interplay between HIV and development of NCDs in persons living with HIV (PLWH). This includes exploratory studies to uncover the extent to which HIV infection influences the etiopathogenesis of the NCDs; and to identify and develop appropriate approaches for effective diagnosis, prevention, therapeutic interventions and integrated clinical care for PLWH with the comorbid conditions. Applicants should develop their studies in keeping with the NIH HIV/AIDS Research Priorities (<https://www.oar.nih.gov/hiv-policy-and-research/research-priorities> ; <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-20-018.html>) . Research teams should contain an appropriate mix of expertise to accomplish the proposed studies, including partnerships between HIV and NCD researchers who can initiate new ideas and determine feasibility of novel approaches to understand and reduce the long-term suffering from the comorbid disorders. Applicants will also be asked to address the needs of collaborating LMIC institutions to develop capacity for carrying out research in this field.

**Budget:** The combined budget for direct costs for the two-year project period may not exceed \$275,000. No more than \$150,000 may be requested in any single year. The budget request must reflect the actual needs of the proposed project. Applicants may request a project period of up to two years.

### 2. Pediatric Immune System – Ontogeny and Development (INTEND) (R01 Clinical Trial Not Allowed)

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

**Hyperlink:** [PAR-21-248](#)

**Type:** R01

**Application Due Date:** October 05, 2021; February 05, 2022; October 05, 2022; February 05, 2023. Aids Dates: January 07, 2022; May 07, 2022; January 07, 2023. Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement:** The purpose of this Funding Opportunity Announcement (FOA) is to correlate immune system development patterns between two or more age groups - neonates, infants, and children and adolescents and further understand the impact of infectious diseases, microbiome and environmental factors on the ontogeny and development of the pediatric immune system, from birth, transitioning into adolescence and adulthood with the focus of impact during pregnancy and post-natal period.

**Budget:** Application budgets are limited to \$400,000/year in direct costs of the proposed project. The scope of the proposed project should determine the project period. A maximum project period of 4 years is allowed.

### 3. Computational Approaches for Validating Dimensional Constructs of Relevance to Psychopathology (R01 Clinical Trial Optional)

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

**Hyperlink:** [PAR-21-263](#)

**Type:** R01

**Application Due Date:** November 01, 2021; November 01, 2022; November 01, 2023. Apply by 5:00 PM local time of applicant organization

**Funding Opportunity Announcement:** This Funding Opportunity Announcement (FOA) solicits applications for research projects that will use computational approaches to test the validity of dimensional constructs in the NIMH Research Domain Criteria (RDoC) matrix (or similar constructs based on comparable criteria). Some elements of the RDoC matrix have been updated since its first release, but a thorough data-driven validation that broadly explores, compares, and validates the constructs within the matrix has not been performed. This FOA seeks research that addresses the following questions: Do the different domains of behavior segregate from each other? How much do they rely on distinct versus overlapping neural circuits? What are the relationships between domains, constructs, and subordinate sub-constructs, both in

terms of their correlational structure and their underlying neural circuitry? By answering these questions, proposed research projects will test integrative models of functioning and identify dysregulation in psychopathology-related mechanisms that may cut across traditional diagnostic categories and may change over time. This FOA seeks to promote projects where the computational and the experimental components are well integrated. To ensure ecological validity of these studies, models derived from lab-based behavioral tasks will need to be tested for generalizability to behavioral data collected in a real-world setting. The ultimate goal is to advance translational research that will identify novel classification approaches and/or treatment targets, and lead to more effective and timely interventions for serious mental illnesses.

**Budget:** Application budgets may not exceed \$500,000 Direct Costs annually, including any consortium F&A, and are expected to reflect actual needs of the proposed project. The total project period for an application submitted in response to this FOA may not exceed five years.

#### 4. Computationally-Defined Behaviors in Psychiatry (R21 Clinical Trial Optional)

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

**Hyperlink:** [PAR-21-264](#)

**Type:** R21

**Application Due Date:** November 01, 2021; November 01, 2022, November 01, 2023 Apply by 5:00 PM local time of applicant organization

**Funding Opportunity Announcement:** This Funding Opportunity Announcement (FOA) solicits applications for research projects that will apply computational approaches to develop parametrically detailed behavioral assays across mental-health relevant domains of function. These projects should focus on behavior in humans and test computational models in healthy, trans-diagnostic, unselected, or community samples. NIMH is particularly interested in the study of behavioral measures, models, and parameters that have the potential for back-translation from humans to animals, especially for pre-clinical therapeutics development, and in models that have the potential to be extended to clinical populations. To maximize prospects of back-translation and to provide a neurobiological foundation for future research, studies will need to consider behavioral models and parameters that are linked to the underlying neural processes that may be involved in their computation. Finally, in order to ensure ecological validity of behavioral assays, models derived from lab-based behavioral tasks will need to be tested for generalizability to behavioral data collected in a real-world setting.

**Budget:** Direct costs are limited to \$275,000 over a two-year project period, with no more than \$200,000 in direct costs allowed in any single year. The maximum project period is 2 years.

#### 5. Dyadic Interpersonal Processes and Biopsychosocial Outcomes (R01 - Basic Experimental Studies with Humans)

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

**Hyperlink:** [PAR-21-280](#)

**Type:** R01

**Application Due Date:** March 05, 2022; March 05, 2023 Aids dates: May 07, 2022, May 07, 2023. Apply by 5:00 PM local time of applicant organization

**Funding Opportunity Announcement:** This funding opportunity announcement (FOA) invites basic and/or methodological research projects that illuminate and/or measure independent and interdependent health-related effects within dyads across relationships and settings. For the purpose of this FOA, a *dyad* is a unit of two individuals whose interactions and influences on one another are nested within larger social contexts and networks. Dyads are social relationships that extend beyond the individual and have strong bidirectional influences on physical and mental health. For the purpose of this FOA, *independent effects* are those effects that affect each member of the dyad individually (i.e., by nature of being part of the dyad), whereas *interdependent effects* are those that affect one member of the dyad *contingent upon the other member of the dyad* (i.e., not only because the individual is part of a dyad but also because being part of the dyad has an effect on the other individual within the dyad as well).

**Budget:** 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.

#### 6. Dyadic Interpersonal Processes and Biopsychosocial Outcomes (R01 Clinical Trials Not Allowed)

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

**Hyperlink:** [PAR-21-281](#)

**Type:** R01

**Application Due Date:** February 05, 2022, February 05, 2023 Aids dates: May 07, 2022; May 07, 2023 Apply by 5:00 PM local time of applicant organization

**Funding Opportunity Announcement:** This funding opportunity announcement (FOA) invites basic and/or methodological research projects that seek to illuminate or measure independent and interdependent health-related effects within dyads. For the purpose of this FOA, a dyad is a unit of two individuals whose interactions and influences on one another are nested within larger social contexts and networks. Both animal and human subjects research projects are welcome. Types of projects submitted under this FOA include but are not limited to, observational studies involving humans, or existing/synthesized datasets studies. Researchers proposing basic science experimental studies involving human participants (i.e., experimentally manipulate independent variables) should consider the companion FOA PAR-21-280" Dyadic Interpersonal Processes and Biopsychosocial Outcomes (R01 Basic Experimental Studies with Humans)."

**Budget:** 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.

#### 7. Innate Immune Memory Impacting HIV Acquisition and/or Control (R21 Clinical Trial Not Allowed)

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

**Hyperlink:** [RFA-AI-21-041](#)

**Type:** R21

**Application Due Date:** December 06, 2021. Apply by 5:00 PM local time of applicant organization

**Funding Opportunity Announcement:** The purpose of this Funding Opportunity Announcement is to investigate innate immune cell effector functions and innate immune memory as a means to prevent HIV infection and/or establishment of disease. Exploratory research from basic molecular mechanisms, translational work, and clinical research examining innate memory are encouraged.

**Budget:** NIAID and partner components intend to commit an estimated total of \$2,500,000 to fund 7-8 awards, for fiscal year 2022 The combined budget for direct costs for the two-year period may not exceed \$275,000. No more than \$200,000 may be requested in any single year. The total project period may not exceed two years.

#### 8. Emergency Awards: Antiviral Drug Discovery (AViDD) Centers for Pathogens of Pandemic Concern (U19 Clinical Trial Not Allowed)

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

**Hyperlink:** [RFA-AI-21-050](#)

**Type:** U19

**Application Due Date:** October 22, 2021. Apply by 5:00 PM local time of applicant organization

**Funding Opportunity Announcement:** This Funding Opportunity Announcement (FOA) solicits applications from single institutions or consortia of institutions to participate in the Antiviral Drug Discovery (AViDD) Centers for Pathogens of Pandemic Concern program. The purpose of this program is to support comprehensive multidisciplinary research Centers focused on innovative antiviral drug development targeting coronaviruses (CoVs), emphasizing SARS-CoV-2, and one or more select RNA viruses with pandemic potential. NIAID is issuing this FOA in response to the declared public health emergency issued by the Secretary, HHS, for the 2019 Novel Coronavirus (COVID-19), and within the provisions described in the "American Rescue Plan Act of 2021."

**Budget:** NIAID intends to commit \$200 million in FY 2022 to fund 8 awards. Application budgets are limited to \$15 million for FY2022 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 period is 5 years.

#### 9. Technology Development for Single-Molecule Protein Sequencing and Single-Cell Proteome Analysis (R01 Clinical Trial not allowed)

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

**Hyperlink:** [RFA-HG-21-001](#)

**Type:** R01

**Application Due Date:** October 1, 2021; June 15, 2022; June 15, 2023 Apply by 5:00 PM local time of applicant organization

**Funding Opportunity Announcement:** This Funding Opportunity Announcement (FOA) solicits grant applications to catalyze major advances in single-molecule protein sequencing and single cell proteome analysis through technology development. The goal of this initiative is to achieve technological advances over the next five years that enable generation of protein sequencing data at sufficient scale, speed, cost and accuracy to use routinely in studies of genome biology and function, and in biomedical and clinical research in general.

**Budget:** Issuing IC and partner [components](#) intend to commit an estimated total of \$20,000,000 to fund 8-10 awards. NHGRI will commit \$14,000,000, and NCI will commit \$6,000,000. An applicant may request direct costs of up to \$500,000 per year. Because the nature and scope of the proposed research will vary from application to application, it is anticipated that the size of each award will also vary. The scope of the proposed project should determine the project period. The maximum project period is 3 years.

#### 10. Technology Development for Single-Molecule Protein Sequencing (R21 Clinical Trial not allowed)

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

**Hyperlink:** [RFA-HG-21-002](#)

**Type:** R21

**Application Due Date:** October 1, 2021; June 15, 2022; June 15, 2023. Apply by 5:00 PM local time of applicant organization

**Funding Opportunity Announcement:** This Funding Opportunity Announcement (FOA) solicits R21 grant applications to catalyze major advances in single-molecule protein sequencing through technology development. The goal of this initiative is to achieve technological advances over the next five years that enable generation of protein sequencing data at sufficient scale, speed, cost and accuracy to use routinely in studies of genome biology and function, and in biomedical and clinical research in general. Exploration of methods other than those currently in use is highly encouraged. High-risk/high-payoff applications are appropriate to achieve the goals of this FOA.

**Budget:** NHGRI intends to commit \$500,000 in total costs per year in FY22, 23 and 24 to fund 2-4 awards yearly. The actual number of awards is contingent upon NIH appropriations and the submission of a sufficient number of meritorious applications. 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 a single year. The scope of the proposed project should determine the project period. The maximum project period is 2 years.

Research Development and Support Division (RDSD),  
Faculty of Medicine and Health Sciences, Stellenbosch University  
5<sup>th</sup> Floor, Teaching Block, Tygerberg Campus.  
Enquiries: *Christa*  
e: [cdevries@sun.ac.za](mailto:cdevries@sun.ac.za) | t: +27 21 938 9838

Afdeling Navorsingsontwikkeling/Division for Research Development (DRD)  
Stellenbosch University  
2038 Wilcocks Building, Ryneveld Street  
Enquiries: *Lizél*  
e: [lizelk@sun.ac.za](mailto:lizelk@sun.ac.za) | t: +27 21 808 2105