

**NIH funding opportunities** 

Faculty of Medicine and Health Sciences: Research Development and Support 15 Mar 2021 (#06)

### [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**

- <u>NOT-OD-21-073</u> Upcoming Changes to the Biographical Sketch and Other Support Format Page for Due Dates on or after May 25, 2021. Specific Changes to Biosketch Instructions - Updates
  - A full copy of the updated Biosketch instructions can be found <u>here</u>. Specific changes listed below. NIH will incorporate the changes into the NIH Application Form Instructions within the next forms update by FY 2022. Instructions for a Biographical Sketch
  - Personal Statement updated to read: Briefly describe why you are well-suited for your role(s) in this project. Relevant factors may include: aspects of your training; your previous experimental work on this specific topic or related topics; your technical expertise; your collaborators or scientific environment; and/or your past performance in this or related fields, *including ongoing and completed research projects from the past three years that you want to draw attention to (previously known as research support)*.
  - **Positions,** *Scientific Appointments,* and Honors updated to read: List in *reverse* chronological order *all* positions and scientific appointments both domestic and foreign, including affiliations with foreign entities or governments. This includes titled academic, professional, or institutional appointments whether or not remuneration is received, and whether full-time, part-time, or voluntary (including adjunct, visiting, or honorary).
  - Scholastic Performance updated to remove 'Research Support'. *Section D is solely present on the fellowship version of the Biosketch, and no longer includes research support, only Scholastic Performance*.

## **Notices of Special Interest (NOSI)**

 <u>NOT-HD-20-032</u> Notice of Special Interest (NOSI): Using Systems Science Methodologies to Protect and Improve Child and Reproductive Population Health. The purpose of this Notice of Special Interest (NOSI) is to solicit applications to support multi-disciplinary scientific teams proposing research using systems science approaches to address persistent public health challenges. Systems science refers to multi-level methodologies addressing complex behavioral and social phenomena. This initiative encourages applications for both basic and applied research, including methodological and measurement development, with a focus on human behavioral and/or social science. This initiative also seeks to promote interdisciplinary collaboration among health researchers and experts in mathematical modelling. This notice applies to due dates on or after June 5, 2021 and subsequent receipt dates through May 7, 2024. Submit applications for this initiative using the following funding opportunity announcement (FOA) or any reissues of this announcement through the expiration date of this notice. <u>PA-20-185</u> NIH Research Project Grant (Parent R01 Clinical Trial Not Allowed)

### **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.

<u>PA-20-185</u> 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)

## Funding Opportunity Announcements (FOA)

### 1. Maximizing the Scientific Value of Existing Biospecimen Collections (R21 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due dateHyperlink: RFA-OD-21-004Type: R21

**Application Due Date:** October 8, 2021, August 8, 2022, March 8, 2023. Apply by 5:00 PM local time of applicant organization. **Funding Opportunity Announcement**: The purpose of this Funding Opportunity Announcement (FOA) is to invite R21 applications to stimulate exploratory research relevant to the mission of the Food and Drug Administration (FDA) - Center for Tobacco Products (CTP) using existing (publicly available) biospecimens currently stored in repositories in the United States. This will include, but not be limited to, collections associated with the Population Assessment of Tobacco and Health (PATH) Study, the National Health and Nutrition Examination Survey (NHANES), the National Heart, Lung and Blood Institute's (NHLBI) Biologic Specimen and Data Repository Information Coordinating Center (BioLINCC), and the Prostate, Lung, Colorectal and Ovarian (PLCO) Cancer Screening Trial. Proposed research should seek to maximize the scientific value of these stored collections and to provide researchers with an opportunity to generate preliminary data for subsequent research proposals. Other publicly available datasets would be considered, depending on analyses to be conducted. These applications need to provide justification why the data set is unique, and the research questions cannot be answered from a publicly available, nationally representative, data set. The awards under this FOA will be administered by NIH using funds that have been made available through FDA-CTP and the Family Smoking Prevention and Tobacco Control Act (P.L. 111-31). Research results from this FOA are expected to generate findings and data that are directly relevant in informing the FDA's regulation of the manufacture, distribution, and marketing of tobacco products to protect public health. Research Projects must address the research priorities related to the regulatory authority of the Food and Drug Administration (FDA) - Center for Tobacco Products (CTP).

**Budget:** NIH, via support from the FDA Center for Tobacco products (CTP), intends to fund up to 5 R21s, corresponding to a total of up to \$1.0 million, for fiscal year 2021. Future year amounts will depend on availability of funds. The combined budget for direct costs for the entire project period may not exceed \$275,000. No more than \$200,000 in direct cost may be requested in any single year. The maximum project period is 2 years.

# 2. Innovation Grants to Nurture Initial Translational Efforts (IGNITE): Neurotherapeutic Agent Characterization and In vivo Efficacy Studies (R61/R33 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due dateHyperlink: PAR-21-122Type: R61/R33Application Due Date: June 17, 2021, October 19, 2021, February 22, 2022. Apply by 5:00 PM local time of applicant organization.Funding Opportunity Announcement: This funding opportunity announcement (FOA) provides funding to conduct pharmacodynamic,<br/>pharmacokinetic, and in vivo efficacy studies to demonstrate that proposed therapeutic agent(s) have sufficient biological activity to warrant<br/>further development to treat neurological or neuromuscular disorders that fall under the NINDS mission. Therapeutic agents include small<br/>molecules, biologics or biotechnology-derived products. This FOA is part of a suite of Innovation Grants to Nurture Initial Translational Efforts<br/>(IGNITE) to advance projects to the point where they can meet the entry criteria for the Blueprint Neurotherapeutics Network or other<br/>translational programs.

**Budget:** Direct costs cannot exceed \$499,000 in any one year. Cumulative direct costs for the entire three-year project period may not exceed \$750,000. The total project period for a combined R61/R33 application submitted in response to this FOA may not exceed three years, with no more than two years for the R61 phase and no more than two years for the R33 phase.

# 3. Innovation Grants to Nurture Initial Translational Efforts (IGNITE): Development and Validation of Model Systems to Facilitate Neurotherapeutic Discovery (R61/R33 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due dateHyperlink: PAR-21-123Type: R61/R33Application Due Date: June 17, 2021, October 19, 2021, February 22, 2022. Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement**: This funding opportunity announcement (FOA) encourages the development and validation of animal models and human/animal tissue ex vivo systems that recapitulate the phenotypic and physiologic characteristics of a defined neurological or neuromuscular disorder. The goal of this FOA is to promote a significant improvement in the translational relevance of animal models or ex vivo systems that will be utilized to facilitate future development of neurotherapeutics. Ideally, models proposed for this FOA would have the potential to provide feasible and meaningful assessments of efficacy following therapeutic intervention that would be applicable in both preclinical and clinical settings. This FOA is part of a suite of Innovation Grants to Nurture Initial Translational Efforts (IGNITE) Program focused on enabling the exploratory and early stages of drug discovery.

**Budget:** Direct Costs cannot exceed \$499,000 in any one year and cumulative direct costs for the three year project cannot exceed \$750,000. The total project period for a combined R61/R33 application submitted in response to this FOA may not exceed three years, with no more than two years for the R61 phase and no more than two years for the R33 phase. The total project period for a combined R61/R33 application submitted in response to this FOA may not exceed three years for the R33 phase. The total project period for a combined R61/R33 application submitted in response to this FOA may not exceed three years, with no more than two years for the R61 phase and no more than two years for the R33 phase.

# 4. Innovation Grants to Nurture Initial Translational Efforts (IGNITE): Assay Development and Neurotherapeutic Agent Identification (R61/R33 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due dateHyperlink: PAR-21-124Type: R61/R33Application Due Date: June 17, 2021, October 19, 2021, February 22, 2022. Apply by 5:00 PM local time of applicant organization.Funding Opportunity Announcement: This funding opportunity announcement (FOA) encourages research grant applications to develop in<br/>vitro and/or ex vivo assays and conduct iterative screening efforts to identify and characterize potential therapeutic agents for neurological or<br/>neuromuscular disorders. This FOA is part of a suite of Innovation Grants to Nurture Initial Translational Efforts (IGNITE) to advance projects to<br/>the point where they can meet the entry criteria for the Blueprint Neurotherapeutics Network (BPN) or other translational programs.Budget: Direct costs cannot exceed \$499,000 in any one year. Cumulative direct costs for the entire three-year project period may not exceed<br/>\$750,000. he total project period for a combined R61/R33 application submitted in response to this FOA may not exceed three years, with no<br/>more than two years for the R61 phase and no more than two years for the R33 phase.

# 5. Blueprint Neurotherapeutics Network (BPN): Biologic-based Drug Discovery and Development for Disorders of the Nervous System (UG3/UH3 Clinical Trial Optional)

Letter of Intent: 30 days prior to the application due dateHyperlink: PAR-21-163Type: UG3/UH3Application Due Date:August 10, 2021, February 09, 2022 August 09, 2022. Apply by 5:00 PM local time of applicant organization.Funding Opportunity Announcement:The Blueprint Neurotherapeutics Network for Biologics (BPN-Biologics) provides support for biologic-<br/>based therapeutic discovery and development, from lead optimization through phase I clinical testing. This Funding Opportunity Announcement(FOA) supports preclinical discovery and development of potential therapeutic Biotechnology Products and Biologics including, but not limited<br/>to, large biologic macromolecules, (e.g., proteins, antibodies, and peptides), gene-based therapies (i.e., oligonucleotide- and viral-based), cell<br/>therapies, and novel emerging therapies (e.g., microbial and microbiome therapies). Applicants will collaborate with NIH-funded consultants<br/>and can augment their project with NIH contract research organizations (CROs) that specialize in manufacturing, scaling, pharmacokinetics,<br/>toxicology, and Phase I clinical testing. BPN-Biologics awardee institutions retain their assignment of IP rights and gain assignment of IP rights<br/>from the BPN-Biologics contractors (and thereby control the patent prosecution and licensing negotiations) for biotherapeutic candidates<br/>developed in this program.

**Budget:** Application budgets are not limited but need to reflect the actual needs of the proposed project. Applicants may seek up to two years of UG3 funding. The UH3 phase cannot exceed four years. The total duration of both the UG3 and UH3 cannot exceed 5 years. The actual duration of individual projects will depend upon the entry point and on successful achievement of milestones and conditions as described in Milestones Section of the program overview.

### 6. Modular R01s in Cancer Control and Population Sciences (R01 Clinical Trial Optional)

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

Hyperlink: PAR-21-190

Hyperlink: RFA-MH-21-130

Type: R01

Type: R01

Application Due Date: November 08, 2021, March 07, 2022Apply by 5:00 PM local time of applicant organization. Funding Opportunity Announcement: This funding opportunity announcement (FOA) encourages applications for research in cancer control and population sciences. The overarching goal is to provide support to promote research efforts on novel scientific ideas that have the potential to substantially advance cancer research in statistical and analytic methods, epidemiology, cancer survivorship, cancer-related behaviors and behavioral interventions, health care delivery, and implementation science. Budget:

### 7. BRAIN Initiative: Secondary Analysis and Archiving of BRAIN Initiative Data (R01 Clinical Trial Not Allowed)

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

Application Due Date: October 07, 2021. Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement**: The BRAIN Initiative and the neuroscience field as a whole are generating massive and diverse research data across different modalities, spatiotemporal scales, and species in efforts to advance our understanding of the brain. The data types are being produced through the development and application of innovative technologies in high-throughput -omics profiling, optical microscopy, electron microscopy, electrophysiological recording, macroscale neuroimaging, neuromodulation, and others. The BRAIN Initiative has made significant investments in the development of an infrastructure to make data available to the research community in a useful way. This infrastructure includes data archives, data standards, and software for data integration, analysis and machine learning.

This Funding Opportunity Announcement (FOA) encourages secondary analysis of the large amounts of existing data relevant to the goals of the BRAIN Initiative. The data do not need to be held in one of the funded BRAIN Initiative data archives, but the data must be held in a data archive that is readily accessible to the research community. Support will be provided for innovative analysis of relevant existing datasets using conventional or novel analytic methods, data science techniques, and machine learning approaches. Support may also be requested to prepare and submit existing data into any of the BRAIN Initiative data archives. Investigators should not underestimate the time and effort that may be necessary to curate or harmonize data. Analyzed data, models and analytical tools generated under this FOA are expected to be deposited into an appropriate data archive. Since the BRAIN Initiative data archives are mostly making the data available to the research community through cloud-based storage, depositing the analyzed data, models and tools are expected to enhance opportunities to create a data sandbox where investigators can easily compare the results of their analysis with those from other research groups. The goal of this FOA is to promote studies that will significantly advance new discoveries and accelerate the pace of research of the BRAIN Initiative through harnessing the big data and machine learning opportunities. Awardees are expected to enhance the value of existing data, improve the overall data integration and analysis capability, and strengthen the statistical power and rigor and reproducibility of BRAIN Initiative related data.

**Budget:** Issuing IC and partner <u>components</u> intend to commit an estimated total of \$4,000,000 to fund 8 awards each fiscal year. Application budgets are limited to \$300,000 (direct costs) each year 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.

#### 8. BRAIN Initiative: Integration and Analysis of BRAIN Initiative Data (R01 Clinical Trial Not Allowed)

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

Hyperlink: <u>RFA-MH-21-135</u>

Type: R01

Application Due Date: October 15, 2021; June 10, 2022; October 14, 2022; June 09, 2023Apply by 5:00 PM local time of applicant organization. Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) solicits applications to develop informatics tools for analyzing, visualizing, and integrating data related to the BRAIN Initiative or to enhance our understanding of the brain. As part of programs of building the informatics infrastructure for the BRAIN Initiative, the FOA supports several different, but related activities. These include modifying existing analysis and visualization tools to deal with BRAIN Initiative data and integrating different types of BRAIN Initiative datasets. Proposing the development of new tools to deal with BRAIN Initiative data is also permitted. The tools supported under this FOA will make use of relevant data standards and will be built so that they can be integrated into the data repositories, both of which are created in awards under the other FOAs of the BRAIN initiative informatics program. The tools must be user-friendly in accessing and analyzing data from appropriate data archives, and should analyze/visualize data without requiring users to download data. The tools should also allow data to be combined for analysis/visualization from multiple locations.

**Budget:** Issuing IC and partner <u>components</u> intend to commit an estimated total of \$4 million to fund 4-7 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 3 years.

# 9. HEAL Initiative: Team Research for Initial Translational Efforts in Non-addictive Analgesic Therapeutics Development (U19 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due dateHyperlink: <u>RFA-NS-21-015</u>Type: R01Application Due Date: April 27, 2021, June 22, 2021, October 13, 2021, June 9, 2022, October 11, 2022, June 9, 2023, and October 10, 2023Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This funding opportunity announcement (FOA) is part of a suite of FOAs to support the development of safe, effective, and non-addictive therapeutics to treat pain. The goal of this FOA is to support team-based research projects to develop assays, screening and early optimization work to develop a non-addictive therapeutic to treat pain. Discovery and validation of pharmacodynamic markers efficacy and pharmacokinetic/pharmacodynamic (PK/PD) studies are also responsive. The result of the project should be to advance a hit or lead to the point where they can meet the entry criteria for RFA-NS-21-010 HEAL Initiative: Non-addictive Analgesic Therapeutics Development [Small Molecules and Biologics] to Treat Pain (UG3/UH3 Clinical Trial Optional) within the 5 years of the award, there is no opportunity for renewal of this award. Applications should propose a plan that will lead to the development of analgesics with a rigorous biological rationale and scientifically sound assays. If the data does not currently exist, the application must include a strong plan for developing data linking the putative therapeutic target(s) to the proposed pain indication and supporting the hypothesis that altering the target activity will produce desirable outcomes for the disease. This FOA is not specific for any one or group of pain conditions. Projects to develop therapeutics for acute pain, chronic pain, painful neuropathy, musculoskeletal pain, headache disorders, osteoarthritis, diabetic neuropathy, chemotherapyinduced neuropathy, eye pain, sickle-cell pain, post-surgical pain, cancer pain, visceral pain, post stroke pain, myofascial pain, painful disorders of the orofacial region and other conditions will be considered. Projects to develop analgesics for a combination of chronic overlapping pain conditions or for specific disease or pathological conditions will also be considered. Projects that seek to identify pain treatment targets in specific populations such as women, children, older adults, and other underrepresented groups will also be responsive to this FOA. Input from patients and caregivers on the therapeutic goals of the project is encouraged. The goal of each 5-year U19 application should be to identify candidate therapeutic(s) that will be ready to be submitted to <u>RFA-NS-21-010</u> for further optimization.

**Budget:** NIH intends to fund an estimate of 3-6 awards, for fiscal year 2021. Future year amounts will depend on annual appropriations. NIH intends to fund an estimate of 3-6 awards, for fiscal year 2021. Future year amounts will depend on annual appropriations. 5 years

# 10. HEAL Initiative: Planning Studies for Initial Analgesic Development Initial Translational Efforts [Small Molecules and Biologics] (R34 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due dateHyperlink: <u>RFA-NS-21-016</u>Type: R34Application Due Date: April 27, 2021, June 22, 2021, October 13, 2021, June 09, 2022Apply by 5:00 PM local time of applicant organization.Funding Opportunity Announcement: The goal of this funding opportunity announcement (FOA) is to solicit Initial Analgesic Development R34applications that propose 2-year exploratory/planning awards that are expected to enable a future application for RFA-NS-21-015 HEALInitiative: Team Research - for Initial Translational Efforts in Non-addictive Analgesic Development [Small Molecules and Biologics] (U19 ClinicalTrial Not Allowed).Thus, the limited scope of aims and approach of these applications are expected to establish a strong research team,feasibility, validity, or other technically qualifying results that support, enable, and/or lay the groundwork for a subsequent Team Research U19application must include a plan for developing a strong research team, as well as a strategy to collect preliminary data linking putativetherapeutic targets to the proposed pain indication and supporting the hypothesis that altering target activity will produce desirable outcomesfor the disease.

**Budget:** NIH intends to fund an estimate of up to 6 awards for fiscal year 2021. Future year number of awards and funding amounts will depend on annual appropriations. The direct costs for each year of the project may not exceed \$500,000, including consortium costs. 2 years