NIH funding opportunities

Faculty of Medicine and Health Sciences: Research Development and Support 26 Sep 2017 (#35)

[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.*

*Please be advised that you **must contact the Research Grants Management Office (RGMO) Pre-Awards** (Dr Christa de Vries cdevries@sun.ac.za) **to inform of your intent to apply.***

Timelines:** **Confirm your intent to apply as soon as possible, but not later than 30 days before the submission date. All final documents MUST reach the RGMO seven (7) workdays before NIH application due date. The application will be submitted four (4) workdays before the application due date.

Important Notice

- **Updates to Active Funding Opportunity Announcements to Prepare for Policy Changes Impacting Due Dates On or After January 25, 2018 (NOT-OD-17-114)**
- **The NIH Announces New Review Criteria for Research Project Applications Involving Clinical Trials (NOT-OD-17-118)**

1. Development of Valid Reliable Markers of Aging-Related Biologic Mechanisms for Human Studies

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (RFA-AG-18-018) **Type: U01**
Application Due Date: January 30, 2018. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: encourages applications to develop valid markers to assess the activity of fundamental aging mechanisms in humans that may influence the risk and progression of multiple aging conditions. Projects are encouraged that focus on selected mechanism(s) that may regulate aging changes, assess multiple possible markers for these mechanisms, test methods to improve their measurement properties, characterize their variability among individuals of differing ages and within the same age cohort, and assess their relationships in humans to in vivo functions influenced by the mechanism(s) under study. It is strongly encouraged that each project includes an interdisciplinary research team with expertise, as needed, in the biology of their selected mechanism(s), biomedical aging research, clinical pathology including laboratory assays, imaging methods, human cohort studies, tissue banking, biorepository resources, and statistics. Though the principal focus of the initiative is on development of markers in humans, studies in laboratory animals may also be conducted when necessary for the development of human markers, and potential development of parallel laboratory animal markers of a given mechanism. The markers generated through this initiative will provide a valuable resource for a wide range of human observational aging and intervention studies, by enhancing the ability to identify potential targets for interventions and assess the effects of interventions aimed at engaging these targets. Awards will be supported through Cooperative Agreements (U01). Awardees will be expected to interact and function as a network, through periodic meetings, exchange of data, and collaboration among awardees when mutually useful. NIA staff will assist in coordinating these activities. Clinical trials testing effects of interventions on newly developed markers as surrogate markers to screen potential interventions targeting aging-related mechanisms are outside the scope of this FOA, as are projects with a principal focus on laboratory animal studies. Applications for such projects will be considered non-responsive.

Budget: The NIA intends to commit $2,000,000 in FY 2018 to fund 3-4 awards. A budget of up to $400,000 per year in direct costs may be requested. Application budgets need to reflect the actual needs of the proposed project. The scope of the proposed project should determine the duration of the project period. The maximum project period is 5 years.

2. Population-Based Model Organism Research for G x E Exploration in Complex Disease Outcomes (Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (RFA-ES-17-009) **Type: R01**
Application Due Date: February 1, 2018. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) will support research using population-based model organism resources for environmental health science and toxicology questions. This FOA is particularly interested in the interplay between environment, genetics, and epigenetics and the identification and understanding of host susceptibility to environmental exposures, relevant to human disease outcomes.

Budget: NIEHS intends to commit $4 million in FY 2019 to fund approximately 6 awards. Future year amounts will depend on annual appropriations. Application budgets are limited to $499,999.00 Direct Costs. The maximum project period is 5 years.

3. BRAIN Initiative: Tools to target, identify and characterize non-neuronal cells in the brain (R01 Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (RFA-DA-18-018) **Type: R01**
Application Due Date: February 1, 2018 and October 4, 2018. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: The purpose of this Funding Opportunity Announcement [FOA] submitted through the Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative is to stimulate the development and validation of novel tools and analytical methods to target, identify and characterize non-neuronal cells in the brain. This FOA complements previous and ongoing cell-census and tool development efforts initiated under BRAIN, RFA-MH-14-215 and RFA-MH-14-216, that have focused almost exclusively on neuronal cells. The cutting-edge tools and methods developed under this opportunity should focus specifically on providing improved points of entry into non-neuronal cell-types (glial and vascular) to enable their inventory and characterization within the CNS and help define how these cells interact among each other and with neuronal cells to impact functional circuitries. Plans for validating the utility of the tool/technology/method and demonstrating its advantage over currently available approaches will be an essential feature of a successful application. Tools that can be used in several species or model organisms rather than in a single species are especially desirable.

Budget: Issuing IC and partner components intend to commit an estimated total of $8M to fund 10 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.

4. Biology Of Aging Dental, Oral And Craniofacial Tissues (Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (RFA-DE-18-009) **Type: R01**
(RFA-DE-18-010) **R21**
Application Due Date: January 31, 2018 and *aids date* February 28, 2018. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: The purpose of this Funding Opportunity Announcement (FOA) is to stimulate collaborative research to understand the biological mechanisms of aging in dental, oral, and craniofacial (DOC) tissues, as they relate to parallel processes in other tissues and organs. The areas of emphasis under this FOA include inflammation, tissue healing and regeneration, and epigenetic regulation. The overarching long-term goal of this effort is to improve oral health in older adults by addressing knowledge gaps in our understanding of the basic biology of age-associated changes in health and disease states of DOC tissues.

Budget: **R01:** NIDCR intends to commit $2M in FY 2018 to fund 4-5 awards. Application budgets are limited to $250,000 direct costs per year for all years. The scope of the proposed project should determine the project period. The maximum period is 5 years. **R21:** NIDCR intends to commit $1M in FY 2018 to fund 3-4 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. The scope of the proposed project should determine the project period. The maximum period is 2 years

5. Innovative Approaches or Technologies to Investigate Regional, Structural and Functional Heterogeneity of CNS Small Blood and Lymphatic Vessels

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (RFA-NS-18-003) **Type: R01**
Application Due Date: December 11, 2017. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: The NIH Blueprint for Neuroscience Research is a collaborative framework through which 14 NIH Institutes, Centers and Offices jointly support neuroscience-related research, with the aim of accelerating discoveries and reducing the burden of nervous system disorders.
This Funding Opportunity Announcement (FOA) will solicit research projects focused on the development of new technology and tools, or novel mechanistic studies, or a combination of mechanistic and technology development studies specific to central nervous system (CNS, which includes retina) small blood and lymphatic vessels in health and disease, across the life span. The program aims at facilitating the development of tools and technology to image, profile and map CNS small blood and lymphatic vessels. Additional goals are to elucidate the mechanisms underlying CNS small blood and lymphatic vessels structural and functional heterogeneity, differential susceptibility to injury, role in disease and repair processes, and their responses to therapies. Preclinical studies using in vitro and/or animal models specific to CNS small blood and lymphatic vessels alone or in combination with pilot human studies are appropriate for this FOA.
This initiative is one of the science projects supported by the NIH Blueprint for Neuroscience Research in FY 2018, which also include initiatives on "Dynamic Neuroimmune Interactions in the transition from Brain Function to Dysfunction" and "Characterization of Extracellular Vesicles." For additional information on FOAs of NIH Blueprint science projects, please check NIH Blueprint website http://neuroscienceblueprint.nih.gov/.

Budget: NIH Blueprint for Neuroscience Research intends to fund up to 20 awards, corresponding to a total of $ 6 million, for fiscal year 2018, for this and the related FOA (RFA-NS-18-004) "Human Studies of Target Identification, Biomarkers and Disease Mechanisms Specific to CNS Small Blood and Lymphatic Vessels". Future year amounts will depend on annual appropriations. Application budgets are limited to $400,000 direct costs/year and need to reflect the actual needs of the proposed project. The maximum project period is 5 years.

6. Human Studies of Target Identification, Biomarkers and Disease Mechanisms Specific to CNS Small Blood and Lymphatic

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (RFA-NS-18-004) **Type: R01**
Application Due Date: December 11, 2017. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) will solicit research projects to facilitate the development and translation of tools and technology for non-invasive imaging and profiling of human central nervous system (CNS, including retina) small blood and lymphatic vessels; to investigate their role in CNS physiology, disease, repair processes, and responses to therapy using novel approaches. Applications can be focused on the development of new technology and tools, novel target or biomarker identification and validation studies, or a combination of mechanistic and technology development studies specific to human CNS small blood and lymphatic vessels in health and disease, across the life span. This initiative is one of the science projects supported by the NIH Blueprint for Neuroscience Research in FY 2018, which also include initiatives on "Dynamic Neuroimmune Interactions in the transition from Brain Function to Dysfunction" and "Characterization of Extracellular Vesicles." For additional information on FOAs of NIH Blueprint science projects, please check NIH Blueprint website http://neurosciencebluepr int.nih.gov/.

Budget: NIH Blueprint for Neuroscience Research intends to fund up to 20 awards, corresponding to a total of $ 6 million, for fiscal year 2018, for this and the related FOA (RFA-NS-18-003) "Innovative Approaches or Technologies to investigate Regional, Structural and Functional Heterogeneity of CNS Small Blood and Lymphatic Vessels". Future year amounts will depend on annual appropriations. Application budgets are limited to $499,000 direct costs/year and need to reflect the actual needs of the proposed project. The maximum project period is 5 years.

7. BRAIN Initiative: Research Resource Grants for Technology Integration and Dissemination

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (RFA-NS-18-005) **Type: U24**
Application Due Date: February 9, 2018. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This funding opportunity announcement (FOA) supports efforts to disseminate resources and to integrate them into neuroscience research practice. Projects should be highly relevant to specific goals of the BRAIN Initiative, goals that are described in the planning document "BRAIN 2025: A Scientific Vision." They should engage in one or more of the following activities: distribution of tools and reagents; user training on the usage of new technologies or techniques; providing access to existing technology platforms and specialized facilities; minor improvements to increase the scale/efficiency of resource production and delivery; minor adaptations to meet the needs of a user community. Applications strictly focused on technology or software development, rather than dissemination of an existing resource, are not responsive to this FOA. Refinements to microscopes or tools necessary to customize them to the experimental needs of the end users are allowed. Projects should address compelling needs of neuroscience researchers working toward the goals of the BRAIN 2025 report that are otherwise unavailable or impractical in their current form.

Budget: The NIH anticipates providing $10M per year to fund an estimated 10 to 20 awards. Application budgets are not limited but need to reflect the actual needs of the proposed project. Support may be requested for up to 5 years.

8. Human Heredity and Health in Africa (H3Africa): Ethical, Legal, and Societal Issues (ELSI) Collaborative Centers

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (RFA-RM-17-020) **Type: U54**
Application Due Date: December 6, 2017. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) encourages applications to establish Collaborative Centers to study ethical, legal and societal issues (ELSI) of human genome and environmental health research across the African continent. Of particular interest are projects that propose bioethical, legal, and social science analyses of new or emerging issues that affect multiple communities across the continent of Africa. These awards will support 3-5 collaborating research projects at three or more African institutions working together as a partnership to accomplish more than each project could accomplish on its own.

Budget: The NIH Common Fund intends to commit up to a total of $500,000 per year for up to 4 years. NIH intends to fund 1 award. The number of awards is contingent upon NIH appropriations and the submission of a sufficient number of meritorious applications. Application budgets are limited to $500,000 total costs per year, and must reflect actual needs of the proposed project. The scope of the proposed project should determine the project period. The maximum project period is 4 years.

9. Human Heredity and Health in Africa (H3Africa): Ethical, Legal, and Societal Issues (ELSI) Research Program

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (RFA-RM-17-021) **Type: U01**
Application Due Date: December 6, 2017. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: This Funding Opportunity Announcement (FOA) encourages applications to study the ethical, legal and societal issues (ELSI) of human genome research in African populations. Of particular interest are projects that propose focused bioethical, legal, and social science analyses of new or emerging issues. This FOA is complementary to the H3Africa: ELSI Collaborative Centers (RFA-RM-17-020).

Budget: The NIH Common Fund intends to commit up to a total of $400,000 per year for up to 4 years. NIH intends to fund an estimate of up to 3 awards. The number of awards is contingent upon NIH appropriations and the submission of a sufficient number of meritorious applications. Application budgets are limited to $100,000 direct costs per 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 period is 4 years.

10. Science of Behavior Change: Revision Applications for Use-inspired Research to Optimize Adherence, Behavior Change Interventions, and Outcomes

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

Hyperlink: (RFA-RM-17-022) **Type: R01**
(RFA-RM-17-023) **U01**
(RFA-RM-17-024) **R34**
(RFA-RM-17-028) **R21**

Application Due Date: December 5, 2017. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: Supported by the NIH Common Fund (Common Fund) Science of Behavior Change (SOBC) Program, this Funding Opportunity Announcement (FOA) solicits competitive revision (formerly known as a competitive supplement) applications to NIH-supported clinical trials awarded as research project R01 grants. (See information about the new NIH clinical trial definition at https://osp.od.nih.gov/clinical-research/clinical-trials/.) The goal of the SOBC Program is to advance a mechanisms-focused, experimental medicine approach to behavior change research. Funded projects in the SOBC Research Network (https://commonfund.nih.gov/behaviorchange/fundedresearch) have developed experimental manipulations, assays, and/or measures (hereafter referred to as "assays" for brevity) to support an experimental medicine approach to behavior change research. The SOBC Measures Repository assays are accessible from the SOBC Research Network Open Science Framework (OSF) page at https://osf.io/zp7b4. The goal of this FOA is to accelerate the adaptation, validation, and translation of SOBC Research Network assays for use in ongoing clinical trials. This FOA calls for the integration of SOBC Research Network assays into active NIH-supported clinical trials of drugs, devices, procedures, or behavior modifications. The active NIH-supported clinical trial used to respond to this FOA does not have to be a behavior change trial or identify behavior change as a primary outcome. The integration of SOBC Research Network assays into ongoing clinical trials will accelerate the development of interventions and experimental manipulations that have been shown to engage specific mechanisms of behavior change and the development of assays that verify engagement of those behavior change targets.

Budget: The NIH Common Fund intends to commit $5.25 million in FY 2018 and $5.25 million in FY 2019 collectively across RFA-RM-17-022, RFA-RM-17-023, RFA-RM-17-024, and RFA-RM-17-028 to fund a total of 10-20 applications, contingent upon receiving scientifically meritorious applications and availability of funds. **R01 & U01:** Application budgets are limited to $500,000 per year in direct costs and should not exceed the budget of the parent award. All application budgets should reflect the actual needs of the proposed project. The scope of the proposed project should determine the project period. The maximum project period is 2 years, but the project cannot extend beyond the end date of the parent award. **R34:** Application budgets are limited to $225,000 per year in direct costs and should not exceed the budget of the parent award. All application budgets should reflect the actual needs of the proposed project. The scope of the proposed project should determine the project period. The maximum project period is 2 years, but the project cannot extend beyond the end date of the parent award. **R21:** Direct costs for the 2-year project period may not exceed $275,000. No more than $200,000 may be requested in any single year. All application budgets should reflect the actual needs of the proposed project.

11. New Onset Depressive Symptoms in Acute Illness (Clinical Trial Not Allowed)

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

Hyperlink: (PA-17-487) **Type: R21**
(PA-17-488) **R01**

Application Due Date: Standard dates & Standard AIDS dates apply. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: The purpose of the funding opportunity announcement (FOA) is to encourage research on the etiology of depressive symptoms that occur in the context of a sudden onset acute illness. Although it is known that depressive symptoms may linger and affect functional recovery long after physical recovery from an acute insult, there is a gap in knowledge about the pathobiology that may underlie these incident depressive symptoms. A greater understanding of the etiological factors that contribute to and/or mitigate a trajectory of depressive symptoms may inform a personalized, holistic approach to managing recovery from acute illness.

Budget: **R21:** 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. **R01:** 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.

Brief definitions of some NIH grant mechanisms: *comprehensive list of extramural grant and cooperative agreement activity codes*

R01 – NIH Research Project Grant Program: most common NIH program; to support a discrete, specified, circumscribed research project; generally 3-5 years; budget may be specified, but generally <$500,000 p.a. (direct costs).

R21 – NIH Exploratory/Developmental Research Grant: encourages new, exploratory and developmental research projects (could be used for pilot or feasibility studies); up to 2 years; budget total generally <$275,000 (direct costs).

R03 – NIH Small Grant Program: limited funding for short period to support e.g. pilot / feasibility study, collection of preliminary data, secondary analysis of existing data, small-contained research projects, development of new research technology, etc.; normally for "new investigators"; not renewable; up to 2 years; budget generally <$50,000 (direct costs).