

# NIH funding opportunities



Faculty of Medicine and Health Sciences: Research Development and Support

23 Nov 2015

[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>.

Please be advised that you **must contact the Research Grants Management Office (RGMO)** <u>at least 60 days</u> before **the submission date**, Mr Eugene Baugaard (<u>eugeneb@sun.ac.za</u>), or as soon as you commit to apply for an NIH grant and that the grant is submitted institutionally. <u>All final application documents MUST reach the RGMO seven</u> (7) workdays before NIH application due date.

# **Important notices**

- Findings of Research Misconduct (NOT-OD-16-020); (NOT-OD-16-021)
- Reminder: Annual Reports to the Office of Laboratory Animal Welfare due January 31, 2016 (NOT-OD-16-022)
- ASSIST Now an Option for Fellowship Grant Applications (NOT-OD-16-023)
- Transition to Payment Management System (PMS) Subaccounts: FY 2016 Supplements (NOT-OD-16-028)
- Notice of Pre-application Webinar for Clinical Proteomic Tumor Analysis Consortium (RFA-CA-15-021, RFA-CA-15-022 and RFA-CA-15-023) (NOT-CA-15-044)
- Notice of Intent to Publish a Funding Opportunity Announcement for NIDA Research Education Program for Clinical Researchers and Clinicians (R25)(NOT-DA-16-003)

#### 1. BRAIN Initiative: Development and Validation of Novel Tools to Analyze Cell-Specific and Circuit-Specific Processes in the Brain

Letter of Intent due date: January 2, 2016

Hyperlink: (RFA-MH-16-775)

vpe: F

RO1

**Application Due Date:** February 2, 2016. Apply by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date. **Applicants should be aware that on-time submission means that an application is submitted error free** (of both Grants.gov and eRA Commons errors) on the application due date.

**Purpose:** The purpose of this Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative is to encourage applications that will develop and validate novel tools to facilitate the detailed analysis of complex circuits and provide insights into cellular interactions that underlie brain function. The new tools and technologies should inform and/or exploit cell-type and/or circuit-level specificity. Plans for validating the utility of the tool/technology will be an essential feature of a successful application. The development of new genetic and non-genetic tools for delivering genes, proteins and chemicals to cells of interest or approaches that are expected to target specific cell types and/or circuits in the nervous system with greater precision and sensitivity than currently established methods are encouraged. Tools that can be used in a number of species/model organisms rather than those restricted to a single species are highly desired. Applications that provide approaches that break through existing technical barriers to substantially improve current capabilities are highly encouraged.

**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 3 years.

# 2. BRAIN Initiative: New Technologies and Novel Approaches for Large-Scale Recording and Modulation in the Nervous System

Letter of Intent due date: January 24, 2016

Hyperlink:

(RFA-NS-16-006)

pe: UC

**Application Due Date:** February 24, 2016. Apply by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date. **Applicants should be aware that on-time submission means that an application is submitted error free** (of both Grants.gov and eRA Commons errors) on the application due date.

**Purpose:** Understanding the dynamic activity of neural circuits is central to the NIH BRAIN Initiative. This FOA seeks applications for proof-of-concept testing and development of new technologies and novel approaches for large-scale recording and manipulation of neural activity to enable transformative understanding of dynamic signalling in the nervous system. In particular, we seek exceptionally creative approaches to address major challenges associated with recording and manipulating neural activity, at or near cellular resolution, at multiple spatial and/or temporal scales, in any region and throughout the entire depth of the brain. It is expected that the proposed research may be high-risk, but if successful could profoundly change the course of neuroscience research. Proposed technologies should be compatible with experiments in behaving animals, and should include advancements that enable or reduce major barriers to hypothesis-driven experiments. Technologies may engage diverse types of signalling beyond neuronal electrical activity for large-scale analysis, and may utilize any modality such as optical, electrical, magnetic, acoustic or genetic recording/manipulation. Applications that seek to integrate multiple approaches are encouraged. Where appropriate, applications are expected to integrate appropriate domains of expertise, including biological, chemical and physical sciences, engineering, computational modelling and statistical analysis.

**Budget:** Application budgets are not limited but need to reflect the actual needs of the proposed project. Awards are for three years of support.

#### 3. BRAIN Initiative: Optimization of Transformative Technologies for Large Scale Recording and Modulation in the Nervous System

Letter of Intent due date: January 24, 2016

Hyperlink: (RFA-NS-16-007)

T**ype:** UC

**Application Due Date:** February 24, 2016. Apply by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date. **Applicants should be aware that on-time submission means that an application is submitted error free** (of both Grants.gov and eRA Commons errors) on the application due date.

Purpose: Although invention and proof-of-concept testing of new technologies is a key component of the BRAIN Initiative, to achieve their potential these technologies must also be optimized through feedback from end-users in the context of the intended experimental use. This seeks applications for the optimization of existing and emerging technologies and approaches that have potential to address major challenges associated with recording and manipulating neural activity, at or near cellular resolution, at multiple spatial and temporal scales, in any region and throughout the entire depth of the brain. This FOA is intended for the iterative refinement of emergent technologies and approaches that have already demonstrated their transformative potential through initial proof-of-concept testing, and are appropriate for accelerated development of hardware and software while scaling manufacturing techniques towards sustainable, broad dissemination and user-friendly incorporation into regular neuroscience practice. Proposed technologies should be compatible with experiments in behaving animals, and should include advancements that enable or reduce major barriers to hypothesis-driven experiments. Technologies may engage diverse types of signalling beyond neuronal electrical activity for large-scale analysis, and may utilize any modality such as optical, electrical, magnetic, acoustic or genetic recording/manipulation. Applications that seek to integrate multiple approaches are encouraged. Applications are expected to integrate appropriate domains of expertise, including where appropriate biological, chemical and physical sciences, engineering, computational modelling and statistical analysis.

**Budget:** Application budgets are not limited but need to reflect the actual needs of the proposed project. Awards are for three years of support.

# 4. Pre-application: Stimulating Peripheral Activity to Relieve Conditions (SPARC): Comprehensive Functional Mapping of Neuroanatomy and Neurobiology of Organs

Letter of Intent due date: N/A

Application Due Date: Applications are accepted bimonthly on or around the 15th of the month: January 15, 2016; March 15, 2016; May 16, 2016; July 15, 2016; September 15, 2016; November 15, 2016; January 17, 2017; March 15, 2017; May 15, 2017; July 14, 2017; September 15, 2017; November 15, 2017; January 15, 2018. Apply by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.

Applicants should be aware that on-time submission means that an application is submitted error free (of both Grants.gov and eRA Commons errors) on the application due date.

Purpose: The purpose of this Funding Opportunity Announcement (FOA) is to invite pre-applications from applicants who have an interest in ultimately submitting an application to "Stimulating Peripheral Activity to Relieve Conditions (SPARC): Comprehensive Functional Mapping of Neuroanatomy and Neurobiology of Organs (OT2)" (RFA-RM-15-018). The OT1 SPARC OT pre-application is the required first step in the application process for the companion OT2 FOA (RFA-RM-15-018). Potential applicants should read both FOAs. Applicants whose OT1 pre-applications are found to be meritorious and programmatically relevant will be invited to submit a full application to the OT2 "Stimulating Peripheral Activity to Relieve Conditions (SPARC): Comprehensive Functional Mapping of Neuroanatomy and Neurobiology of Organs" FOA (RFA-RM-15-018). There will be substantial interaction with NIH Program Staff leading to the development of programmatic and budget elements for an acceptable OT2 application. OT2 applications must include a copy of the Invitation to Submit from the SPARC program as a requirement for submission. The Invitation to Submit an OT2 application is not an indication of any award. No Other Transaction awards will be made under this FOA.

**Budget:** No awards will be made under this OT1 FOA. The timeline for OT1 applications received by the first due date will allow consideration of a possible OT2 application for FY16 funds under the companion announcement "Stimulating Peripheral Activity to Relieve Conditions (SPARC): Comprehensive Functional Mapping of Neuroanatomy and Neurobiology of Organs (OT2)" RFA-RM-15-018.

# 5. Improving Outcomes in Cancer Treatment-Related Cardiotoxicity

**Application Due Date:** Standard dates apply. Apply by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date. **Applicants should be aware that on-time submission means that an application is submitted error free** (of both Grants.gov and eRA Commons errors) on the application due date.

Purpose: This Funding Opportunity Announcement (FOA) encourages collaborative applications that will contribute to the identification and characterization of patients at risk of developing cancer treatment-related cardiotoxicity. The primary intent is to mitigate cardiovascular dysfunction while optimizing cancer outcomes. To accomplish this, methods that evaluate cardiac risk prior to treatment and integrate evidence-based cancer treatment regimens with screening, diagnostic, and/or management strategies are sought. Research applications should focus on mitigation/management of adverse effects associated with anti-cancer treatments including: cytotoxic chemotherapies, targeted agents, immunomodulatory therapies and radiation (that occur during cancer treatment and/or long-term survivorship) as defined by cardiac specific common terminology criteria for adverse events (CTCAE).

**Budget: RO1-** Application budgets are not limited but need to reflect the actual needs of the proposed project. The maximum project period is 5 years. **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 a single year. The maximum project period is 2 years.



### 6. National Eye Institute Clinical Study Planning Grant Program

Letter of Intent due date: N/A Hyperlink: (PA-16-038) Type: R34 Application Due Date: Standard dates apply and Standard AIDS dates apply. Apply by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date. Applicants should be aware that on-time submission means that an application is submitted error free (of both Grants.gov and eRA Commons errors) on the application due date.

**Purpose:** The National Eye Institute (NEI) supports large-scale clinical vision research projects, including randomized clinical trials and epidemiologic studies. At the time of submission, applications requesting support for these activities are expected to provide detailed information regarding the study rationale, design, analytic techniques, protocols and procedures, facilities and environment, organizational structure, and collaborative arrangements. This information is best conveyed in a well-documented Manual of Procedures (MOP), the development of which represents a costly and time-consuming activity. This FOA is designed to facilitate activities central to the refinement of a study protocol and procedures and the development of a detailed MOP. The NEI Clinical Study Planning Grant may be used to support the development of a MOP, as well as to conduct preliminary studies to refine study procedures or document recruitment potential. This NEI FOA is applicable to both epidemiologic and clinical trial research studies.

**Budget:** The NEI permits direct costs up to \$150,000 per year. The scope of the proposed project should determine the project period. The maximum period is two years.

#### 7. Advancing Erythroid Cell Biology

Letter of Intent due date: N/A Hyperlink: (PA-16-039) Type: RO1 Application Due Date: Standard dates apply and Standard AIDS dates apply. Apply by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date. Applicants should be aware that on-time submission means that an application is submitted error free (of both Grants.gov and eRA Commons errors) on the application due date.

**Purpose:** This Funding Opportunity Announcement (FOA) encourages investigator-initiated applications that propose hypothesis-driven research using erythroid cells. The aim of this program is to support research efforts towards a complete description of the molecular and cellular components of erythropoiesis and how these components function to achieve normal erythropoiesis. Components include genes that are expressed (transcriptome) in erythroid cells, either during development or during differentiation, chemical changes to DNA and histone proteins (epigenome) and the proteins (proteome) that are translated in erythroid cells, including post-translational modifications or subcellular localizations that are unique to erythroid cells. A long range goal of this program is to generate a concise description of erythropoiesis that unifies genetics, molecular processes and cytokine determinants in the erythroid lineages so that new therapeutics may be developed to measure and combat anemia.

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

#### 8. Exploratory/Developmental Bioengineering Research Grants (EBRG)

Letter of Intent due date: N/A Hyperlink: (PA-16-040) Type: R21 Application Due Date: Standard dates apply and Standard AIDS dates apply. Apply by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date. Applicants should be aware that on-time submission means that an application is submitted error free (of both Grants.gov and eRA Commons errors) on the application due date.

**Purpose:** The purpose of this FOA is to encourage submission of Exploratory/Developmental Bioengineering Research Grants (EBRG) applications which establish the feasibility of technologies, techniques or methods that: 1) explore a new multidisciplinary approach to a biomedical challenge; 2) are high-risk but have high impact; and 3) develop data that may lead to significant future research. An EBRG application may propose hypothesis-driven, discovery-driven, developmental, or design-directed research and is appropriate for evaluating unproven approaches for which there is minimal or no preliminary data.

**Budget:** Direct costs are limited to \$275,000 over a two-year period, with no more than \$200,000 in direct costs allowed in any single year. The total project period may not exceed two years.

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

DP3 – Institutional Training and Director Program Projects -Type 1 Diabetes Targeted Research Award: To support research tackling major challenges in type 1 diabetes and promoting new approaches to these challenges by scientific teams.

P20 – Research Program Projects and Centers - Exploratory Grant: To support planning for new programs, expansion or modification of existing resources, and feasibility studies to explore various approaches to the development of interdisciplinary programs that offer potential solutions to problems of special significance to the mission of the NIH. These exploratory studies may lead to specialized or comprehensive centers.

**U01 – NIH Research Project Cooperative Agreement:** supports discrete, specified, circumscribed projects to be performed by investigator(s) in an area representing their specific interests and competencies; many types of cooperative agreements, e.g. Clinical Trials Centers; generally no budget upper limit but may be specified.

**U24 – Resource-Related Research Projects – Cooperative Agreements**: To support research projects contributing to improvement of the capability of resources to serve biomedical research.

**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).

R21/R33 - Phased Innovation: The R33 award is to provide a second phase for the support for innovative exploratory and development research activities initiated under the R21 mechanism. Although only R21 awardees are generally eligible to apply for R33 support, specific program initiatives may establish eligibility criteria under which applications could be accepted from applicants demonstrating progress equivalent to that expected under R33.

**Complete Glossary and acronym list of NIH Terms** 

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