

NIH funding opportunities



Faculty of Medicine and Health Sciences: Research Development and Support

10 Nov 2014

[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 <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.

1.Title: The Early Detection Research Network: Biomarker Developmental Laboratories

Letter of Intent due date: December 6, 2014 Hyperlink: (RFA-CA-14-014) Type: UO1

Application Due Date: January 6, 2015, by 5:00 PM local time of applicant organization.

Purpose: The purpose of this Funding Opportunity Announcement (FOA) is to solicit applications for Biomarker Developmental Laboratories (BDLs), one of the four scientific units of the Early Detection Research Network (EDRN). The EDRN is a national infrastructure funded to discover, develop, and validate biomarkers for risk assessment, detection, and molecular diagnosis and prognosis of early cancer. The proposed BDLs will be responsible for the discovery, development, characterization, and testing of new, or the refinement of existing, biomarkers and biomarker assays for risk assessment, detection, and molecular diagnosis and prognosis of early cancer. The other three scientific units of the continuing EDRN program are: the Biomarker Reference Laboratories (BRLs), which will serve as Network resources for clinical and laboratory validation of biomarkers; the Clinical Validation Centers (CVCs), which will conduct clinical research on the validation of biomarkers and will serve as resource centers for the EDRN by participating in collaborative biomarker validation studies with EDRN BDLs and BRLs; and the Data Management and Coordinating Center (DMCC), which will support statistical and computational analyses, informatics infrastructure, study design, coordination and support of EDRN-sponsored biomarker validation studies, and the coordination of Network-wide meetings and conferences.

Budget: A budget of up to \$400,000 per year (direct costs) may be requested. The indicated budget limit may be appropriate for larger projects involving multiple laboratories (and possibly multiple PD(s)/PI(s)). Smaller projects (e.g., involving one PD/PI and a single laboratory) are expected not to exceed \$250,000 per year (direct costs). **Budget Period:** Max 5 years

2.Title: BRAIN Initiative: Planning for Next Generation Human Brain Imaging

Letter of Intent due date: February 18, 2015 Hyperlink: (RFA-MH-15-200) Type: R24

Application Due Date: March 18, 2015, by 5:00 PM local time of applicant organization

Purpose: This funding opportunity announcement (FOA), in support of the NIH Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative, aims to support planning activities and the initial stages of development of entirely new or next generation brain imaging technologies and methods that will lead to transformative advances in our understanding of the human brain. **Budget:** Application budgets are limited to \$300,000 in direct costs in any project year, but need to reflect the actual needs of the proposed

project. Budget Period: Max 3 years

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

Letter of Intent due date: January 10, 2015 Hyperlink: (RFA-NS-15-003) Type: UO

Application Due Date: February 10, 2015, by 5:00 PM local time of applicant organization.

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 exception ally 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. Budget Period: Max 3 years



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

Letter of Intent due date: January 10, 2015 Hyperlink: (RFA-NS-15-004) Type:

Application Due Date: February 10, 2015, by 5:00 PM local time of applicant organization.

Purpose: Although invention and proof-of-concept testing of new technologies are key components 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. In this FOA we seek applications for thoptimization 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 signaling 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 apply expertise that integrates appropriate domains of expertise, including where appropriate biological, chemical and physical sciences, engineering, computational modeling and statistical analysis.

Budget: Application budgets are not limited but need to reflect the actual needs of the proposed project. Budget Period: Max 3 years

5.Title: BRAIN Initiative: Integrated Approaches to Understanding Circuit Function in the Nervous System

Letter of Intent due date: January 10, 2015 Hyperlink: (RFA-NS-15-005) Type: UO1

Application Due Date: February 10, 2015, by 5:00 PM local time of applicant organization.

Purpose: The purpose of this FOA is to promote the integration of experimental, analytic, and theoretical capabilities for large-scale analysis of neural systems and circuits. This FOA seeks applications for exploratory research studies that use new and emerging methods for large scale recording and manipulation of neural circuits across multiple brain regions. Applications should propose to elucidate the contributions of dynamic circuit activity to a specific behavioral or neural system. Studies should incorporate rich information on cell-types, on circuit functionality and connectivity, and should be performed in conjunction with sophisticated analysis of complex, ethologically relevant behaviors. Applications should propose teams of investigators that seek to cross boundaries of interdisciplinary collaboration by bridging fields and linking theory and data analysis to experimental design. Exploratory studies supported by this FOA are intended to develop experimental capabilities and quantitative, theoretical frameworks in preparation for a future competition for large scale awards.

Budget: Application budgets are not limited but need to reflect the actual needs of the proposed project. Budget Period: Max 3 years

6.Title: Promoting Research in Basic Neuroscience

Letter of Intent due date: N/A Hyperlink: (PAS-15-029) Type: RO1

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

Purpose: The goal of this Funding Opportunity Announcement (FOA) is to stimulate research addressing fundamental questions in basic neuroscience. Proposed projects can address any area of neuroscience within the missions of the participating institutes and should focus on understanding the structure and/or function of the normal nervous system. While fundamental basic research often generates insights relevant to disorders of the nervous system, this FOA is not intended to stimulate research that is explicitly disease-related.

Budget: Application budgets are not limited but need to reflect the actual needs of the proposed project. Budget Period: Max 5 years

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

R01 – NIH Research Project Grant: 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).

R24 – Resource-Related Research Projects: To support research projects that will enhance the capability of resources to serve biomedical research.

R03 – **NIH Small Research Grant:** To provide research support specifically limited in time and amount for studies in categorical program areas. Small grants provide flexibility for initiating studies which are generally for preliminary short-term projects and are non-renewable.

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.

R34 - Clinical Trial Planning Grant Program: To provide support for the initial development of a clinical trial, including the establishment of the research team; the development of tools for data management and oversight of the research; the development of a trial design and other essential elements of the study, such as the protocol, recruitment strategies, and procedure manuals; and to collect feasibility data.

D43 - **International Research Training Grants:** To support research training programs for US and foreign professionals and students to strengthen global health research and international research collaboration.

DP1 - NIH Director's Pioneer Award: To support individuals who have the potential to make extraordinary contributions to medical research. The NIH Director's Pioneer Award is not renewable.

Glossary of selected acronyms:

FOA Funding Opportunity Announcement

PA Program Announcements (click on "PA" to search for further funding opportunities)

RFA Request for Applications (click on "RFA" to search for further funding opportunities)

Complete Glossary and acronym list of NIH Terms

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