NIH funding opportunities

Faculty of Medicine and Health Sciences: Research Development and Support 28 Aug 2017 (#31)

[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

- **National Institutes of Health Policy Supporting the Next Generation Researchers Initiative (NOT-OD-17-101) .** This policy supersedes previous notices on new and early stage investigators.

1. BRAIN Initiative: Tools to Facilitate High-Throughput Microconnectivity Analysis

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (RFA-MH-18-505) **Type:** ***R01***
Application Due Date: December 7, 2017 and November 13, 2018. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: The purpose of this Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative is to encourage applications that will develop and validate tools and resources to facilitate the detailed analysis of brain microconnectivity. Novel and augmented techniques are sought that will ultimately be broadly accessible to the neuroscience community for the interrogation of microconnectivity in healthy and diseased brains of model organisms and humans. Development of technologies that will significantly drive down the cost of connectomics would enable routine mapping of the microconnectivity on the same individuals that have been analyzed physiologically, or to compare normal and pathological tissues in substantial numbers of multiple individuals to assess variability. Advancements in both electron microscopy (EM) and super resolution light microscopic approaches are sought. Applications that propose to develop approaches that break through existing technical barriers to substantially improve current capabilities are highly encouraged. Proof-of-principle demonstrations and/or reference datasets enabling future development are welcome, as are improved approaches for automated segmentation and analysis strategies of neuronal structures in EM images.

Budget: Issuing IC and partner components intend to commit an estimated total of $4 million to fund 3-7 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.

2. Understanding and Modifying Temporal Dynamics of Coordinated Neural Activity

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (PAR-17-463) **Type:** ***R21***
Application Due Date: November 8. 2017 and then Standard dates & Standard AIDS dates Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: A rich body of evidence suggests that optimal cognitive, affective, and social processes are associated with highly coordinated neural activity. These findings suggest that oscillatory rhythms, their co-modulation across frequency bands, spike-phase correlations, spike population dynamics, and other patterns might be useful drivers of therapeutic development for treatment of cognitive, social, or affective symptoms in neuropsychiatric disorders. This funding opportunity supports projects that test whether modifying electrophysiological patterns during behavior can improve cognitive, affective, or social processing. Applications should use experimental designs that incorporate active manipulations to address at least one, and ideally more, of the following topics: (1) in animals or humans, determine which parameters of neural coordination, when manipulated in isolation, improve particular aspects of cognitive, affective, or social processing; (2) in animals or humans, determine how particular abnormalities at the genomic, molecular, or cellular levels affect the systems-level coordination of electrophysiological patterns during behavior; (3) determine whether in vivo, systems-level electrophysiological changes in behaving animals predict analogous electrophysiological and cognitive improvements in healthy persons or clinical populations; and (4) use biologically-realistic computational models that include systems-level aspects to understand the function and mechanisms by which oscillatory and other electrophysiological patterns unfold across the brain to impact cognitive, affective, or social processing. This FOA uses the R21 grant mechanism, encouraging shorter, higher-risk applications.

Budget: 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 project period is limited to 2 years.

3. Understanding and Modifying Temporal Dynamics of Coordinated Neural Activity

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (PAR-17-466) **Type:** ***R01***

Application Due Date: November 8. 2017 and then Standard dates & Standard AIDS dates Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: A rich body of evidence suggests that optimal cognitive, affective, and social processes are associated with highly coordinated neural activity. These findings suggest that oscillatory rhythms, their co-modulation across frequency bands, spike-phase correlations, spike population dynamics, and other patterns might be useful drivers of therapeutic development for treatment of cognitive, social, or affective symptoms in neuropsychiatric disorders. This funding opportunity supports projects that test whether modifying electrophysiological patterns during behavior can improve cognitive, affective, or social processing. Applications must use experimental designs that incorporate active manipulations to address at least one, and ideally more, of the following topics: (1) in animals or humans, determine which parameters of neural coordination, when manipulated in isolation, improve particular aspects of cognitive, affective, or social processing; (2) in animals or humans, determine how particular abnormalities at the genomic, molecular, or cellular levels affect the systems-level coordination of electrophysiological patterns during behavior; (3) determine whether in vivo, systems-level electrophysiological changes in behaving animals predict analogous electrophysiological and cognitive improvements in healthy persons or clinical populations; and (4) use biologically-realistic computational models that include systems-level aspects to understand the function and mechanisms by which oscillatory and other electrophysiological patterns unfold across the brain to impact cognitive, affective, or social processing.

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.

4. Reducing Stigma to Improve HIV/AIDS Prevention, Treatment and Care in Low and Middle- Income Countries

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (PAR-17-474) **Type:** ***R21***

Application Due Date: December 11, 2017. Apply by 5:00 PM local time of applicant organization.

Funding Opportunity Announcement: The purpose of this FOA is to stimulate research on interventions to reduce HIV/AIDS-associated stigma and its impact on the prevention and treatment of HIV/AIDS and on the quality of life of People Living with HIV/AIDS (PLWH). Specifically, this initiative will support research on a) novel stigma reduction interventions that link to increase in care-seeking behavior and/or decrease in transmission; b) reducing the impact of stigma on adolescent and/or youth health; c) strategies to cope with the complex burden of stigmatization due to HIV and one or more comorbidities/coinfections; d) reducing effects of stigma on and/or by family members or caregivers of PLWH; and e) innovative and improved stigma measurement in the context of implementation of an intervention. The overall goals are to understand how to reduce stigma as a factor in HIV transmission, to eliminate or mitigate the aspects of stigma that limit beneficial health outcomes for the infected and at-risk individuals and communities, and to initiate exploratory studies to determine the feasibility of stigma interventions related to HIV prevention, treatment and/or care in Low and Middle-Income Countries (LMICs).

Budget: Application budgets are limited to up to $125,000 per year in direct costs, but need to reflect the actual needs of the proposed project. Applicants may request a project period of up to two 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).