

NIH funding opportunities



Faculty of Medicine and Health Sciences: Research Development and Support 15 Mar 2017 (#10)

[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) Pre-Awards (Dr Christa de Vries cdevries@sun.ac.za) as soon as possible to inform of your intent to apply and then confirm at least 30 days before the submission date. The NIH grant is submitted institutionally. All final application documents MUST reach the RGMO seven (7) workdays before NIH application due date. The application will be submitted two (2) days before the application due date.

Important notices

- Notice of NIAIDs Interest in Biomedical Research in non-AIDS associated, Pulmonary Non-Tuberculous Mycobacterial (NTM) Infections (NOT-AI-17-016)
- Notice of Change in Key Dates in PAR-17-142 "International Research in Infectious Diseases, including AIDS (R01)" (NOT-AI-17-018)

1. Research Answers to NCI's Provocative Questions

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

Hyperlink: (RFA-CA-17-017) Type: *R01* (RFA-CA-17-018) *R21*

Application Due Date: June 28, 2017; October 30, 2017; June 28, 2018; October 30, 2018 by 5:00 PM local time of applicant organization.

This Funding Opportunity Announcement (FOA) support research projects designed to solve specific problems and paradoxes in cancer research identified by the National Cancer Institute (NCI) Provocative Questions initiative. These problems and paradoxes phrased as questions are not intended to represent the full range of NCI's priorities in cancer research. Rather, they are meant to challenge cancer researchers to think about and elucidate specific problems in key areas of cancer research that are deemed important but have not received sufficient attention. Some of these "Provocative Questions" (PQs) stem from intriguing but older, neglected observations that have never been adequately explored. Other PQs are built on more recent findings that are perplexing or paradoxical, revealing important gaps in current knowledge. Finally, some PQs reflect problems that traditionally have been thought to be intractable but that now may be open to investigations using new strategies and recent technical advances. The current issuance of the PQ Initiative includes an updated set of 12 PQs. Each research project proposed in response to this FOA must be focused on addressing one particular research problem defined by one specific PQ selected from the list. Projects proposed to address specific PQs may use strategies that incorporate ideas and approaches from multiple disciplines, as appropriate. Transdisciplinary projects are encouraged as long as they serve the scientific focus of the specific PQ chosen.

Budget: R01: The NCI intends to fund approximately 15-20 R01 awards per round, corresponding to a total set-aside of up to \$15 million for two rounds in fiscal year 2018, and an equivalent amount for FY2019. Future year amounts will depend on annual appropriations. Application budgets are not limited but need to reflect the actual needs of the proposed project. The total project period may not exceed 5 years. **R21:** The NCI intends to fund approximately 8-10 R21 awards per round, corresponding to a total of up to \$5 million for two rounds in fiscal year 2018, and an equivalent amount for FY2019. Future year amounts will depend on annual appropriations. 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. Application budgets should reflect the actual needs of the proposed project. The total project period may not exceed 2 years.

2. Advancing Exceptional Research on HIV/AIDS and Substance Abuse

Letter of Intent: 30 days prior to the application due date Hyperlink: (RFA-DA-18-002) Type: R01

Application Due Date: August 22, 2017; August 22, 2018; August 22, 2019 by 5:00 PM local time of applicant organization.

This Funding Opportunity Announcement (FOA) supports highly innovative RO1 applications on HIV/AIDS and drug abuse and complements the Avant-Garde Award Program for HIV/AIDS and Drug Use Research and the Avenir Award Program for Research on Substance Abuse and HIV/AIDS. The Avant-Garde award supports individuals who conduct high-risk, high-reward research and does not require a detailed research plan. The Avenir award is similar to the Avant-Garde award but focuses on support for early stage investigators. Applications submitted under this FOA are required to have a detailed research plan and preliminary data. This FOA focuses on innovative research projects that have the potential to open new areas of HIV/AIDS research and/or lead to new avenues for prevention and treatment of HIV/AIDS among substance abusers. The nexus with drug abuse should be clearly described. This FOA is open to both individual researchers and research teams and is not limited to any one area of research on HIV and substance use, but all studies must focus on NIH HIV/AIDS Research Priorities https://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-137.html

Budget: NIDA intends to commit \$3M in FY 2018, 2019, 2020 to fund 3-4 awards. Application budgets are not limited but need to reflect the actual needs of the proposed project. The scope proposed should determine the project period. The maximum project period is five years.

3. Neoantigen-Based Therapeutic Targeting of Head and Neck Cancers

Letter of Intent: 30 days prior to the application due date **Hyperlink:** (RFA-DE-18-004) **Type:** R01

Application Due Date: June 19, 2017 by 5:00 PM local time of applicant organization.

This Funding Opportunity Announcement (FOA) support basic and preclinical research aimed at developing novel immunotherapeutic targets for head and neck cancers (HNC), including salivary gland cancers. Research supported by this FOA will identify human HNC-specific neoantigens, and will test the utility of these neoantigens as targets for eliciting anti-tumor immune responses in affected patient populations.

Budget: NIDCR intends to fund an estimate of 4-5 awards, corresponding to a total of \$3.0 million, for fiscal year 2018. Future year amounts will depend on annual appropriations. Application budgets are limited to \$350,000 in direct costs and 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. Neuroskeletal Biology of the Dental and Craniofacial Skeletal System

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

Hyperlink: (RFA-DE-18-005) (RFA-DE-18-006) R21

Application Due Date: September 28, 2017 (Aids date November 25, 2017) by 5:00 PM local time of applicant organization.

This Funding Opportunity Announcement (FOA) encourage research on the role of the nervous system in metabolism, homeostasis, remodeling and/or regeneration of the postnatal dental and craniofacial skeletal system (DCS) in health and disease. The objectives are to enhance basic science knowledge about interactions between the peripheral and central nervous systems (PNS/CNS) and the DCS, and facilitate development of strategies to optimize normal function, reduce the impact of disease, and develop capacity to repair and regenerate injured teeth and craniofacial bones.

Budget: R01: NIDCR intends to commit \$2 Million in FY 2018 to fund 4-5 awards. Application budgets are limited to \$250,000 direct costs in any single year. The scope of the proposed project should determine the project period. The maximum project period is 5 years. **R21:** NIDCR intends to commit \$1 Million 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 total project period may not exceed 2 years.

5. Innovations in HIV Testing, Adherence, and Retention to Optimize HIV Care Continuum Outcomes

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

Hyperlink: (PA-17-182) (PA-17-181)

(PA-17-181) R21

Application Due Date: <u>Standard AIDS dates</u> apply by 5:00 PM local time of applicant organization.

This Funding Opportunity Announcement (FOA) The health and preventive benefits of treatment for HIV/AIDS, regardless of CD4 count, are now unequivocal. In the United States and globally, ambitious goals have been targeted for HIV testing, adherence, and retention in care, to optimize HIV clinical outcomes and preventive benefit. Additional tools are needed to inform the gaps and strategies that are unique to particular populations, cities, regions, and countries. Applications appropriate for this FOA could include formative basic behavioral and social science to better understand a step in the care continuum and/or multiple steps in the HIV care continuum, and initial development and pilot tests of innovative approaches for intervention. PA-17-182 uses the R01 grant mechanism while this PA-17-181 uses the R21 mechanism. High risk/high payoff projects that lack preliminary data or utilize existing data may be most appropriate for the R21 mechanism, while applicants with preliminary data and/or including longitudinal analysis may wish to apply using the R01 mechanism.

Budget: 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. **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. The maximum project period is 2 years.

6. Targeted Implementation Science to Achieve 90/90/90 Goals for HIV/AIDS Prevention and Treatment

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

Hyperlink: (PA-17-194) (PA-17-195) R21

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

This Funding Opportunity Announcement (FOA) encourages implementation research projects designed in partnership with global and domestic service providers, to target the particular needs in the selected community, to achieve the 90/90/90 HIV prevention and treatment targets identified by HIV/AIDS global leadership. The targets for HIV testing are that 90% of all persons living with HIV know their status, for treatment initiation that 90% of those diagnosed receive timely and effective antiretroviral treatment (ART), and for optimal treatment and preventive benefit that 90% of those on treatment achieve sustained viral suppression. PA-17-194 uses the R01 grant mechanism while PA-17-195 uses the R21 mechanism. High risk/high payoff projects that lack preliminary data or utilize existing data may be most appropriate for the R21 mechanism, while applicants with preliminary data and/or include longitudinal analysis may wish to apply using the R01 mechanism.

Budget: 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. **R21:** The combined budget for direct costs for the two-year project may not exceed \$275,000. No more than \$200,000 may be requested in any single year. The total project period may not exceed 2 years.

7. From Genomic Association to Causation: A Convergent Neuroscience Approach for Integrating Levels of Analysis to Delineate Brain Function in Neuropsychiatry

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

Hyperlink: (PAR-17-176) (PAR-17-179) (PAR-17-179) (U01

Application Due Date: May 1, 2017 and then Standard dates apply by 5:00 PM local time of applicant organization.

This Funding Opportunity Announcement (FOA) The primary objective of this FOA is to stimulate innovative Convergent Neuroscience (CN) approaches to establish causal and/or probabilistic linkages across contiguous levels of analysis (e.g., gene, molecule, cell, circuit, system, behavior) in an explanatory model of psychopathology. In particular, applicants should focus on how specific constituent biological processes at one level of analysis contribute to quantifiable properties at other levels, either directly or as emergent phenomena. Although not required, it is preferable that applications link at least three levels of analysis and include an emphasis on genetics. The projects under this FOA will develop novel methods, theories, and approaches through a CN team framework, bringing together highly synergistic inter/transdisciplinary teams from neuroscience and "orthogonal" fields (e.g., data/computational science, physics, engineering, mathematics, and environmental sciences). Successful teams will combine, expand upon, or develop conceptual frameworks and theoretical approaches, and build explanatory computational models that connect contiguous levels of analysis. Such frameworks, theories, and computational explanatory models should be validated through experimental approaches to elucidate biological underpinnings of complex behavioral (including cognitive and affective) outcomes in psychopathology. Additionally, a goal of this program is to advance research in CN by creating a shared community framework of resources which may be used by the broader research community to further research, as such, successful team will have robust plan for sharing data and other resources. This FOA should be used when two or more collaborating sites are essential to complete the proposed research. It is required that the Research Strategy be identical across linked collaborative U01 applications, with the exception of a short section describing the specific function of each application under "elements unique to that site." For a linked set of collaborative U01 applications, each application must have its own Program Director/Principal Investigator (PD/PI) and the program must provide a mechanism for cross-site coordination. Applications that stand alone and are not collaborative should come in under the companion U01 FOA (PAR-17-179). All awards supported under this FOA and the companion U01 FOA (PAR-17-179) will be governed by the Convergent Neuroscience Network for Psychiatry (CNN-Psych) Steering Committee

Budget: Application budgets may not exceed \$2,500,000 direct cost annually for all applications combined in a collaborative set and are expected to reflect actual needs of the proposed project. The maximum project period is 5 years.

8. NIDCD Research Grants for Translating Basic Research into Clinical Tools

Letter of Intent: 30 days prior to the application due date Hyperlink: (PAR-17-184) Type: R01

R21

Application Due Date: October 18, 2017; June 19, 2018; February 20, 2019; October 18, 2019; June 18, 2020 apply by 5:00 PM local time of applicant organization.

This Funding Opportunity Announcement (FOA) provide an avenue for basic scientists, clinicians and clinical scientists to jointly initiate and conduct translational research projects which translate basic research findings into clinical tools for better human health. The scope of this FOA includes a range of activities to encourage translation of basic research findings which will impact the diagnosis, treatment and prevention of communication disorders. Connection to the clinical condition must be clearly established and the outcomes of the grant must have practical clinical impact.

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 period is 5 years.

9. Translational Research in Pediatric and Obstetric Pharmacology and Therapeutics

Letter of Intent: 30 days prior to the application due date Hyperlink: (PAR-17-189) (PAR-17-187) R21

(PAR-17-188) R03

Application Due Date: August 7, 2017; November 7, 2017; April 4, 2018; August 7, 2018; November 7, 2018; April 4, 2019; August 7, 2019; November 7, 2019; April 3, 2020, apply by 5:00 PM local time of applicant organization.

This Funding Opportunity Announcement (FOA) encourage applications for translational and clinical research as well as clinical trials that will advance our knowledge about the underlying mechanisms of drug action, response, and safety in children at various developmental stages, and in women during pregnancy and lactation. The overall goals of the FOA are to improve the safety and effectiveness of current drugs for pediatric or obstetric patients, and to enhance the development of new drugs or a safer usage of the existing drugs for tailored therapies to meet emerging clinical needs for these special populations.

Budget: 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. **R21:** The combined budget for direct costs for the two-year project may not exceed \$275,000. No more than \$200,000 may be requested in any single year. The total project period may not exceed 2 years. **R03:** Application budgets are limited to \$50,000 in direct costs per year. The scope of the proposed project should determine the project period. The maximum project period is two years.

10. Alcohol-PTSD Comorbidity: Preclinical Studies of Models and Mechanisms

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

Hyperlink: (RFA-AA-17-016)

Type: R01

Application Due Date: May 17, 2017 apply by 5:00 PM local time of applicant organization.

This Funding Opportunity Announcement (FOA) issued by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), and with possible collaboration with Cohen Veterans Bioscience, encourages Research Project Grant (R01) applications that will further the development, validation and/or application of animal models for mechanistic studies on the comorbidity of PTSD and alcohol use disorders.

Budget: NIAAA intends to commit \$2 million in FY 2017 to fund 8 awards. Awards issued under this FOA are contingent upon the availability of funds and the submission of a sufficient number of meritorious applications. Application budgets are limited to \$250,000 total costs per year. The total project period for an application submitted in response to this FOA may not exceed five years.

11. NIDA Avant-Garde Award Program for HIV/AIDS and Drug Use Research

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

Hyperlink: (RFA-DA-18-001)

Type: DP1

Application Due Date: July 31, 2017, July 31, 2018, July 31, 2019, apply by 5:00 PM local time of applicant organization.

This Funding Opportunity Announcement (FOA) The NIDA Avant-Garde Award Program for HIV/AIDS Research supports individual scientists of exceptional creativity who propose high-impact research that will open new areas of HIV/AIDS research relevant to drug abuse and/or lead to new avenues for prevention and treatment of HIV/AIDS among drug abusers. The term "avant-garde" is used to describe highly innovative approaches that have the potential to be transformative. The proposed research should reflect approaches and ideas that are substantially different from those already being pursued by the investigator or others and should support the NIH HIV/AIDS Research Priorities https://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-137.html. The NIDA Avant-Garde award supports innovative, basic research that may lead to improved preventive interventions or therapies; creative, new strategies to prevent disease transmission; novel approaches to improve disease outcomes; and creative approaches to eradicating HIV or improving the lives of those living with HIV.

Budget: NIDA intends to commit \$2M in each fiscal year (FY18-FY20) to fund 2-3 awards each year. Application budgets are limited to \$500,000 in direct costs per year. The maximum period is 5 years.

12. NIDA Translational Avant-Garde Award for Development of Medication to Treat Substance Use Disorders

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

Hyperlink: (RFA-DA-18-003)

Type: UG3/UH3

Application Due Date: July 25 2017; July 25, 2018; July 25, 2019 apply by 5:00 PM local time of applicant organization.

This Funding Opportunity Announcement (FOA) The purpose of this award is to support outstanding basic and/or clinical researchers with the vision and expertise to translate research discoveries into medications for the treatment of Substance Use Disorders (SUDs) stemming from tobacco, cannabis, cocaine, methamphetamine, heroin, or prescription opiate use. Eligible applicants must demonstrate the ability to develop molecules with the potential to treat SUDs and advance them in the drug development continuum. The ultimate goal of this FOA is to bring molecules closer to FDA approval. The UG3/UH3 Phased Innovation Awards Cooperative Agreement involves 2 phases. The UG3 will support a project with specific milestones to be accomplished at the end of the 2-year period. The UH3 will provide funding for 3 years to a project that successfully completed the milestones set in the UG3. UG3 projects that have met their milestones will be administratively considered by NIDA and prioritized for transition to the UH3 phase. Investigators responding to this FOA must address both UG3 and UH3 phases. Through this FOA, NIDA seeks to attract exceptionally talented investigators to the mission of expanding the number and breadth of lead molecules in the pipeline for drug addiction treatment, optimizing these leads, and/or advancing them to clinical testing.

Budget: NIH intends to commit \$2,000,000 in FY17 to fund up to 2 awards. Application budgets are limited to \$1,000,000 direct costs per year and need to reflect the actual needs of the proposed project. The project period is limited to 2 years for the UG3 phase and 3 years for the UH3 phase.

13. Marijuana, Prescription Opioid, or Prescription Benzodiazepine Drug Use Among Older Adults

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

Hyperlink: (PA-17-196) (PA-17-197) R21
(PA-17-198) R03

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

This Funding Opportunity Announcement (FOA) Despite significant scientific advancements made in substance use disorder research over the last century, the causes and consequences of drug use in later life remain poorly understood. The intent of this funding opportunity announcement is to support innovative research that examines aspects of marijuana and prescription opioid and benzodiazepine use in adults aged 50 and older. This FOA encourages research that examines the determinants of these types of drug use and/or characterizes the resulting neurobiological alterations, associated behaviors, and public health consequences. This initiative will focus on two distinct populations of older adults: individuals with earlier onset of drug use who are now entering this stage of adult development or individuals who initiate drug use after the age of 50. Applications are encouraged to utilize broad methodologies ranging from basic science, clinical, and epidemiological approaches. The insights gleaned from this initiative are critical to our understanding of the determinants of drug use in later life, as well as its consequences in the aging brain and on behavior. This knowledge may have the potential to identify risk factors and to guide clinical practices in older populations.

Budget: 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. **R21:** The combined budget for direct costs for the two-year project may not exceed \$275,000. No more than \$200,000 may be requested in any single year. The total project period may not exceed 2 years. R03: Application budgets are limited to \$50,000 in direct costs per year. The total project period may not exceed two years.

14. Hearing Health Care for Adults: Improving Access and Affordability

Letter of Intent: 30 days prior to the application due date Hyperlink: (PA-17-202) Type: R01

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

This Funding Opportunity Announcement (FOA) encourages applications for research on hearing health care in adults in support of improving access and affordability. Further research is needed to strengthen the evidence base with a goal of delivering better hearing health care outcomes in adults.

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.

15. Nutrition and Alcohol-Related Health Outcomes

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

Hyperlink: (PA-17-211)

Type: R01

(PA-17-213) **R21** (PA-17-212) **R03**

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

This Funding Opportunity Announcement (FOA) encourages applications that propose to examine associations between nutrition and alcohol-related health outcomes in humans and animal models. The goal of this program announcement is to stimulate a broad range of research on the role of nutrition in the development, prevention, and treatment of a variety of alcohol-related health outcomes including alcohol use disorder and chronic disease.

Budget: 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. **R21:** The combined budget for direct costs for the two-year project may not exceed \$275,000. No more than \$200,000 may be requested in any single year. The total project period may not exceed 2 years. **R03:** Application budgets are limited to \$50,000 in direct costs per year. The scope of the proposed project should determine the project period. The maximum project period is two years.

16. Inter-organelle Communication in Cancer

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

Hyperlink: (PAR-17-203)

(CAR- 47-203)

Type: R01

(PAR-17-204) **R21**

Application Due Date: August 16, 2017; January 17, 2018; August 15, 2018; January 16, 2019; August 14, 2019; January 15, 2020, apply by 5:00 PM local time of applicant organization.

This Funding Opportunity Announcement (FOA) support research projects that examine how inter-organelle communication in cancer cells and/or tumor-associated cells affects cellular function, adaptation, and phenotypic plasticity

Budget: **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. **R21**: The combined budget for direct costs for the two-year project may not exceed \$275,000. No more than \$200,000 may be requested in any single year. The total project period may not exceed 2 years.

17. Alliance of Glycobiologists for Cancer Research: Translational Tumor Glycomics Laboratories

Letter of Intent: 30 days prior to the application due date Hyperlink: (PAR-17-206) Type: U01

Application Due Date: June 8 2017; February 7, 2018; June 8, 2018; February 7, 2019 apply by 5:00 PM local time of applicant organization.

This Funding Opportunity Announcement (FOA) continue support for the program referred to as the "Alliance of Glycobiologists for Cancer Research" (http://glycomics.cancer.gov). Through this FOA, the NCI encourages research projects to elucidate how changes in cellular carbohydrates may promote cancer initiation and progression and use this information to identify glycan-based abnormalities to serve as biomarkers for early cancer detection or risk assessment. These changes may be studied at the level of glycoproteins, glycolipids, glycosaminoglycans, and/or their binding proteins. In their applications, applicants are encouraged to address the ability of these biomarker candidates to accurately distinguish individuals with cancer from those without. It is expected that the most promising biomarker candidates will ultimately be tested in clinical validation studies, although such validation studies are not required for the proposed projects. All investigators with appropriate expertise and capabilities, irrespective of any prior association with this Alliance, are encouraged to consider applying to this FOA.

Budget: Application budgets are expected to differ, reflecting the actual needs of the proposed projects. It is anticipated and encouraged, however, that most requests be up to a maximum of \$500,000 direct costs per year commensurate with the scope and complexity of the proposed projects. The total project period may not exceed 5 years.



18. Alliance of Glycobiologists for Cancer Research: Biological Tumor Glycomics Laboratories

Letter of Intent: 30 days prior to the application due date Hyperlink: (PAR-17-207) Type: U01

Application Due Date: June 8, 2017; February 7, 2018; June 8, 2018; February 7, 2019 apply by 5:00 PM local time of applicant organization.

This Funding Opportunity Announcement (FOA) support research applications that are focused on mechanisms that mediate alterations in glycosylation during oncogenesis. The goal of this FOA is to advance our knowledge of altered glycosylation or other modifications in carbohydrate structure in cancer to determine whether it is the cause or the result of neoplastic transformation. Because the research is intended to examine the biology of how modifications in carbohydrate structure influence malignancy during different stages of the disease, this FOA will support research teams that have complementary expertise in glycobiology and cancer biology to focus on mechanisms that mediate alterations in glycosylation during oncogenesis.

Budget: Application budgets are expected to differ, reflecting the actual needs of the proposed projects. It is anticipated and encouraged, however that most requests be up to a maximum of \$500,000 direct costs per year commensurate with the scope and complexity of the proposed projects. The total project period may not exceed 5 years.

19. NCCIH Mind and Body Clinical Trial Cooperative Agreement

Letter of Intent: 30 days prior to the application due date Hyperlink: (PAR-17-215) Type: U01

Application Due Date: June 2, 2017; October 3, 2017; February 2, 2018; June 1, 2018; October 3, 2018; February 1, 2019; May 31, 2019; October 3, 2019; and January 31, 2020 apply by 5:00 PM local time of applicant organization. **Aids application due dates**: June 30, 2017; October 31, 2017; March 2, 2018; June 29, 2018; October 31, 2018; March 1, 2019; June 28, 2019; October 31, 2019; and February 28, 2020;

This Funding Opportunity Announcement (FOA) invites cooperative agreement applications for investigator-initiated clinical trials of mind and body interventions in NCCIH-designated areas of high research priority. Applications submitted under this FOA are expected to propose a clinical trial to develop and test adaptive interventions; optimize the intervention by evaluating which element of a complex intervention are critical for changes in outcome; assessing whether the intervention can be delivered with fidelity across sites in preparation for a future multisite trial; or collect additional preliminary data such as determining the duration or frequency of the intervention to be used in a future multisite trial. It is important, therefore, to already have sufficient preliminary data that includes: demonstration of feasibility of recruitment and accrual of participants; demonstration of participant adherence to the intervention as well as retention of participants throughout the study; completion of final data collection from any related studies; and evidence that the intervention has promise of clinical benefit. This FOA is not intended to support multi-site efficacy or effectiveness trials, nor will it support trials to test mind and body interventions for the treatment or prevention of cancer. Applicants are encouraged to contact the appropriate NCCIH Scientific/Research contact for the area of science for which they are planning to develop an application prior to submitting to this FOA.

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.

Brief definitions of some NIH grant mechanisms: <u>comprehensive list of extramural grant and cooperative agreement activity codes</u>

D71 - International Research Training Planning Grant: To plan for the preparation of an application for a D43 international research training grant or for a U2R international research training cooperative agreement.

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.

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).

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.

R25 – NIH Education Projects: used in a wide variety of ways to promote an appreciation for and interest in biomedical research, provide additional training in specific areas, and/or to develop ways to disseminate scientific discovery into public health and community applications.

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.

R35 - Outstanding Investigator Award: To provide long term support to an experienced investigator with an outstanding record of research productivity. This support is intended to encourage investigators to embark on long-term projects of unusual potential.

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

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.

U19 - Research Program-Cooperative Agreements: supports a research program of multiple projects directed toward a specific major objective, basic theme or program goal, requiring a broadly based, multidisciplinary and often long-term approach. A cooperative agreement research program generally involves the organized efforts of large groups, members of which are conducting research projects designed to elucidate the various aspects of a specific objective.