

Faculty of Medicine and Health Sciences: Research Development and Support 16 Mar 2020 (#12)

## [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> or <u>www.sun.ac.za/RDSfunding</u> (current & archive).

Confirm your intent to apply ASAP, but not later than **60 days** before the submission date. Tygerberg Campus: <u>cdevries@sun.ac.za</u> • Stellenbosch Campus <u>lizelk@sun.ac.za</u>

# **Important Notice**

- <u>NOT-AG-20-017</u> Notice of Special Interest: Digital Technology for Early Detection of Alzheimer's Disease and Related Dementias. The goal of this NOSI is to facilitate research on the use of digital signals and data as 'biomarkers' that may flag or signal early changes within individuals at risk of AD/ADRD before cognitive symptoms are evidenced by current cognitive assessment and/or brain imaging biomarkers. This notice applies to due dates on or after July 9, 2020 and subsequent receipt dates through November 13, 2021
- <u>NOT-CA-20-031</u> Notice of Special Interest (NOSI): Advancing Head and Neck Cancer Early Detection Research (AHEAD). National Cancer Institute (NCI) is encouraging the submission of applications that advance early detection of head and neck cancer (HNC) to apply genomics, molecular signatures, and epidemiology in clinical studies for distinguishing benign from malignant lesions. This initiative encourages discovery and development of molecular markers to combine with currently available HNC detection methods to increase sensitivity and specificity. This notice applies to due dates on or after June 5, 2020, and subsequent receipt dates through January 8, 2022.

1. Engineering Immunity to HIV-1 Through Next Generation Vaccines (Clinical Trial Not Allowed)		
Letter of Intent: 30 days prior to the application due date	Hyperlink: <u>RFA-AI-20-015</u>	Type: R61/R33
Application Due Date: July, 28, 2020. Apply by 5:00 PM local time of applicant organization.		
<b>Funding Opportunity Announcement</b> : The purpose of this Funding Opportunity Announcement (FOA) is to pair Bioengineers and		

Immunologists to leverage emerging innovative knowledge in physical and computational sciences for the design and development of an HIV-1 vaccine. The objective of this FOA is to support small multi-disciplinary teams that include a product development translational partner. This will foster the application of novel and practical bioengineering solutions to solve challenging and persistent problems in the production of a safe and effective preventive HIV-1 vaccine. Potential research areas for the improvement of HIV-1 vaccine effectiveness may include enhancing the magnitude, quality, and durability of the immune responses.

**Budget**: NIAID intends to commit \$5,000,000 in FY 2021 to fund 4-5 awards. Application budgets are not limited but need to reflect the actual needs of the proposed project. The total project period for an application submitted in response to this FOA cannot exceed five years. Applicants may request up to three years of support for the R61 phase, and up to two years of support for the R33 phase.

## 2. Partnerships for Countermeasures against Select Pathogens (Clinical Trials Not Allowed)

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

Hyperlink: <u>RFA-AI-20-028</u>

Type: R01

Application Due Date: Apply by 5:00 PM local time of applicant organization. Funding Opportunity Announcement: June 29, 2020. The purpose of this Funding Opportunity Announcement (FOA) is to solicit research applications for milestone-driven projects focused on preclinical development of lead candidate therapeutics, vaccines and related countermeasures against select NIAID Emerging Infectious Diseases/Pathogens. Applications must include a Product Development Strategy attachment and demonstrate substantive investment by at least one industrial participant. Each project supported by this FOA must focus on a previously-identified, well-characterized lead candidate (or lead candidate series) that targets one or more pathogen(s) from either of the following select pathogen categories: Antimicrobial-Resistant Bacteria/Fungi or Emerging Viral Pathogens

Vaccines: Multivalent/Universal Vaccines, Vaccines Against Antimicrobial-Resistant Bacteria/Fungi, Vaccines Against Select Emerging Viruses.

**Budget:** NIAID intends to commit \$10.5 million in FY2021 to fund 10-15 awards. Recommended budget for direct costs of up to \$750,000 per year may be requested. Applicants may also request up to an additional \$300,000 in the first year of the award for major equipment to ensure that research objectives can be met and biohazards can be contained, totaling \$1,050,000 direct costs for Year 1 only. The scope of the proposed project should determine the project period. The maximum project period is 5 years.

## 3. Research Projects to Enhance Applicability of Mammalian Models for Translational Research (Clinical Trial Not Allowed)

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

Application Due Date: <u>Standard dates</u> Apply by 5:00 PM local time of applicant organization. Funding Opportunity Announcement: The purpose of this Funding Opportunity Announcement (FOA) is to invite applications for projects to expand, improve, or transform the utility of mammalian cancer and tumor models for translational research. With this FOA, the NCI intends to encourage submission of projects devoted to demonstrating that mammalian models or their derivatives used for translational research are robust representations of human biology, are appropriate to test questions of clinical importance, and provide reliable information for patients' benefit. These practical goals contrast with the goals of many mechanistic, NCI-supported R01 projects that use mammals, or develop and use mammalian cancer models, transplantation tumor models, or models derived from mammalian or human tissues or cells for hypothesis-testing, non-clinical research. Among many other possible endeavors, applicants in response to this FOA could propose demonstrations of how to overcome translational deficiencies of mammalian oncology models, define new uses of mammalian models or their genetics for unexplored translational challenges, advance standard practices for use of translational models, test approaches to validate and credential models, or challenge current practices for how models are used translationally. Budget: Application budgets are limited to \$450,000 direct costs per year. The scope of the proposed project should determine the project period. The maximum project period is 5 years.

Hyperlink: PAR-20-131

Type: R01

#### 4. Core Infrastructure Support for Cancer Epidemiology Cohorts (Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due dateHyperlink: PAR-20-136Type: U01Application Due Date: April 7, 2020; November 9, 2020; April 9, 2021; November 9, 2021; April 7, 2022; November 9, 2022 Apply by 5:00 PMIocal time of applicant organization.

**Funding Opportunity Announcement**: Through this Funding Opportunity Announcement (FOA), the National Cancer Institute (NCI) encourages grant applications for support of the core functions of Cancer Epidemiology Cohorts (CECs), as well as methodological research. This FOA is intended to support the maintenance of existing CECs infrastructure and resource sharing with broader scientific communities. **Budget**: The direct costs for any year may not exceed \$500,000. The maximum project period is 5 years.

# 5. In-Depth Phenotyping and Research Using IMPC-Generated Knockout Mouse Strains Exhibiting Embryonic or Perinatal Lethality or Subviability (Clinical Trial Not Allowed)

Letter of Intent: 30 days prior to the application due dateHyperlink: PAR-20-137Type: R01Application Due Date: June 5, 2020 (new) and July 5, 2020 (renewal, resubmission, revision); October 5, 2020 (new) and November 5, 2020 (renewal, resubmission, revision); October 5, 2021 (new) and Sovember 5, 2021 (new) and July 5, 2021 (renewal, resubmission, revision); October 5, 2021 (new) and<br/>November 5, 2021 (renewal, resubmission, revision); June 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2021 (new) and<br/>November 5, 2022 (renewal, resubmission, revision); June 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revision); October 5, 2022 (new) and July 5, 2022 (renewal, resubmission, revisi

Phenotyping Consortium (IMPC) of which the NIH Knockout Mouse Phenotyping Program (KOMP2) is a member. The mission of IMPC is to generate a comprehensive catalogue of mammalian gene function that will provide the foundation for functional analyses of human genetic variation. As of November 2019, the IMPC-KOMP2 KO mouse phenotyping effort has generated mutants in 9,051 mouse genes, completed phenotypes of 7153 lines, and released data for 6255 lines corresponding to 5861 mutant genes. Overall, the IMPC hopes to achieve broad-based phenotyping of roughly 20,000 KO strains. About 30% of these strains either are expected to be embryonic or perinatal lethal, or subviable. A large portion of homozygous lethal mutations are expected to have viable heterozygous phenotypes. The scientific community has the unique opportunity to leverage these mouse strains while they are being created and bred as part of the IMPC adult mouse phenotyping effort to perform additional in-depth phenotyping and research.

**Budget:** Budgets with direct costs of up to \$499,999 per year may be requested. The scope of the proposed project should determine the project period. The maximum project period is 5 years.

#### 6. Investigator Initiated Extended Clinical Trial (Clinical Trial Required)

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

Hyperlink: PAR-20-139

Type: R01

Application Due Date: May 13, 2020; September 13, 2020; January 13, 2021; May 13, 2021; September 13, 2021; January 13, 2022; May 13, 2022; September 13, 2022; January 13, 2023. Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement**: This Funding Opportunity Announcement (FOA) invites applications for implementation of investigator-initiated clinical trials requiring an extended project period of 6 or 7 years. The trials can be any phase, must be hypothes isdriven, and related to the research mission of one of the participating ICs. Consultation with IC staff is strongly encouraged prior to the submission of the clinical trial implementation application. This FOA is not intended for support of clinical trials that do not require an extended project period of 6 or 7 years.

**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 of 6 or 7 years.

#### 7. Defining Lineage Plasticity and Endogenous Regeneration Capacity of Dental, Oral, and Craniofacial Tissues (Clinical Trial Not Allowed)

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

Hyperlink: <u>RFA-DE-20-006</u> Type: R01

Application Due Date: July 8, 2020 and aids date July 31, 2020. Apply by 5:00 PM local time of applicant organization.

**Funding Opportunity Announcement**: The purpose of this Funding Opportunity Announcement (FOA) is to encourage studies that will interrogate the capacity of cells residing in the postnatal Dental, Oral, and Craniofacial tissues to acquire developmental plasticity to undergo lineage reprogramming in vivo in response to injury and other types of environmental stress, and to generate function allycompetent cells of alternative lineage(s). The end goal of this initiative is to develop approaches for capitalizing on this developmental plasticity for obtaining needed cells to promote endogenous regeneration of Dental, Oral, and Craniofacial tissues affected by disease or injury for achieving the goals of regenerative medicine. This Initiative will build a basic science foundation for developing clinically relevant, minimally invasive strategies for overcoming limitations of the currently available regenerative medicine methodologies. **Budget**: NIDCR intends to commit \$3M total costs in FY 2021 to fund 5-8 awards solicited from RFA-DE-20-006 and RFA-DE-20-007. 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.

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