

NIH funding opportunities



Faculty of Medicine and Health Sciences: Research Development and Support

24 Aug 2020 (#38)

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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 or www.sun.ac.za/RDSfunding (current & archive).

Confirm your intent to apply ASAP, but not later than 60 days before the submission date.

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Upcoming Deadlines

- Mobile Health: Technology and Outcomes in LMICs 24 September 2020; AIDS deadline 3 December 2020
- Emerging Global Leader Award 4 November 2020
- Global Brain Disorders Research 6 November 2020
- Reducing Stigma to Improve HIV/AIDS Prevention, Treatment and Care in LMICs 12 November 2020
- Chronic, Noncommunicable Diseases and Disorders Research Training (NCD-Lifespan) D43 13 November 2020
- Ecology and Evolution of Infectious Diseases Initiative (EEID) 18 November 2020

Parent Announcements

Parent Announcements (PA) for unsolicited are broad funding opportunity announcements allowing applicants to submit investigator-initiated applications. They are open for up to 3 years and use standard due dates.

- PA-20-185 NIH Research Project Grant (Parent R01 Clinical Trial Not Allowed)
- PA-20-184 Research Project Grant (Parent R01 Basic Experimental Studies with Humans Required)
- PA-20-183 Research Project Grant (Parent R01 Clinical Trial Required)
- PA-20-200 NIH Small Research Grant Program (Parent R03 Clinical Trial Not Allowed)
- PA-20-195 NIH Exploratory/Developmental Research Grant Program (Parent R21 Clinical Trial Not Allowed)
- PA-20-194 NIH Exploratory/Developmental Research Grant Program (Parent R21 Clinical Trial Required)
- <u>PA-20-196</u> NIH Exploratory/Developmental Research Grant Program (Parent R21 Basic Experimental Studies with Humans Required)

Notices of Special Interest

NOT-AA-20-019: Notice of Special Interest: Alcohol and Aging. The purpose of this Notice of Special Interest (NOSI) is to promote research to improve our understanding of the effects of alcohol consumption on aging across different levels of biological organization including the molecular, cellular, tissue, organ, organism, and societal levels. The following broad research areas will be encouraged: 1) Basic and clinical research defining the effects of alcohol consumption on lifespan, health span, and age-related diseases depending on level of alcohol consumption, drinking pattern, and duration of drinking; 2) Research to inform evidence-based guidance for identifying risk for alcohol use disorder (AUD) among older adults as well as prevention, diagnosis, and treatment of AUD in this population; and 3) Research to extend the health span of older adults who drink and decrease the health care burden of age-related diseases associated with alcohol use. This notice applies to due dates on or after October 5, 2020 and subsequent receipt dates through September 8, 2023.

The Notice will support, but is not limited to the following research areas/topics:

Basic biological mechanisms, metabolism, and health effects

- Determine how alcohol consumption affects the pillars of aging: macromolecular damage, epigenetics, inflammation, adaptation to stress, protein homeostasis (proteostasis), stem cell regeneration, and metabolism.
- Identify and model mechanisms through which alcohol contributes to infectious and non-infectious diseases and frailty in older adults.
- Study alcohol-associated cardiac aging and its consequences: all-cause mortality, high blood pressure, congestive heart failure, arrythmias and vascular dysfunction.
- Determine the effects of sex as a biological variable on the alcohol-aging axis.
- Examine alcohol-induced changes in the microbiome and its metabolites in aging and age-related disease.
- Explore the relationship between alcohol consumption and cancer in older adults.
- Utilize aging biomarkers such as telomere attrition, and the "epigenetic clock" to measure the various outcomes of alcohol on aging.
- Determine alcohol's roles in cellular senescence and the contribution of senescence cells to Alcohol Use Disorders (AUD) and Alcohol Related Organ Diseases (AROD).

Neuroscience

- Identify neurobiological mechanisms contributing to the influence of alcohol on healthy and pathologic brain aging across the spectrum of alcohol drinking patterns and doses.
- Examine how alcohol modulates neuroimmune interactions and neuroinflammation associated with healthy and pathologic aging.
- Explore how alcohol disrupts peripheral and central nervous system interactions and neurovascular function, which contributes to cognitive decline associated with aging.
- Determine how alcohol consumption alters cognitive and behavioural changes associated with aging, dysregulates sleep, and impacts pain in aging populations.
- Study how prenatal or adolescent alcohol exposure affects the aging process and susceptibility of aging pathologies.

Epidemiology, Prevention and Treatment

- Develop screening vehicles, prevention, behavioural and pharmaceutical therapies targeted for older adults.
- Investigate increased sensitivity to the effects of alcohol on balance, attention and driving that could contribute to falls, car crashes, and other unintentional injuries among older adults.
- Examine the polypharmacy-alcohol interactions in older adults with emphasis on emerging legal and illicit drugs.
- Identify vulnerabilities of high-risk groups among older adults including those with comorbidities, women, and those with racial, ethnic, socioeconomic, immigrant, sex/gender minority status.
- Develop and evaluate innovative approaches to effectively communicate health effects of alcohol consumption to older adults to reduce alcohol-related adverse consequences.

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