



Call for Applications: 2018-2019 Awards Supported by the San Antonio Nathan Shock Center

The San Antonio Nathan Shock Center is soliciting applications to support the research of any investigator who is developing a new project in the basic biology of aging.

Applications are accepted from investigators at any US academic institution.

Junior investigators are encouraged to apply. We can consider applications from any investigator who is eligible to receive NIH grants according to the rules of their home institution.

The projects should utilize one or more Cores of the Center. Projects that propose creative uses of more than one Core are encouraged. Center Cores and their capabilities are listed below and at <http://nathanshock.barshop.uthscsa.edu>

- **Aging Animal Models and Longevity Assessment Core.** Core Leader: Jim Nelson, Ph.D.; Core Co-Leader: Adam Salmon, Ph.D. This Core plays a crucial role in helping investigators establish whether aging has been altered in their animal models. The Core maintains and monitors aging colonies of new and established rodent models, determines longevity, and distributes these animals to investigators for basic research on aging. The core also supports projects using other animal models, including common marmosets, to investigate cellular and molecular mechanisms that modulate the rate of aging.
- **Bioanalytical Pharmacology and Drug Evaluation Core.** Core Leader: Martin Javors, Ph.D.; Core Co-Leader: Alfred Fisher, M.D., Ph.D. This Core seeks to facilitate the application of new and existing drugs to aging and age-related disease studies by investigators in San Antonio and nationwide. The core promotes this objective by offering (1) bioanalytical assays and pharmacologic expertise to optimize the form, dosage, and dosing frequency of drugs, and (2) lifespan and healthspan studies using *C. elegans* to conduct initial testing of new drugs or perform studies intended to test the *in vivo* actions of drugs.
- **Healthspan and Functional Assessment Core.** Core Leader: Nicolas Musi, M.D.; Core Co-Leader: Veronica Galvan, Ph.D.; Core Co-Leader: Elizabeth Fernandez, Ph.D. This Core supports the overall mission of the San Antonio Nathan Shock Center to enable research that aims to expand our understanding of mechanisms of aging and of age-associated disease. The Core will provide intellectual and instrumental/technical services to the scientific community on the selection and performance of functional assays in rodents that aim to increase our knowledge about mechanisms that control age-related changes in function at the tissue, organ, and whole body levels, in the context of normal aging and in relation to age-related diseases. We provide expertise and assistance to investigators with

an interest in aging-related questions in the design and execution, as well as data analysis and interpretation on experimental measures.

- **Pathology Core.** Core Leader: Yuji Ikeno, M.D., Ph.D.; Core Co-Leader: Gene Hubbard, D.V.M., M.S. Age-related pathology increases exponentially with advancing age and is largely responsible for age-related morbidity as well as mortality. This Core provides pathological information to investigators with insight into the potential biological/molecular mechanisms of the intervention under study.

Applications must include:

- One-page hypothesis and specific aims of your project. This can be very brief, sufficient for the reader to understand the importance of what is being proposed. Specifics such as numbers of animals, etc., are not initially needed because this will be determined in conjunction with the Core Leaders if the proposal is selected for further consideration. Please indicate which Cores of the Center will be needed for your studies. It is strongly suggested that you contact the Core Leaders (see above) in advance of submitting your proposal. If you have consulted with one or more Core Leaders during the development of your proposal, please so state in your application.
- Your NIH Biosketch and the Biosketches of any proposed collaborators.
- A budget is not initially required. If your proposal is selected for further consideration, a budget will be developed based on a power analysis of the number of samples, animals, etc., that will be needed for the successful development of your project.

Awards will be made for the next budget year (July 1 2018 to June 30 2019). Funds will be allocated for **Core services**. Only under very unusual circumstances and careful justification will we consider awarding funds directly to the PI's lab.

Applications are due **April 1, 2018**

Send applications to: Peter J. Hornsby, Ph.D., Research Development Core Leader, San Antonio Nathan Shock Center (hornsby@uthscsa.edu).