Birmingham Medical News

Published: February 13, 2018



**Steven Austad, PhD**

UAB Department of Biology chair Steven Austad, PhD received a five-year, $1.5 million grant from the National Institutes of Health to study the differences in males and females that may indicate length and quality of life in mice, which in turn will improve human health.

The grant funds research that will develop a standardized measurement and associated recovery metrics that predict the healthspan impact of assumed health-extending interventions when administered in early to mid-life in mice.

Investigators will use the grant to develop a panel of quick, inexpensive tests that can be administered to mice in early to mid-life that predict whether an intervention will extend its healthspan, which could be beneficial in clinical trials. One major limitation of aging research is the time it takes to perform a lifespan study.

"In order to speed progress in the field of aging research, it would be invaluable to develop the planned panel of tests," Austad said. "To help us evaluate whether our test panel is working, we will use sex differences observed in successful mouse longevity interventions to validate how well our resilience panel predicts extended healthspan."

Three interventions will be used, including dietary restriction, which has proven benefits in both sexes; rapamycin, known to be beneficial in expanding life more for females than males; and 17-á-estradiol, which exhibits longetivity benefits in males only.