



THE UNIVERSITY OF ARIZONA
COLLEGE OF MEDICINE TUCSON

Physiology

Seminars in Translational & Advanced Research (STAR)

Friday, October 9
Arizona Health Sciences Center
Room 8403
11:00am - 12:00pm

<https://arizona.zoom.us/j/85062222452>



Sara Burke, PhD

*Professor and Department Head,
Neuroscience, University of
Arizona*

Host: Paulo Pires

"Neurobiological and Metabolic Mechanisms of Age-Related Cognitive Decline"

The goal of the Burke laboratory is to determine how aging, metabolism, and genetic risk alter the neural circuits that support cognition and to identify strategies for promoting resilience. Since establishing her independent research program at the University of Florida in 2013, Dr. Sara Burke has focused on systems-level mechanisms of cognitive aging, particularly interactions among the hippocampus, prefrontal cortex, and perirhinal cortex. Her research incorporates multidisciplinary approaches, including behavioral neuroscience, in vivo electrophysiology, molecular and metabolic analyses, neuroimaging, and cross-species models.

Her work has examined age-related impairments in mnemonic discrimination and associative learning, changes in hippocampal-cortical coordination, and the effects of ketogenic diets, time-restricted feeding, and APOE genotype on brain metabolism and cognition. Dr. Burke is now Professor and Head of the Department of Neuroscience at the University of Arizona. She founded and directed the University of Florida Summer Neuroscience Internship Program and contributes extensively to NIH peer review, including service on the Cognitive Disorders of Brain Aging study section and multiple NIH and NIA special-emphasis panels.