

Center for Transformative Research in Metabolism (TRiM)
Community Advisory Panel Public Talk and Discussion
“Secrets of Hibernators: Preventing Muscle Loss in Humans”

Tuesday, July 8, 2025 | 5:30 to 6:30 p.m.
Location: 1000 University Ave., Room 158
(aka “Old University Park School”)

Abstract: Older adults are increasing rapidly. Many individuals face age-related chronic conditions such as muscle atrophy and frailty. These conditions significantly raise the risk of needing costly long-term care, with the median cost for nursing home care in Alaska exceeding \$400,000 annually, the highest in the nation.

Join Dr. Sarah Rice as she shares her research that investigates the mechanisms arctic hibernators use to maintain muscle health during their long, inactive winter months. This innovative research shows promise for developing new strategies to prevent muscle loss, potentially transforming long-term care, combating frailty, and improving the quality of life for bedridden patients in Alaska and beyond.

Dr. Sarah Rice

Assistant Professor of Biology
University of Alaska Fairbanks

Dr. Sarah Rice is an Assistant Professor for the Department of Biology and Wildlife at UAF and a TRiM Research Pilot Project leader. Her research focuses on identifying the biochemical and molecular mechanisms that underlie metabolic and molecular regulation and nutrient recycling in hibernating mammals, allowing for adaptations of resilience to muscle atrophy. Dr. Rice began her postdoctoral training at the Center for Translational Research in Aging and Longevity, Texas A&M and completed her training at UAF, Institute of Arctic Biology, Center for TRiM. She received her PhD from UAF’s Department of Biochemistry and Neuroscience.

