# **SEMINAR SERIES**

Supported by The Department of Biomechanics and The Center for Research in Human Movement Variability (MOVCENTR)



## THE ROLE OF EXERCISE IN AMELIORATING NEUROCOGNITIVE DECLINE ASSOCIATED WITH NORMAL AGING AND CHRONIC DISEASE

Featuring Dr. Diane Ehlers University of Nebraska Medical Center

September 11, 2020 | 12:00 - 1:00 pm

Zoom Link: https://unomaha.zoom.us/j/96305482724

### **ABOUT DR. EHLERS**

Dr. Ehlers is an Assistant Professor in the Department of Neurological Sciences. She earned her Ph.D. in Exercise Science from Arizona State University, where she studied psychosocial determinants and outcomes of physical activity in middle-aged women. She completed her postdoctoral training at the University of Illinois at Urbana-Champaign, where she focused on the effects of aerobic exercise training on cognition and brain integrity in healthy older adults and breast cancer survivors. Her current research includes investigations of physical activity's influence on cognition and brain health in cancer survivors. She is specifically interested in establishing the efficacy of exercise for ameliorating cancer-related cognitive impairments, in testing various patterns and doses of physical activity across cancer care, and in identifying the mechanisms by which exercise elicits cognitive and neural benefits in cancer populations.

#### **PRESENTATION ABSTRACT**

Cognition and brain health are increasingly recognized as important factors of successful aging. The trajectory of normal cognitive aging across the lifespan is well-documented, and increasing evidence suggests chronic disease may lead to accelerated cognitive aging. A large body of evidence supports aerobic exercise training for ameliorating age-related deteriorations in cognition and brain health. Applying this body of literature to chronic diseases, such as cancer, obesity, and diabetes, recent studies suggest exercise may similarly benefit disease-related cognitive decline. In this presentation, I will review seminal work in exercise and cognition in older adults, my work in this area, and my recent work applying aging evidence to investigate the effects of physical activity and exercise on cognitive function in cancer survivors. I will also discuss gaps in these literatures and highlight critical areas of future research.

#### more info at cobre.unomaha.edu

\*This seminar was supported by the National Institutes of General Medical Sciences of the National Institutes of Health under Award Number P20GM109090 Center for Research in Human Movement Variability. | The University of Nebraska at Omaha shall not discriminate based upon age, race, ethnicity, color, national origin, gender-identity, sex, pregnancy, disability, sexual orientation, genetic information, veteran's status, marital status, religion, or political affiliation.



