## SEMINAR SERIES

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## How Do We Balance, and What is the Following Approach?

Featuring Dr. Felipe Yamaguchi University of Nebraska at Omaha

Friday, Jan. 27 | 12:00 - 1:15 pm | BRB 167

## PRESENTATION ABSTRACT

Postural control depends on the fusion of multiple sensory modalities (vision, vestibular, and proprioceptive) to accurately estimate body dynamics. There is developed a paradigm (i.e., 3-modality) that can assess how the nervous system changes the emphasis (i.e., reweights) of different modalities due to changing environmental conditions or neurological injury to help us understand the potential mechanism underlying such postural control. However, the 3-modalities protocol is done during a quiet standing upright position. How can we approach it differently since we are constantly moving?

## **ABOUT DR. YAMAGUCHI**

Dr. Felipe Yamaguchi, a Brazilian, Physical Therapist, Certified Osteopath, former professional swimmer, and father, joined the Department of Biomechanics as an Associate Researcher in August 2022. He received his Ph.D. in Biomechanics and Movement Science from the University of Delaware. As part of the Movement Analysis Core (MOVAN) team, he is responsible for providing resources, education, advisement, and services related to the analysis of human movement. His research focuses on how we use our balance system during walking and standing. He has experience implementing and developing biomechanics analysis using a virtual reality environment.

