

SEMINAR SERIES

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



Weird Walks, Mobile Measurements, and Adaptable Ankles

Featuring Dr. Peter Adamczyk
University of Wisconsin - Madison



Friday, March 10 | 12:00 - 1:15 pm | BRB 167

PRESENTATION ABSTRACT

Human locomotion is a highly dynamic activity demanding coordination across many parts of the body. Typical movement patterns are often considered optimal in certain ways, such as for minimum energy consumption or favorable stability; yet these patterns differ across individuals and can be altered by age, injury, or behavior. This presentation will interweave several areas of ongoing research in locomotion biomechanics and motor control, such as: why and how upper body movement can affect the ankles; wearable technology and methods to measure and alter biomechanics in the “real world”; and biomechatronic prosthetic ankles to improve stability and balance.

ABOUT DR. ADAMCZYK

Dr. Peter Adamczyk earned degrees in Mechanical Engineering from Case Western Reserve University (B.S.) and the University of Michigan (M.S. and Ph.D) in the areas of Robotics and Biomechanics. He spent several years running a startup company dedicated to advancing the science and technology of lower-limb prosthetics and real-world motion assessment. He is now the Mead Witter Foundation Associate Professor in Mechanical Engineering at the University of Wisconsin–Madison where he directs the Biomechatronics, Assistive Devices, Gait Engineering and Rehabilitation Laboratory. Dr. Adamczyk’s research aims to enhance physical and functional recovery from impairments affecting walking, running, and standing. Core foci include basic research on locomotion biomechanics; design of semi-active foot prostheses for gait restoration after amputation; wearable sensors for movement assessment during real-life activities; and rehabilitation robotics to explore motor learning and neural adaptation in the lower limb.

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.

UNIVERSITY OF
Nebraska
Omaha

