EXAMINING MOVEMENT MECHANICS AND STABILITY; AN ESSENTIAL COMPONENT TO DEVELOPING EFFECTIVE REHABILITATION PROGRAMS FOR PERSONS WITH MULTIPLE SCLEROSIS.

Featuring Dr. Bradley Bowser
South Dakota State University

April 21, 2017 | 12:00 - 1:00 pm | HPER 112
Parking Available in Lot T

ABSTRACT

Multiple sclerosis (MS) is a neurodegenerative disease with a broad array of symptoms that include, muscle weakness, fatigue, and impaired balance. As these symptoms worsen, disability increases and quality of life decreases. The first step in reversing this trend is a thorough examination of the differences in movement mechanics between persons with MS and healthy non-MS controls. Traditionally, MS researchers have focused their attention on differences in movement times. However, only reporting differences on the length of time to perform functional movements does not provide sufficient detail on the underlying movement mechanics associated with these differences.

For this presentation, we will discuss the movement mechanics of the sit-to-stand, stand-to-sit, step down, and the 3m timed up and go. We will also examine the effect of exercise programs on these movement mechanics.

ABOUT DR. BOWSER

Dr. Brad Bowser joined the Health and Nutritional Sciences Department at South Dakota State University in Fall 2011. He is an Assistant Professor and the Director of the Biomechanics Laboratory. Following his completion of a PhD in Biomechanics at the University of Georgia (2009), Dr. Bowser spent 2 years as a Post-doctoral Fellow at the University of Delaware Running Injury Research Lab. His professional area of interest is lower extremity biomechanics as it relates to clinical populations. The overall purpose of his research is to enhance quality of life by improving functional performance and increasing physical activity in clinical populations including childhood obesity and Multiple Sclerosis.