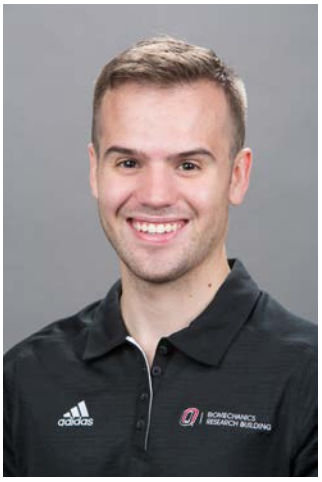
SEMINAR SERIES

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

DOCTORAL STUDENT PRESENTATION:
NIH F31 AND AHA PRE-DOCTORAL FELLOWSHIP

Featuring Mr. Jeffrey Patterson and Mr. Zachary Motz

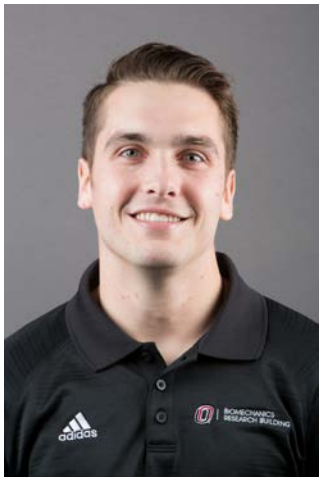
University of Nebraska at Omaha



February 8, 2019

12:00 - 1:15 pm | H&K112

Parking Available in Lot T



JEFFREY PATTERSON

Mr. Patterson will discuss his NIH F31 grant project, including how they are trying to measure and quantify the connection between the Achilles tendon and plantar fascia using ultrasound, and then investigate how that connection is affecting foot and ankle biomechanics across the age span by using inclined walking as a mechanism to target this structure-function relationship. Mr. Patterson will also be discussing the process of applying for the F31 grant including what sort of things to expect while writing the grant, what he needed to do and what he needed other people (sponsors, co-sponsors, collaborators, BRB administrators, etc.) to do for him, how it was initially rejected and the process of rewriting it, and what has changed now that he has received it.

ZACHARY MOTZ

Mr. Motz will discuss his AHA project that pertains to stroke. Stroke is the leading cause of disability among adults, and can lead to major physical deficits including: impaired gait, muscle weakness, and balance problems. Current therapeutic techniques often fail to meaningfully improve mobility thus increasing the likelihood of subsequent morbidity. This could be because of two reasons first, conventional stroke assessments for gait often do not consider inter-limb gait-coordination deficits which are very important for coordination tasks like walking. Second, current measures of inter-limb gait-coordination deficits after stroke do not include an assessment of how such deficits evolve over time, i.e., the temporal structure of inter-limb coordination. It is also not clear how the temporal structure of inter-limb coordination deficits is related to clinical measures. Mr. Motz will also answer questions pertaining to the process of applying for the AHA pre-doctoral fellowship.

more info at **cobre.unomaha.edu**

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University of Nebraska Omaha