## SEMINAR SERIES

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



## UNO BIG IDEA: BIOMECHANICAL REHABILITATION AND MANUFACTURING INITIATIVE

Featuring Dr. Jordan Borrell University of Nebraska at Omaha

April 9th, 2021 | 12:00 - 1:00 pm

Zoom Link: https://unomaha.zoom.us/j/96568695994

## **ABOUT DR. BORRELL**

Dr. Jordan Borrell is a Research Associate in the Department of Biomechanics at the University of Nebraska at Omaha. He directs the functional near-infrared spectroscopy (fNIRS) research in the Additive Manufacturing Laboratory under the guidance of Dr. Jorge Zuniga. Prior to arriving at UNO, he received his M.S. and Ph.D. degrees in Bioengineering from the University of Kansas. His dissertation work incorporated acute and chronic neuromodulatory techniques in a preclinical model of spinal cord injury under the supervision of Dr. Randy Nudo in the Cortical Plasticity Laboratory at the University of Kansas Medical Center. He received his B.A. in Physics from Hastings College.

## **ABSTRACT**

The mission of the Biomechanical Rehabilitation and Manufacturing Initiative (BRMI) is to improve the quality of life of medically underserved populations through the offering of comprehensive rehabilitation services and the creation of low-cost medical devices for our local, national, and international communities. This Big Idea proposes a rehabilitation research initiative that pairs the research performed at UNO with clinical expertise in injury prevention and rehabilitation throughout Omaha to bolster UNO's academic excellence and community engagement. The BMRI also provides an ideal platform to expose students from diverse majors to hands-on research and entrepreneurship type of activities for the implementation of rehabilitation services and the development of new low-cost biomedical devices and related biotechnologies

