SEMINAR SERIES

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



INNOVATIVE APPROACHES FOR EVALUATION AND DEVICE-BASED TREATMENT OF GAIT DISORDERS IN CHILDREN WITH CEREBRAL PALSY

Featuring Dr. Thomas Bulea
National Institutes of Health Clinical Center

January 11, 2019
12:00 - 1:15 pm | H&K112
Parking Available in Lot T

ABOUT DR. BULEA

Dr. Thomas C. Bulea is a Staff Scientist in the Functional & Applied Biomechanics Section of the Rehabilitation Medicine Department at the National Institutes of Health Clinical Center, Bethesda, MD. He received his Ph.D. in biomedical engineering from Case Western Reserve University and completed a post-doctoral fellowship at the National Institutes of Health and a visiting post-doctoral fellowship at the University of Houston. Dr. Bulea's research focuses on integration of neural interfacing and functional neuroimaging with rehabilitation robotics to develop new therapeutic tools and interventions for treatment of movement disorders and paralysis.

LEARNING OBJECTIVES

- Review the use of motion capture, electromyography (EMG), and mobile neuroimaging to characterize walking function and pathology in individuals with cerebral palsy.
- Identify key design considerations for development of wearable robotics exoskeletons in neurorehabilitation applications.
- Discuss recent results of a pilot clinical study utilizing a powered exoskeleton to improve crouch gait in children with cerebral palsy.

The presenter Thomas Bulea, PhD has no financial conflict of interest to disclose. Members of the planning committee, Nick Stergiou, Ph.D., Jeffrey Kaipust, M.S., Angela Collins, M.A., Laura Rotert, B.S., and Jackie Farley, CPP have no financial conflict of interest to disclose.

ACCREDITATION STATEMENT The University of Nebraska Medical Center, Center for Continuing Education is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

CREDIT STATEMENT The University of Nebraska Medical Center, Center for Continuing Education designates this live activity for a maximum of 1.25 *AMA PRA Category 1 Credits*TM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

