The Neuromechanics of Rehabilitation for Lower Limb Loss Symposium 2018

Monday, June 11, 2018
8:30 a.m. - 4:00 p.m.

Baldwin Auditorium
Robert H. Lurie Medical Research Center
303 East Superior
Chicago, IL 60611

NUPOC TEL: 312.503.5700
www.nupoc.northwestern.edu
THE NEUROMECHANICS OF REHABILITATION FOR LOWER LIMB LOSS SYMPOSIUM 2018

CONTINENTAL BREAKFAST
8:30 - 9:00 a.m.

PRESENTATIONS

9:00-9:10 a.m.  Matthew J. Major, PhD
Assistant Professor, Physical Medicine & Rehabilitation
Northwestern University, Chicago, IL
Welcome, symposium overview, aims, and introductions

9:10-9:35 a.m.  Elliott Rouse, PhD
Assistant Professor, Department of Mechanical Engineering
University of Michigan, Ann Arbor, MI
The Role of Mechanical Impedance in Human Neuromotor Control and Wearable Robotic Systems

9:35-10:00 a.m.  Andrew Sawers, CPO, PhD
Assistant Professor, Department of Kinesiology
University of Illinois, Chicago, IL
Falls among Lower Limb Prosthesis Users: Refocusing through an Epidemiological Lens

MORNING REFRESHER
10:00 a.m. - 10:10 a.m.

10:10-10:35 a.m.  Matthew Major, PhD
Assistant Professor, Physical Medicine & Rehabilitation
Northwestern University, Chicago, IL
How a priori Knowledge of a Perturbation Impacts Proactive and Reactive Locomotor Strategies of Below-Knee Prosthesis Users

10:35-11:00 a.m.  Noah Rosenblatt, PhD
Assistant Professor, Podiatric Surgery & Applied Biomechanics
Rosalind Franklin University, North Chicago, IL
The Effects of Fear of Falling on Balance and Gait: Lessons from Intact Adults and Implications for Prosthetic Design and Rehabilitation
11:00-11:25 a.m.  Nicholas Fey, PhD
Assistant Professor, Mechanical Engineering; Joint–Bio-
engineering
University of Texas-Dallas, Dallas, TX
   Techniques to Assess the Neuromechanical Response of Individuals with Above-Knee Amputation during Steady and Non-Steady-State Locomotor Tasks

11:25 a.m.-12:10 p.m.  Hiroaki Hobara, PhD
Senior Researcher, National Institute of Advanced Indus-
trial Science and Technology
Tokyo & Tsukuba, Japan
   Active Amputees: Biomechanics of Running-Specific Prostheses

12:10-12:30 p.m.  Koki Kawano
International Program Representative, JSPS Office
Washington, D.C.
   JSPS Information Session

LUNCHEON
Baldwin Auditorium Foyer
12:30 noon - 13:30 p.m.

13:30-14:30 p.m.  Drs. Hobara, Rouse, Major, Fey, Sawers and Rosenblatt
   Panel Discussion

14:30-15:00 p.m.  Dr. Major and Dr. Garrick
   Closing Remarks

AFTERNOON REFRESHER
15:00 - 16:00 p.m.

NETWORKING OPPORTUNITY
16:30-18:00 p.m.
Symposium registrants are invited to gather for an unhosted, post-symposium mixer. Dinner and drinks are at your own expense. All are welcome!

D4 Irish Pub
345 E Ohio Street
Chicago, IL 60611
(312) 624-8385
ACKNOWLEDGEMENTS

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The views and opinions expressed in the symposium presentations, posters and discussions are those of the authors and do not necessarily reflect the position or policy of any of the supporting institutions.

Photographs were taken with the permission of the symposium participants.

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R. J. Garrick, PhD

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