SEMINAR SERIES

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

DECEPTION, EXO-NETS, SMUSHWARE, AND ORGANIC DATA: NEW FRONTIERS IN NEURO-REHABILITATION

Featuring Dr. James Patton

University of Illinois at Chicago/The Shirley Ryan AbilityLab

April 12, 2019 | 12:00 - 1:15 pm | H&K112

Parking Available in Lot T

ABOUT DR. PATTON

James L. Patton received BS degrees in mechanical engineering and engineering science from the University of Michigan in 1989, MS degree in theoretical mechanics from Michigan State, in 1993, and the PhD degree in biomedical engineering from Northwestern University in 1998. He is Professor of Bioengineering at University of Illinois at Chicago, and a senior research scientist at the Shirley Ryan AbilityLab. He worked in automotive manufacturing and in nuclear medicine before discovering the control of human movement. His general interests involve robotic teaching, dynamic balance control, haptics, modeling of the human-machine interface, and robot-facilitated recovery from a brain injury. Patton is vice president of IEEE-EMB society, and editor in chief of the Proceedings of the Engineering in Medicine and Biology.

LEARNING OBJECTIVES

Making use of visual display technology and human-robotic interfaces, many researchers have illustrated various opportunities to distort visual and physical realities. Judicial application of these leads to training situations that enhance the learning process and can restore movement ability after neural injury. I will trace out clinical studies that have employed such technologies to improve the health and function, as well as share some leading-edge insights that include deceiving the patient, moving the "smarts" of software into the hardware, and examining clinical effectiveness.

The presenter James Patton, PhD has disclosed his financial interest with HDT Robotics and Barrett Technologies. Members of the planning committee, Nick Stergiou, Ph.D., Jeffrey Kaipust, M.S., Angela Collins, M.A., Laura Campbell, 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.

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