Engineering Neuroscience & Health

Department of Biomedical Engineering Division of Biokinesiology and Physical Therapy

ENH SEMINAR SERIES

Presents:

Jacob J. Bloomberg

NASA Johnson Space Center
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Monday

April 02, 2012

4:00 p.m.

Pizza will be served: 3:30— 4 pm

"Improving Astronaut Functional Mobility after Spaceflight using Sensorimotor Adaptability Training"

Jacob J. Bloomberg Ph.D.
NASA Johnson Space Center, Houston Texas
http://www.nasa.gov/centers/johnson/slsd/about/divisions/hacd/laboratories/neurosciences_motion.html

Exposure to the microgravity conditions of spaceflight induces adaptive central reinterpretation of sensory information. This microgravity adaptive state, however, is inappropriate for a gravitational environment so that astronauts must spend time readapting to Earth's gravity following their return from space. During this readaptation period they experience disturbances in spatial orientation, posture, gait, and gaze control. Current research in our laboratory is focused on understanding how exposure to spaceflight produces postflight disturbances in balance, gait control and functional mobility. We are also developing sensorimotor adaptability training programs designed to facilitate the rapid recovery of functional mobility after spaceflight to improve performance of astronauts after their return to Earth and during future planetary missions.

Locations: *Seminar is simultaneously presented*

UPC: HNB 100 — LIVE
Hedco Neurosciences Building
UPC Campus Map/Directions:
http://www.usc.edu/about/visit/upc/

HSC: CHP 147 – Video Conference
Center for the Health Professional
HSC Campus Map/Directions:
http://www.usc.edu/about/visit/hsc/

Organized by Professor Francisco Valero-Cuevas http://bbdl.usc.edu/ENH

Web Cast
http://capture.usc.edu/college/Catalog/pages/catalog.aspx?catalogId=946350f1-ca84-40e7-b867-e16adba01e4e

Information about all seminars can be found at
http://bbdl.usc.edu/ENH