University of Southern California

USC

Department of Biomedical Engineering Division of Biokinesiology and Physical Therapy

How Do We Discover Why Manual Dexterity Declines with Old Age?

Abstract

Ageing-related decline in hand function is ubiquitous and inexorable beginning at about age 60 years. This decline disproportionately impacts dexterous grasp and manipulation. Many potential explanations for this decline have been offered, but the causes remain poorly understood. This talk will focus on intriguing results from rare longitudinal studies and equally rare intervention studies, and on our recent observations which support the view that controlling the moments applied to grasped objects is a fundamental problem in old age. Determining which from among the many potential mechanisms that may underlie this putative problem is a challenge that leads us back to longitudinal and intervention designs, and away from cross-sectional designs and correlation.

Engineering Neuroscience & Health

Seminar Series

Presents:

Dr. Kelly Cole
Kelly-Cole@uiowa.edu

Monday
October 20, 2008
4:00 p.m.

Refreshments will be served 3– 4 p.m.

Locations:
Seminar is simultaneously presented

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

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

Bio sketch:

Kelly J. Cole, Ph.D. Associate Professor

Doctoral Degree: Speech Science (Emphasis in Neuroscience)
Institution: The University of Wisconsin-Madison (1984)

Specialization: Motor Control (Control of Human Movement)

Research Interests: We investigate the neural control of the human hand during health, old age, and disease/injury. Presently, we focus on the sensorimotor mechanisms that control the three-dimensional fingertip forces during skilled grasp and manipulation. The contributions of tactile information, vision, and memory to this control are of particular interest.

Web Cast
http://capture.usc.edu/college/Catalog/?cid=af180d48-ceff-42b9-a35c-eb199daed320

Information about all seminars can be found at
http://www-clmc.usc.edu/~heiko/ENH