Engineering Neuroscience & Health

Department of Biomedical Engineering Division of Biokinesiology and Physical Therapy

ENH SEMINAR SERIES

Presents:

Dr. David Kleinfeld

University of California, San Diego

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Monday

May 4, 2009

4:00 p.m.

Refreshments will be served 3—4 pm

"Object localization by a scanning sensorimotor system"

David Kleinfeld, Ph.D.
Professor - Department of Physics
David Kleinfeld Laboratory at UC San Diego

Sensory perception involves the dual challenge of encoding external stimuli and managing the influence of changes in body position that alter the sensory field. I will present data on the integration of sensory signals elicited by both external stimuli and motor activity as rats rhythmically sweep their vibrissa in search of a target. In particular, we find that rodents estimate position in a coordinate frame that is normalized to the trajectory of the motor output, as defined by phase in the whisk cycle, rather than angle of the vibrissa relative to the face. The underlying computation is discussed and modeled.

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://bme.usc.edu/valero/

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