Brain Mapping Center Special Seminar

Hosted By: JJ Danny Wang, Ph.D., *Neurology, UCLA*

"ANTs, Eigenanatomy and Neural Signature of Social Experience"

Brian B. Avants, Ph.D.

Assistant Professor, PENN Image Computing & Science Laboratory, Department of Radiology
University of Pennsylvania School of Medicine

Dr. Avants' work modules consist of: (1) developing robust, standardized software for computing high-dimensional statistics in medical imaging spaces; (2) using these methods to uncover multivariate relationships between the brain and other factors such as the (social) environment or the presence of neuropathology. In this talk, Dr. Avants will describe the genesis of Advanced Normalization Tools (ANTs), touch on a variety of ANT-based applications and preview its newest incarnation, ANTsR (which is ANTs & Eigenanatomy with **R** as a statistical backend). He will highlight the importance of general but customizable toolkits like ANTs, which seek to standardize processing for large and diverse datasets, by showing how this core may be used in different organs, species and across human populations. Time permitting, Dr. Avants will also discuss recent studies that suggest (1) socioeconomic status (SES) has cortical and functional signatures in childhood; (2) within an economically homogeneous, low-SES population, variation in early experience may be encoded in brain structure. Discussion of these preliminary results will be encouraged.

Wednesday, July 17, 2013

11:00am – 12:00pm

Brain Mapping Center Conference Room (221)

For more information contact: Ludmila Budilo (lbudilo@ucla.edu, 310-825-2699)