



CCNS Transition Workshop
May 4-6, 2016
SCHEDULE

Wednesday, May 4th

SAMSI Room 150

8:15	Shuttle
8:45– 9:00	Opening Remarks by SAMSI Associate Director: Thomas Witelski Neuromechanics
9:00 –9:30	Laura Miller , UNC and Katie Newhall , UNC <i>Modeling the Muscular Response to Motor Neuron Spike-Trains</i>
9:30-10:00	Tirthabir Biswas , Loyola <i>A New Template for Walking</i>
10:00-10:30	Alexander Hoover , Tulane <i>Neuromuscular Control of Jellyfish Turning</i>
10:30– 11:00	Break
	Big Data Integration, Part 1
11:00–11:30	Hernando Ombao , UC Irvine <i>The Future Outlook in EEG Analysis</i>
11:30-11:45	Discussion
11:45–1:15	Lunch
	Big Data Integration, Part 2
1:15-1:45	Xi Luo , Brown <i>Estimating Brain Pathway Effects Using Large-scale Multilevel Models</i>
1:45–2:15	Qunqun Yu , UNC <i>Joint and Individual Variation Explained (JIVE) Integration of HCP Data</i>
2:15-2:45	Amanda Mejia , Johns Hopkins <i>PCA Leverage: Outlier Detection for High-Dimensional fMRI Data</i>
2:45-3:00	Discussion
3:00-3:30	Break
	Optical Imaging
3:30-4:30	Mark Reimers , Michigan State <i>Issues in Data Analysis for Optical Imaging</i>
4:30-5:00	Discussion
5:00	Shuttle departs to hotel

Thursday, May 5th

SAMSI Room 150

8:30	Shuttle
	Inverse Problems
9:00–9:30	Julianne Chung , Virginia Tech <i>Computational Methods for Large-Scale Inverse Problems</i>
9:30-9:50	Sarah Vallelian , SAMSI <i>Reduced Order Modeling in Photoacoustic Tomography</i>
9:50-10:10	Andrew Brown , Clemson <i>Efficient Markov Chain Monte Carlo Methods for Hierarchical Bayesian Inverse Problems</i>
10:10-10:30	Hoang Duy Thai , SAMSI <i>Simultaneous Image Segmentation and Deconvolution</i>
10:30–11:00	Break
	MRI Processing Part 1

11:00–11:10	Daniel Rowe Marquette <i>A Gentle Introduction to Image Processing and Reconstruction in FMRI</i>
11:10-11:40	Iain Bruce , Duke <i>Quantifying Correlations Artificially Induced in fcMRI Data by the SENSE pMRI Model</i>
11:40-12:10	Benjamin Risk , SAMSI <i>Examination of Artifacts from Multiband Imaging</i>
12:10–1:30	Lunch
	MRI Processing Part 2
1:30-2:00	Mary Kociuba , Marquette <i>A Method to Mitigate Inter-slice Signal Leakage in SMS-fMRI</i>
2:00-2:20	Adam Jaeger , SAMSI <i>Topology and fMRI Data</i>
2:20-2:30	Daniel Rowe Marquette <i>The Current State of Image Processing and Reconstruction with Future Directions</i>
2:30-3:00	Break
	Structural Connectivity
3:00-3:30	Sean Simpson , Wake Forest School of Medicine <i>Disentangling Brain Graphs: the Conflation of Network and Connectivity Analyses</i>
3:30-4:00	Jian Cheng , NIH <i>Mapping Tissue Microstructure using Spherical Polar Fourier Diffusion MRI</i>
4:00-4:30	Zhengwu Zhang , SAMSI <i>Robust Human Brain Structural Connectivity Analysis</i>
4:30-5:00	Lu Wang , Duke <i>Bayesian Network-Response Regression</i>
5:00-7:00	Poster Session and Reception
7:00	Shuttle departs to hotel

Friday, May 6th

SAMSI Room 150

8:30	Shuttle
	Imaging Genetics
9:00-9:30	Michele Guindani , MD Anderson <i>Integrative Bayesian Modeling Approaches to Imaging Genetics</i>
9:30–10:00	Yihong Zhao , NYU <i>Imaging Genetics toward Mechanistic Understanding of Psychiatric Disorders</i>
10:00–10:30	Break
10:30-11:00	Chintan Mehta , Yale <i>Identifying Genetic Variants for Learning Ability with Neuroimaging</i>
11:00-11:30	Jasmine Yang , UNC <i>Imaging Genetic Analysis for PNC Behavioral Data</i>
11:30-12:00	Hongtu Zhu , UNC
12:00	Closing Remarks and Box Lunch
1:00	Shuttle to RDU Airport