



Connectivity Course 2014Sep03 Schedule



Structural and Functional Connectivity via MRI

September 3-7, 2014

All classes will be held in the Research Affairs Conference room in Building 149 at the WEST end of the building on the first floor.

Day 1 (Wednesday, Sep 3)

8:30 - 10:00	- 1 -	Program Introduction and Overview	Robert Savoy
10:00 - 12:00	- 2 -	Basics of NMR and MRI: Sources of Signal and Contrast; Diffusion Imaging Image Contrast and Tradeoffs in fMRI; Safety, HRC/IRB Considerations	Robert Savoy
12:00 - 1:00		Lunch	
1:00 - 1:30	- 24 -	Advanced MR: Multi-Channel and Multi-Slice	Kawin Setsompop
1:00 - 2:00	- 3 -	Basics of Seed-based fc-fMRI: History and Relation to Multivariate Analysis	Robert Savoy
2:00 - 3:30	- 4 -	Clinical Overview and Motivation	Michael D. Fox
4:00 - 6:00		Tour of MRI; Collection of Seed-Based Connectivity Data	Robert Savoy / Sheeba Arnold / Mary Foley

Day 2 (Thursday, Sep 4)

9:00 - 10:00	- 5 -	White Matter Anatomy	Jeremy Schmahmann
10:15 - 12:00	- 6 -	Basics of Seed-based fc-fMRI: Acquisition and initial Processing	Sheeba Arnold
12:00 - 1:00		Lunch	
1:00 - 2:15	- 7 -	Basics of Seed Based fc-fMRI: Artifact Reduction (and the ART Toolbox)	Sue Whitfield-Gabrieli
2:30 - 4:00	- 8 -	Basics of Seed Based fc-fMRI: Analysis (and the CONN Toolbox)	Sue Whitfield-Gabrieli
4:00 - 6:00	- 9 -	Hands on Exercises with the Data	Sheeba Arnold / Sue Whitfield-Gabrieli
6:00 - 7:15		Dinner in the Atrium	
7:15 - 9:00	- 10 -	Applications of fc-fMRI	Sue Whitfield-Gabrieli

Day 3 (Friday, Sep 5)

9:00 - 10:00	- 11 -	Network Connectivity; Individual Differences ; Neurogenerative Disease	Brad Dickerson
10:15 - 12:00	- 12 -	ICA and Resting State Network Analyses for Individuals	Lisa Nickerson
12:00 - 1:00		Lunch	
1:00 - 2:00	- 13 -	ICA and Resting State Network Analyses for Groups	Lisa Nickerson
2:00 - 3:30	- 14 -	ICA Hands On using FSL / Melodic	Lisa Nickerson
4:00 - 5:00	- 15 -	Introduction to Diffusion MRI	Anastasia Yendiki
4:00 - 6:00		Acquiring Diffusion Data	Anastasia Yendiki / Thomas Witzel

Day 4 (Saturday, Sep 6)

9:00 - 10:00	- 16 -	Overview of processing Diffusion Data (Software Demonstration)	Anastasia Yendiki
10:00 - 12:00	- 17 -	Tractography Didactics	Anastasia Yendiki
12:00 - 1:00		Lunch (possible MEG Tour Seppho Ahlphors/MEG Staff)	
1:00 - 2:30	- 18 -	Graph Theory and Analysis of fc-fMRI data	Mika Rubinov (Remote Lecture)
3:00 - ??	- 19 -	Hands-on Exercises with Diffusion Data	Anastasia Yendiki

Day 5 (Sunday, Sep 7)

9:00 - 10:00	- 20 -	Testing the Reality of it all..	Doug Rosene
10:00 - 11:00	- 21 -	Geometric Structure of Fiber Pathways	Van Wedeen
11:00 - 11:30	- 22 -	fcfMRI at 7 Tesla	Koene Van Dijk
11:30 - 12:30	- 22 -	General Discussion	Staff and Class

NOTE: The above schedule is descriptive of the topics that will be covered, and the approximate timing.