

## **Cognitive Neuroscience Treatment Research to Improve Cognition in Schizophrenia Evaluating Potential Biomarkers of Cognitive Function**

**Thursday, October 29<sup>th</sup>**

### **Introduction and Overview**

- 8.15 am Introduction and Background for CNTRICS  
Cameron S. Carter, M.D.
- 8.30 am Summary of Survey Results  
Deanna M. Barch, Ph.D.
- 8:45 am The promises and pitfall of cognitive biomarkers in treatment research  
Ed Bullmore

### **EEG and ERP Methods**

- 9:30 am Physiological Bases of EEG & MEG Signals & the Application of MEG in Translational Research  
Matti Hamalainen
- 10:15 am Coffee Break
- 10:30 am Methodological Challenges for EEG in Clinical and Translational Research  
Steve Luck
- 11:15 am Time Frequency approaches for EEG analysis (Time Coherence, etc.)  
Kevin Spencer
- 12:00 pm Discussant  
Peter Uhlhaas
- 12:15 pm Group Discussion
- 1:00 pm Lunch

### **Novel Methods**

- 2:00 pm Dynamic Ligand Based Cognitive/Affective Imaging  
Alain Dagher
- 2:45 pm NIR  
Maria Franceschini
- 3:30 pm Coffee Break
- 3:45 pm Recent Advances in TMS I  
Sarah (Holly) Lisanby
- 4:30 pm Recent Advances in TMS II  
Alvaro Pascual-Leone
- 7:00 pm Dinner

**Friday, October 30<sup>th</sup>**

**Functional Magnetic Resonance Imaging**

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| 8:30 am  | Physiological Bases of Bold Signal & Pharmacological Effects on the Hemodynamic Response<br>Peter Bandettini |
| 9:15 am  | Reliability, Quality Assurance and Multisite Trials<br>Gary Glover   |
| 10:00 am | Coffee Break   |
| 10:15 am | Analysis Approaches to the Assessment of Reliability<br>Daniel Mathalon                                      |
| 11:00 am | Analysis approaches – optimizing sensitivity and inference for translation<br>Tor Wager                      |
| 11:45 am | Discussant<br>Randy Gollub   |
| 12:00 pm | Group Discussion   |
| 1:00 pm  | Lunch and End of Meeting   |