Meeting Agenda

The Booker Conference Room Jacobs Hall (EBU1) #2512

Wednesday June 22, 2016

9:00am-9:10am  Welcome Address
Anna Devor (Co-Director for the Center for Multiscale Imaging of Brain Function, UCSD)

**Session I: Bridging across scales, measurement modalities, & from circuits to behavior**

9:10am-9:40am  Anders Dale (Neurosciences ad Radiology, UCSD)
Relating noninvasive electric/magnetic, optical, and MRI signals to the underlying neuronal biophysics

9:40am-9:50am  Q&A

9:50am-10:20am  Gabriel Silva (Bioengineering and Ophthalmology, UCSD)
Dynamic functional connectomics: Deriving causal information flow from the structural connectome

10:20am-10:30am  Q&A

10:30am-10:45am  BREAK - Coffee and tea

**Session II: Neuroelectrical instrumentation & electrical signal processing**

10:45am-11:15am  Patrick Mercier (ECE, UCSD)
Modular neuroelectrical interfacing devices that integrate electrodes with amplifiers and wireless telemetry

11:15am-11:25am  Q&A

11:25am-11:55am  Vikash Gilja (ECE, UCSD)
Leveraging novel neurorecording and manipulation technologies to develop high performance closed-loop brain machine interfaces

11:55am-12:05pm  Q&A

12:05pm-12:30pm  LUNCH
Session III: Modeling of optical and fMRI data

12:30pm-12:50pm  Svenn-Arne Dragly (University of Oslo, Norway)
Photonflow: an open-source fluorescence microscopy simulator

12:50pm-1:00pm  Q&A

1:00pm-1:20pm  Marte Julie Sætra (University of Oslo, Norway)
Estimation of oxygen consumption from periarteriolar pO₂ measurements

1:20pm-1:30pm  Q&A

1:30pm-2:00pm  Richard Buxton (Radiology, UCSD)
Bridging the gap between microscopic measurements and noninvasive quantitative fMRI measurements in humans

2:00pm-2:10pm  Q&A

2:10pm-2:25am  BREAK - Coffee and tea

Discussion and Conclusions

2:25pm-3:00pm  Feedback from members of the Advisory Committee and general discussion

3:00pm-3:10pm  Conclusions