

Conference Schedule

Friday, August 20

- 7:30 - 8:15 a.m.** **Continental Breakfast**
- 8:15 - 8:20 a.m.** Welcome and Introduction (Dean Michael Stamos)
- 8:20 - 8:30 a.m.** Opening Remarks - SOM & Cajal (Gall & Ribak)
- Session 1 “How is Brain Connectivity Organized Globally?”**
Larry Swanson, PhD, Chair
- 8:30 - 9:10 a.m.** Understanding the Basic Plan of the Nervous System: Perspective, Strategy, Progress Report (Swanson)
Q&A 5 min
- 9:15 - 9:55 a.m.** Modular Organization of the Connectome: Model Organisms to Humans (Sporns)
Q&A 5 min
- 10:00 - 10:20 a.m.** **Break**
- 10:20 - 11:00 a.m.** The Brain’s Structural Connectome is Organized to Support Efficient Control of State Transitions (Bassett)
Q&A 5 min
- 11:05 - 11:45 a.m.** Large-Scale, Non-Canonical Hippocampal Formation Circuit Organization and Function (Xu)
Q&A 5 min
- 11:50 - 12:05 p.m.** Short Talk: Connectome of the Basal Forebrain Cholinergic System in Rat (Zaborszky)
Q&A 3 min
- 12:15 - 1:30 p.m.** **Lunch / Poster Session**
- Session 2 “How to Define Cell Types?”**
Hongkui Zeng, PhD, Chair
- 1:30 - 2:10 p.m.** Understanding Brain Cell Type Diversity (Zeng)
Q&A 5 min
- 2:15 - 2:55 p.m.** Mapping Molecular, Spatial, and Functional Organizations of Cells in the Brain by Single-Cell Transcriptome Imaging (Zhuang)
Q&A 5 min
- 3:00 - 3:20 p.m.** **Break**
- 3:20 - 4:00 p.m.** Contributions of Genetics and Connectivity to Cortical Cell Type Taxonomy (Callaway)
Q&A 5 min
- 4:05 - 4:45 p.m.** Deconstructing the Neural Control of Internal States (Anderson)
Q&A 5 min
- 5:00 p.m.** **Adjourn**

Saturday, August 21

7:30 - 8:15 a.m. Continental Breakfast

Session 3 “How is Connection Specificity Achieved?”

Liqun Luo, PhD, Chair

8:15 - 9:15 a.m. The Pinckney J. Harman Memorial Lecture of the Cajal Club:
Establishing Wiring Specificity of Neural Circuits in Flies and Mice (Luo)
Q&A 5 min

9:20 - 10:00 a.m. Wiring Up Direction Selective Circuits in the Retina (Feller)
Q&A 5 min

10:05 - 10:20 a.m. Break

10:20 - 11:00 a.m. Trans-Seq: Translating Transcriptomics to Connectomics at Retinotectal Synapses (Duan)
Q&A 5 min

11:05 - 11:45 a.m. IgSF Protein Interactions Instruct Drosophila Neuromuscular Circuit Wiring (Carrillo)
Q&A 5 min

11:50 - 12:05 p.m. Short Talk: A Novel Cell-Type-Specific Brain Pathway Tunes Reward-Seeking Behaviors
(Baram)
Q&A 3 min

12:15 - 1:30 p.m. Lunch

Session 4 “How is Development Regulated by Gene Networks?”

John Rubenstein, PhD, Chair

1:30 - 2:10 p.m. Transcriptional Network Orchestrating Regional Patterning of Cortical Progenitors (Rubenstein)
Q&A 5 min

2:15 - 2:55 p.m. Genetic and Epigenetic Determinants of Cortical Development and Evolution (Rakic)
Q&A 5 min

3:00 - 3:20 p.m. Break

3:20 - 4:00 p.m. A Molecular Logic for Cortical Projection Neuron Subtype Specification (Chen)
Q&A 5 min

4:05 - 4:45 p.m. Chromatin Regulation of Synaptic Maturation (West)
Q&A 5 min

4:50 - 6:00 p.m. Closing reception for all attendees at Beckman Center