

MEETING AGENDA

Why Does the Neocortex Have Layers and Columns?

The Banbury Center, Cold Spring Harbor Laboratory, New York, USA
October 28-31, 2018

This meeting was funded by **Numenta** and **Cold Spring Harbor Laboratory**

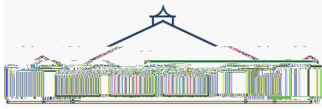
Organizers:

Subutai Ahmad, Numenta

Jeffrey Gavornik, Boston University

Stefan Mihalas, Allen Institute for Brain Science

This Banbury Center meeting convened experts from experimental, computational, and theoretical neurosciences to present their latest findings related to the anatomy, physiology, and function of cortical circuits. The goal was to develop a theoretical framework for understanding the function



8:45 am SESSION 1: General Frameworks

Jeffrey Hawkins, Numenta, Redwood City, USA

Michael Berry, Princeton University, Princeton, USA

Rajesh Rao, University of Washington, Seattle, USA

Stefan Mihalas, Allen Institute for Brain Science, Seattle, USA

11:15 am General Discussion

12:00 pm Luncheon

2:00 pm SESSION 2: Anatomy / Thalamus I

Kathleen Rockland, Boston University School of Medicine, Boston, USA

Sara Aton, University of Michigan, Ann Arbor, USA

Anthony Zador, Cold Spring Harbor Laboratory, Cold Spring Harbor, USA

Martin Usrey, University of California, Davis, USA

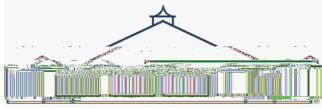
4:30 pm General Discussion & End of Day Wrap Up

6:00 pm Reception, dinner

TUESDAY, OCTOBER 30

7:15 am Breakfast

8:30 am SESSION 3: Anatomy / Thalamus II



12:00 pm Luncheon

1:30 pm **(continued) SESSION 4: Sensory Systems**

Alessandra Angelucci, University of Utah, Salt Lake City, USA

Kristina Nielsen, Johns Hopkins University, Baltimore, USA

Andrew Hires, University of Southern California, Los Angeles, USA

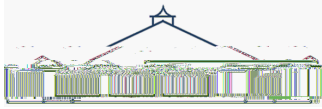
3:30 pm **SESSION 5: Sequences, Prediction, and Cognition**

Maria Geffen, University of Pennsylvania, Philadelphia, USA

Jeffrey Gavnornik, Boston University, Boston, USA

David Schneider, New York University, New York, USA

Christine Constantinople, New York University, New York, USA



MEETING PARTICIPANTS

Subutai Ahmad, Numenta

Alessandra Angelucci, University of Utah

Sarah Aton, University of Michigan

Michael Berry, Princeton University

Solange Brown, Johns Hopkins University

Randy Bruno, Columbia University

Christine Constantinople, New York University

Tatiana Engel, Cold Spring Harbor Laboratory

Jeffrey Gavornik, Boston University

Maria Geffen, University of Pennsylvania

Michael Halassa, Massachusetts Institute of Technology