



SHORT COURSE #2

Advances in Brain-scale, Automated Anatomical Techniques: Neuronal Reconstruction, Tract Tracing, and Atlasing

Organized by: Sebastian Seung, PhD

Friday, November 14

8:30 a.m. – 6:00 p.m.

Location: Walter E. Washington Convention Center

Room: Ballroom B

Washington, DC

TIME	AGENDA TOPICS	SPEAKER
8 – 8:30 a.m.	CHECK-IN	
8:30 – 8:40 a.m.	Opening Remarks	Sebastian Seung, PhD <i>Princeton University- Princeton Neuroscience Institute</i>
8:40 – 9:30 a.m.	Mapping the mouse brain by ex-vivo whole-brain microscopies	Pavel Osten, MD/PhD <i>Cold Spring Harbor Laboratory</i>
9:30 – 10:20 a.m.	CLARITY and beyond: tools for integrated brain mapping	Kwanghun Chung, PhD <i>Massachusetts Institute of Technology</i>
10:20 – 10:50 a.m.	MORNING BREAK	
10:50 – 11:40 a.m.	Rapid high-resolution mapping of intact brains with CLARITY optimal light-sheet microscopy (COLM)	Raju Tomer, PhD <i>Howard Hughes Medical Institute; Stanford University</i>
11:40 – 12:30 p.m.	Mapping local and global connectivity onto functionally-characterised cortical cells and circuits	Troy Margrie, PhD <i>National Institute for Medical Research</i>
12:30 – 1:30 p.m.	LUNCH: Room 145 AB	
1:30 – 2:20 p.m.	Computational techniques for constructing brain atlases	Lydia Ng, PhD <i>Allen Institute for Brain Science</i>
2:20 - 3:20 p.m.	Panel Discussions	Drs. Osten, Chung, Tomer, Margrie, and Ng
3:20 – 3:30 p.m.	TUTORIAL INTRODUCTIONS	
3:30 - 3:45 p.m.	AFTERNOON BREAK	



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AFTERNOON BREAKOUT SESSIONS

Participants select one breakout session at 3:45 p.m. and one at 5:00 p.m.

TIME	THEME	ROOM
3:45-4:45 p.m.	BREAKOUT SESSIONS	
	GROUP 1 – Isotropic fractionator Suzana Herculano-Houzel, PhD <i>Institute of Biomedical Science</i>	144A
	GROUP 2 – FilamentTracer Marcel Oberlaender, PhD <i>Max Planck Institute for Biological Cybernetics</i>	144B
	GROUP 3 – FIJI/ImageJ Ignacio Arganda-Carreras, PhD <i>The French National Institute for Agricultural Research</i>	144C
4:45 - 5:00 p.m.	AFTERNOON BREAK	
5:00 - 6:00 p.m.	BREAKOUT SESSIONS REPEAT	



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