



NEURO TECHNOLOGY CENTER
 @COLUMBIA UNIVERSITY

2014 Kavli Futures Symposium: “The Novel NeuroTechnologies”

November 3 - 4, 2014

550 West 120th St.

5th floor Auditorium, NWC Building,
 Columbia University, New York City

Monday November 3rd

Breakfast (5 th floor mezzanine NWC)	8:00 – 8:30am
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Speaker	Title	Time
Rafael Yuste, Columbia	Welcome	8:30 – 8:35am
Amber Miller, Columbia	NTC Introduction	8:35 – 8:40am
Cori Bargmann, Rockefeller	White House Brain Initiative	8:40 – 9:00am
John Donoghue, Brown	Opening Keynote	9:00 – 9:40am
<i>Coffee Break</i> (5 th floor mezzanine NWC)		9:40 – 10:00am
Session I: Neuro Imaging Moderator: Darcy Peterka		
Chris Harvey, Harvard	Neuronal circuit dynamics in the mouse parietal cortex	10:00 – 10:40am
Andreas Tolias, Baylor	Structural and functional principles of cortical microcircuit organization	10:40 – 11:20am
Jerome Mertz, BU	New directions in brain imaging	11:20 – 12:00pm
<i>Discussion: Neuro Imaging Technologies</i>		12:00 – 12:20pm

Lunch	12:30 -2:00pm
NTC Career Rapid Networking (6 th floor mezzanine NWC)	1:00 – 2:00pm
<i>For Columbia students and postdocs, RSVP required. A rapid networking event where participants are asked to give a 30 second introduction followed by 5 minute discussions with leading industry, government and STEM related professionals.</i>	

(OPTIONAL) Lab Tours* (7 th , 9 th and 12 th floors NWC)	1:15 – 2:00pm
<i>Guided tours of the NTC Labs</i>	

Session II: NanoNeuro Moderator: Ken Shepard		
Michael Roukes, Caltech	Integrated Neurophotonics: a Vision for Massively-Parallel Interrogation of Brain Activity	2:00 – 2:40pm
Daryl Kipke, Michigan		2:40 – 3:20pm
<i>Coffee Break</i> (5 th floor mezzanine NWC)		3:20 – 3:40pm
Tim Harris, Janelia	Very High Channel Count Si Probes: The IMEC Project	3:40 – 4:20pm
Charles Lieber, Harvard	Nanoelectronic Tools for Brain Science: New Concepts and Progress	4:20 – 5:00 pm
<i>Discussion: NanoNeuro Technologies</i>		5:00 – 5:20pm

Reception and Poster Session (6 th floor mezzanine NWC)	5:30 – 7:00pm
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Tuesday November 4th

Breakfast (5 th floor mezzanine NWC)	8:00 – 8:30am
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Liam Paninski	Opening remarks	8:30 – 8:40am
Session III: NeuroComputation Moderator: Liam Paninski		
Speaker	Title	Time
Konrad Kording, Northwestern		8:40 – 9:20am
Eero Simoncelli, NYU		9:20 – 10:00am
<i>Coffee Break</i> (5 th floor mezzanine NWC)		10:00 – 10:20pm
Sebastian Seung, Princeton	Structural clues to a visual function: direction selectivity in the retina	10:20 – 11:00am
Gyuri Buzsaki, NYU	Local circuit analysis with large-scale recordings combined with optogenetics	11:00 – 11:40am
<i>Discussion: NeuroComputation Technologies</i>		11:40 – 12:00pm

George Church, Harvard	Closing Keynote	12:00 – 12:40pm
Rafael Yuste, Columbia	Wrap Up Summary	12:40 – 12:45pm
Miyoung Chun, Kavli	Closing Remarks	12:45 – 12:50pm

Lunch (6 th floor mezzanine NWC)	1:00 – 2:00pm
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