

2017 CNEP Conference
December 7th at the David Brower Center
2150 Allston Way, Berkeley, CA 94704

8:30 – 9:00 Continental breakfast

9:00 – 10:30 Session I

9:00 – 9:10 Opening remarks: Jose Carmena and Edward Chang, CNEP Co-Directors

9:10 – 9:30 Ludovic Bellier (Knight Lab, UCB), "Music Reconstruction from Intracranial Data"

9:30 – 9:50 Josh Chartier (Chang Lab, UCSF), "The Encoding of Articulatory Movements in Speech Motor Cortex"

9:50 – 10:10 David Piech (Carmena & Maharbiz Labs, UCB), "Wireless Recording With Neural Dust: Communicating With Multiple Sensors Through the Skull and Deep in the Brain"

10:10 – 10:30 Witney Chen (Starr Lab, UCSF), "Neural Circuits for Movement Inhibition in Parkinson's Disease"

10:30 – 10:45 Coffee break

10:45 – 12:00

Keynote Speaker: Richard Andersen (James G. Boswell Professor of Neuroscience and Director of the T&C Chen Brain-Machine Interface Center, California Institute of Technology), "The Neural Code for Representing Large Numbers of Action Variables in the Human Posterior Parietal Cortex"

12:00 – 1:00 Lunch break

1:00 – 2:40 Session II

1:00 – 1:20 Christina Merrick (Ivry Lab, UCB), "Exploring the Contributions of the Ipsilateral Hemisphere to Motor Control"

1:20 – 1:40 Stefan Lemke (Ganguly Lab, UCSF), "Multiplex Control of Proximal and Distal Movements by Corticostriatal Networks During Skill Learning"

1:40 – 2:00 Eric Knudsen (Wallis Lab, UCB), "Frequency-Specific, Closed-Loop Manipulation of Reinforcement Learning"

2:00 – 2:20 Joshua Berke (UCSF), "Cellular-Scale Probes for Ultra-High-Density, Precisely-Localized Electrical and Chemical Sensing"

2:20 – 2:40 Laura Hallock (Bajcsy Lab, UCB), "Quantification and Modeling of Upper-Limb Muscle Deformation: Toward Ultrasound-Driven Assistive Device Control"

2:40 – 3:10 Coffee break

3:10 – 4:10 **Session III**

3:10 – 3:30 Loren Frank (UCSF), "New Tools for Understanding Distributed Information Processing in the Brain"

3:30 – 3:50 Benjamin Johnson (Muller Lab, UCB), "StimDust: A Miniaturized Wireless Peripheral Nerve Stimulator"

3:50 – 4:10 Winston Chiong (UCSF), "Unanticipated Changes to Self and Identity After Neurotechnological Interventions"

4:15 – 6:00 Reception

6:00 Adjourn