

Sunday November 8th

3:00 pm Check-in

6:00 pm Reception

6:30 pm Dinner

7:30 pm **Plenary Talk: Eric Kandel**, HHMI/Columbia University
Prion like mechanisms for the perpetuation of translation at the synapse

8:30 pm Refreshments available at Bob's Pub

Monday November 9th

- 7:30 am Breakfast
- 8:30 am Session 1: Plasticity**
Chair: Mark Bear
- 8:30 am **Michael Sutton**, University of Michigan
Dendritic protein synthesis and local homeostatic control of synapse function
- 8:55 am **Joel D. Richter**, University of Massachusetts Medical School
Translational control of synaptic plasticity
- 9:20 am **Robert Darnell**, HHMI/Rockefeller University
Synaptic RNA maps
- 9:45 am **Hollis Cline**, The Scripps Research Institute
Mobility of dendritic RNP granules in optic tectal neurons in vivo
- 10:10 am Break and Group Photo
- 10:40 am Session 2: Translation and TOR**
Chair: Holly Cline
- 10:40 am **Oswald Steward**, University of California, Irvine
Live-cell imaging of the targeting of Arc mRNA to dendritic spine synapses
- 11:05 am **Nahum Sonenberg**, McGill University
Postnatal deamidation of 4E-BP2 in the brain slows the kinetics of excitatory postsynaptic transmission
- 11:30 am **Kimberly F. Raab-Graham**, University of Texas at Austin
Molecular mechanism of mTOR-mediated suppression of Kv1.1 translation in dendrites
- 11:55 am **Wayne S. Sossin**, McGill University
The role of eEF2 kinase in translational regulation during learning in Aplysia neurons
- 12:20 pm Lunch
- 1:10 pm Tour (optional) - meets at the registration desk

- 2:20 pm** **Session 3: microRNA**
Chair: Eric Klann
- 2:20 pm **Mani Ramaswami**, Trinity College
Regulation of synaptic mRNAs in the Drosophila olfactory circuit
- 2:45 pm **Ray Kelleher**, Harvard Medical School
Translational repression by MicroRNAs in neural development, synaptic plasticity and neuronal survival
- 3:10 pm **Peter Vanderklisch**, Scripps Research Institute
Widespread and differential control of microRNA biogenesis by a cold-inducible and circadian-regulated mRNA-binding protein
- 3:35 pm **Rachel Green**, HHMI/Johns Hopkins University School of Medicine
Allosteric regulation of Argonaute proteins by small RNAs
- 4:00 pm Break
- 4:30 pm** **Discussion 1: Is translational control a mechanism for plasticity?**
Lead by: Mark Bear, Holly Kline and Eric Klann
- 5:30 pm** **Poster Reception 1**
- 7:00 pm Dinner
- 8:00 pm** **Plenary Talk: Erin Schuman**, HHMI/California Institute of Technology
Visualizing and identifying newly synthesized proteins
- 9:00 pm Refreshments available at Bob's Pub

Tuesday November 10th

- 7:30 am Breakfast
- 8:30 am Session 4: mRNA localization**
Chair: Erin Schuman
- 8:30 am **Eric Klann**, New York University
Plasticity and behavioral abnormalities in mice with excessive translation initiation
- 8:55 am **Michael A. Kiebler**, Medical University of Vienna
Neuronal RNA granules and their role in dendritic RNA localization
- 9:20 am **Kelsey Martin**, University of California, Los Angeles
Synapse and stimulus-specific local translation during neuronal plasticity
- 9:45 am **Robert H. Singer**, Albert Einstein College of Medicine
Stimulus dependent β -actin mRNA localization and translation
- 10:10 am Break
- 10:40 am Session 5: Fragile X and Autism I**
Chair: Joel Richter
- 10:40 am **Stephen T. Warren**, Emory University School of Medicine
Molecular mechanisms of Fragile X Syndrome
- 11:05 am **Justin R. Fallon**, Brown University
Fxgs: The presynaptic side of the fragile X system
- 11:30 am **Jennifer C. Darnell**, Rockefeller University
HITS-CLIP identifies specific neuronal mRNA targets of the Fragile X Mental Retardation Protein, FMRP
- 11:55 am **R. Suzanne Zukin**, Albert Einstein College of Medicine
Dysregulation of AMPA receptor mRNA targeting to dendrites in Fragile X Syndrome
- 12:20 pm Lunch
- 2:00 pm Session 6: Fragile X and Autism II**
Chair: Steve Warren
- 2:00 pm **Claudia Bagni**, Catholic University of Leuven Medical School
Developmental control of FMRP-regulated mRNA translation at synapses

- 2:25 pm **Kim Huber**, UT Southwestern Medical Center, Dallas
Mechanisms of translational regulation during hippocampal long-term synaptic depression
- 2:50 pm **Gary J. Bassell**, Emory University School of Medicine
Reversible inhibition of PSD-95 mRNA translation at synapses by miR-125a and FMRP
- 3:15 pm **Michel J. Simonneau**, INSERM U675
Dendritic trafficking and local translation impairment in psychiatric diseases
- 3:40 pm Break
- 4:00 pm **Discussion 2: Is Fragile X a disease of dendritic translation?**
Lead by: Erin Schuman, Joel Richter and Steve Warren
- 5:00 pm **Poster Reception 2**
- 6:30 pm Dinner
- 7:30 pm **Plenary Talk: Roger Y. Tsien**, HHMI/University of California, San Diego
Visualizing activity-dependent protein synthesis with high spatial and temporal resolution in neurons
- 8:30 pm Refreshments available at Bob's Pub

Wednesday November 11th

- 7:30 am Breakfast
- 8:55 am Session 7: Development, Fear and Tools**
Chair: Kevin Moses
- 8:55 am **Linnaea E. Ostroff**, New York University
Bidirectional changes in amygdala synapse size and local protein synthesis with fear or safety learning
- 9:20 am **Andrew Woolley**, University of Toronto
Optical tools for manipulating translation
- 9:45 am **Melissa Moore**, HHMI/University of Massachusetts Medical School
A reputation in need of repair: The 80S monosome
- 10:10 am Break
- 10:30 am Plenary Talk: Mark F. Bear**, HHMI/Massachusetts Institute of Technology
Fragile X: Translation in action
- 11:30 am Discussion 3: Is this really how memory works?**
Lead by: Eric Kandel
- 12:30 pm Lunch (To-go boxes available from servery for those on first shuttle) and Departure
- 1:00 pm First shuttle to Dulles
1:45 pm Second shuttle to Dulles
2:30 pm Last shuttle to Dulles