

MCCS 2020 Symposium

Please note that the schedule is referenced to USA Eastern Daylight Time (UTC-4)

October 21

8:00 pm Welcome
Jennifer Raymond, President of MCCS; *Stanford University*

Session 1

Satoshi Kida, Chair, President of MCCS-Asia; *University of Tokyo*

8:05 pm Regulation of sleep and memory by the hypothalamic neurons
Akihiro Yamanaka, *Nagoya University*

8:25 pm Cholinergic and Glutamatergic Inputs to Dorsal Hippocampus Mediate Stress-Induced Generalization of Negative Memories
Lynn Ren, *Northwestern University*

8:45 pm Synaptic epitranscriptomics in neurodevelopment and neurodevelopmental disorders
Dan Ohtan Wang, *Kyoto University*

9:05 pm Comparing Theories for the Maintenance of Late LTP and Long-Term Memory: Computational Analysis of the Roles of Kinase Feedback Pathways and Synaptic Reactivation
Paul Smolen, *McGovern Medical School, University of Texas Health Science Center at Houston*

9:25 pm Protein chaperones are critical for long-term memory
Snehajoti Chatterjee, *Iowa Neuroscience Institute*

9:30 pm Cytosolic and membrane-associated ribosomes' mRNA profiles are differentially regulated by learning and sleep in hippocampal neurons
Sara J Aton, *University of Michigan*

9:35 pm BREAK

9:45 pm TBA
Tian Xue, *Chinese Science & Tech University*

10:05 pm Astrocytes control sensory acuity via tonic inhibition in the thalamus
Eunji Cheong, *Yonsei University, Seoul, Korea*

- 10:25 pm Astrocyte-mediated constant synapse reorganization is required for normal synaptic functions and memory formation
Hyungju Park, *Korea Brain Research Institute, KBRI*
- 10:45 pm Memory differentiation across the spatial and the object domain require Arc expression in the dentate gyrus and perirhinal cortex.
Magdalena Miranda, *Universidad Favaloro*
- 10:50 pm Organization of memory ensembles across brain regions
Ayal Lavi, *University of California, Los Angeles*

October 22**Session 2**

Andre Fischer, Chair, President of MCCS-Europe; *Georg-August-University Göttingen*

- 3:00 am An interplay between plasticity and stability in hippocampal circuits: From basic principles to malfunctions.
Inna Slutsky, *Tel Aviv University*
- 3:20 am Stability and dynamics in neural codes for long-term spatial memory
Yaniv Ziv, *Weizmann*
- 3:40 am Neuronal ensemble-specific DNA methylation strengthens engram stability
Ana M.M. Oliveira, *Heidelberg University*
- 4:00 am Modulation of AMPA receptor surface diffusion to restore hippocampal plasticity and memory.
Hongyu Zhang, *University of Bergen*
- 4:20 am Neuronal encoding of object-type and object-place memories in mouse hippocampus and retrosplenial cortex
Olga Ivashkina, *Lomonosov Moscow State University*
- 4:25 am Temporal Gating of Synaptic Competition in the Amygdala by Cannabinoid Receptor Activation
Natália Madeira, *NOVA Medical School - Faculdade de Ciências Médicas da Universidade de Lisboa*
- 4:30 am BREAK
- 4:40 am Sleep deprivation impairs proteome and phosphorylation rhythms in synapses.
María S. Robles, *LMU, Munich*

- 5:00am Sparse Activity of Hippocampal Adult-Born Neurons during REM Sleep Is Necessary for Memory Consolidation
Deependra Kumar, *International Institute for Integrative Sleep Medicine (WPI-IIS), University of Tsukuba*
- 5:20 am Synapse diversity and synaptome architecture across the lifespan.
Seth Grant, *University of Edinburgh*
- 5:40 am The Novelty of Quinone Reductase 2
Nathaniel Gould, *University of Haifa*
- 5:45 am The role of corona virus in biopathogenesis of neurodegenerative diseases
Benjamin Temidayo Adebisi, *Osun State University, Nigeria*

Session 3

Li-Huei Tsai, Chair, Past-President of MCCS; *MIT*

- 11:00 am Molecular Mechanisms of Brain Rejuvenation
Saul Villeda, *University of California, San Francisco*
- 11:20 am Mitochondria-lysosome contact sites in neuronal homeostasis and disease.
Yvette Wong, *Northwestern University*
- 11:40 am Proteolytic processing of TGF β provides a mechanism for precise temporal orchestration in long term memory formation
Paige Miranda, *New York University*
- 12:00 pm Heterogeneity in synaptic dynamics as a substrate for sub-second timers within neural circuits
David DiGregorio, *Institut Pasteur*
- 12:20 pm A Thalamic Orphan Receptor Drives Variability in Short Term Memory
Katie Kuangfu Hsiao, *Rockefeller University*
- 12:25 pm Intrinsic neuronal properties represent song and error in zebra finch vocal learning
Arij Daou, *American University of Beirut*
- 12:30 pm Adult-born Neurons Inhibit Developmentally-born Neurons
Alyssa Ash, *University of British Columbia*
- 12:35 pm BREAK
- 12:45 pm Characterizing RNA Granule-Associated Stalled Polysomes
Mina N. Anadolu, *Montreal Neurological Institute, McGill University*

- 1:05 pm Genome folding, unfolding, and refolding in the mammalian brain.
Jennifer Phillips-Cremins, *University of Pennsylvania*
- 1:25 pm Activity-dependent remodeling of chromatin and genome architecture over the lifespan
of engram cells
Asaf Marco, *MIT*