The Mysteries and Marvels of Memory March 26-28, 2010

Silver Center, New York University 31 Washington Place, Room 703 New York, NY 10003

SCHEDULE

Friday, March 26, 2010
7:00 - 9:00pm Welcoming Cocktail Party
Kimmel Center, New York University
60 Washington Square South, Room 914

New York, NY 10003

Saturday, March 27, 2010

9:00 - 10:30 Basic building blocks of biological learning machines Session Chair: Yadin Dudai

9:00 Seth Grant - Molecular origins of the synapse and evolution of adaptive behaviour Wellcome Trust Sanger Institute, Cambridge, UK

9:30 Henry Markram - Isolating Acquired vs Innate Determinants of Synaptic and Microcircuit Plasticity Ècole Polytechnique Fédérale de Lausanne, Switzerland

10:00 Joseph LeDoux - Building Blocks of the Fear Learning Machine The Center for Neural Science, New York University, New York

10:30 - 10:40 Debate/Discussion

10:40 - 11:00 Coffee Break

11:00 - 12:30 Substrates of elementary learning principles Session Chair: Eric Klann

11:00 Sheena Josselyn - Continuing the search for the engram Hospital for Sick Children, University of Toronto

11:30 Bong-Kiun Kaang - Dynamic nature of long-term memory Seoul National University

12:00 Craig Stark - Pattern separation and the aging hippocampus University of California, Irvine

12:30 - 12:40 Debate/Discussion

2:00 - 3:30 Molecular Disruption of Long-Term Memory—Can memory be erased? Session Chair: Joseph LeDoux

2:00 Todd Sacktor - How does inhibiting PKM ζ erase memory? SUNY Downstate Medical Center, Brooklyn, NY

2:30 Karim Nader - Reconsolidation and the nature of amnesia McGill University, Montreal

3:00 Merel Kindt - Deconstructing Fear Memory: Extinction and Reconsolidation University of Amsterdam

3:30-3:40 Debate/Discussion

3:40-4:00 Coffee break

4:00 - 5:30 Behavioral Interference with Long-Term Memory Session Chair: Elizabeth Phelps

4:00 Marie Monfils - Reconsolidation-extinction interactions in fear memory updating University of Texas, Austin

4:30 Matthew Walker - Sleep and sleep loss: Enhancing and interfering with human memories

Assistant Professor of Psychology & Neuroscience, UC Berkeley

5:00 Lynn Nadel - Episodic Memory Updating University of Arizona, Tucson

6:00 - 7:00 Keynote Address: Yadin Dudai

The Engram Shaped and Reshaped: Lessons from the Rat Neocortex New York University and Weizmann Institute of Science

Sunday, March 28

9:00 - 10:30 Enhancement of long-term memory Session Chair: Lila Davachi

9:00 Li-Huei Tsai - Picower Institute for Learning and Memory Epigenetic Mechanisms Regulating Memory Formation in Health and Disease MIT

10:00 Charan Ranganath - Improving episodic memory and prefrontal function through working memory training UC Davis

10:30 Tim Tully - CREB & Memory Enhancers Dart Neuroscience LLC

10:30 - 10:40 Discussion/Debate

10:40 - 11:00 Coffee Break

11:00 - 12:30 Novel findings: Will they change the way we view the MTL? Session Chair: Wendy Suzuki

11:00 Jill Leutgeb - New Findings for Encoding Information in Hippocampal Neural Networks UC San Diego

11:30 Elizabeth Gould - Structural plasticity and hippocampal function Princeton University

12:00 Daniel Schacter - Episodic Simulation of Future Events and the Medial Temporal Lobe Harvard University, Cambridge, MA

12:30 - 12:40 Discussion/Debate

12:40 - 12:45 End of Conference/Closing Remarks