

Memory Disorders Research Society

2023 Annual Meeting Program




MDRS 2023
Los Angeles

September 20-23, 2023

Hosted at the University of California, Los Angeles

Meeting Organizing Committee: Jesse Rissman (chair), David Clewett, Nanthia Suthana, Ueli Rutishauser, Gina Poe, and Barbara Knowlton

Meeting Sponsors: UCLA Brain Research Institute, UCLA Dept. of Psychology, UCLA Semel Institute for Neuroscience and Human Behavior, Cedars-Sinai Center for Neural Science and Medicine, Trends in Cognitive Science, and Neuropsychologia

UCLA College | Life Sciences
Psychology

 Trends in Cognitive Sciences



Wednesday Sept 20th

UCLA Luskin Conference Center Outdoor Courtyard (in front of lobby)

425 Westwood Plaza, Los Angeles, CA 90095

6:30pm - 8:30pm **Welcome Reception** (purely social event with tapas & drinks)

Thursday Sept 21st

UCLA Neuroscience Research Building Auditorium

635 Charles E Young Dr S, Los Angeles, CA 90095

8:00am - 8:35am Breakfast

8:35am - 8:45am Opening Remarks

8:45am - 10:15am **Symposium #1: Mechanisms and consequences of flexibly generalizing memories**

- **Elizabeth Goldfarb (chair):** Perceptual generalization and risky drinking
- **Zoe Ngo:** Memory generalization and specificity in early childhood
- **Joey Dunsmoor:** Pattern separation of fear extinction memory
- **Denise Cai:** The tug of war between memory stability and flexibility

10:15am - 10:30am Coffee Break

10:30am - 12:15pm **Open Paper Talks**

- **Mariam Aly:** Resolving competition during memory-guided attention
- **Bradley Lega:** Cholinergic modulation of human memory circuits: evidence for a two theta model
- **Michael Kahana:** The Penn Electrophysiology of Encoding and Retrieval Study
- **Cory Inman:** CogNeuro GO: Capturing and enhancing episodic memories made in the wild
- **Kari Hoffman:** A hypothetical scenario: hippocampal physiology during object-context learning in freely-moving monkeys
- **Joel Voss:** Theta phase-locked intracranial stimulation enhances hippocampal network connectivity
- **Nicole Long:** The role of the retrieval brain state in cognition
- **Donna Rose Addis:** Autobiographical and collective narratives of a lifetime period: Examining transformation with natural language processing
- **Morgan Barense:** Memory and well-being in times of isolation: unique events enhance mood and episodic richness of life experiences



12:15pm - 1:30pm Lunch (catered meal from Taste of Tehran provided for you just outside of NRB)

1:30pm - 3:00pm **Symposium #2: Top-down influences on narrative memory**

- **Christopher Baldassano**: Top-down attention impacts neural dynamics during narratives with overlapping event scripts
- **Janice Chen**: Influences of choice on memory for narratives
- **Deepu Murty (chair)**: Storytelling modulates episodic memory in service of the transmission of value
- **Daniela Schiller**: A neural narrative of social relationships and personal trauma

3:00pm - 3:15pm Coffee Break

3:15pm - 5:00pm **Open Paper Talks**

- **Morris Moscovich**: Personality, the self, and (involuntary?) episodic memory
- **Adrian Gilmore**: Long-term retention of information learned in a natural environment in a patient with profound amnesia
- **Halle Dimsdale-Zucker**: Explorations into the consequences of context on the organization of free recall and neural representations
- **James Antony**: Memory out of context: Spacing effects and decontextualization in a computational model of the medial temporal lobe
- **Roland Benoit**: Learning from imagined experiences via an endogenous prediction error
(5 min break)
- **Wilma Bainbridge**: A neural network to predict real-world human memory
- **Nanthia Suthana**: Human hippocampal mechanisms underlying real-world and imagined navigation
- **Liz Chrastil**: Navigational systems in the human brain dynamically code for past, present, and future trajectories
- **Chris Wahlheim**: Self-reported encoding quality promotes lure rejections and false alarms

5:00pm - 6:00pm **Business Meeting** (*MDRS members only*)

7:00pm - 11:00pm **A Fun Evening on Melrose – Dinner & Cocktail Party**
The Butcher's Daughter (8755 Melrose Ave., West Hollywood, CA 90069)



Friday Sept 22nd

UCLA Neuroscience Research Building Auditorium

635 Charles E Young Dr S, Los Angeles, CA 90095

8:15am - 9:00am Breakfast

9:00am - 10:30am **Symposium #3: Sleep in memory disorders**

- **Bryce Mander**: Sleep apnea and Alzheimer's disease pathophysiology: Pathways to disordered memory
- **Mark Gluck (chair)**: Interactions between ABCA7 genetic variations and sleep quality predict cognitive decline and Alzheimer's risk in older African Americans
- **Itamar Lerner**: The paradoxical effect of REM sleep on the consolidation of stressful memories and its implications to PTSD
- **Kate Simon**: Is sleep necessary for spatial memory and navigation across the lifespan: a Minecraft study

10:30am - 10:45am Coffee Break

10:45am - 12:15pm **Open Paper Talks**

- **Xiaonan Liu**: A complementary learning systems model of how sleep moderates retrieval practice effects
- **Ken Paller**: Does memory reactivation during sleep influence sleep quality and the positive/negative repercussions of sleep?
- **Rosemary Cowell**: The locus of recognition memory signals in human cortex depends on the complexity of the memory representations
- **Noa Ofen**: Neurophysiological mechanisms of memory in the developing brain: insights from intracranial EEG studies
- **Alison Adcock**: Distinct motivations induce distinct anticipatory states across medial temporal lobe
- **Matthias Gruber**: Individual differences in how curiosity and information prediction errors affect memory
- **Kevin LaBar**: Mood-congruent memory consolidation
- **Talya Sadeh**: How do we evaluate others' memories?

12:15pm - 1:45pm Lunch (*on your own*)



1:45pm - 3:15pm **Symposium #4: The Episodic-Semantic distinction 50 years on**

- **Louis Renoult (chair):** A component process view of declarative memory
- **Rachael Elward:** The episodic semantic distinction in developmental amnesia
- **Melissa Duff:** Hippocampal contributions to semantic representation over time: Evidence from amnesia
- **Mick Rugg:** Episodic and semantic memory: not so different after all?

3:15pm - 4:10pm **Cermak-Corkin Award Presentation and Featured Talks**

- **Zoe Ngo (2021 winner):** *talk already given on Thursday in Symposium #1*
- **Nicole Varga (2022 winner):** The influence of brain development on memory representation
- **Matthias Stangl (2023 winner):** Spatial representations for self and others in the human medial temporal lobe
- **Jie Zheng (2023 winner):** Combined rate and phase coding supports the episodic structure of memory

4:10pm - 4:20pm Coffee Break

4:20pm - 4:55pm **Open Paper Talks**

- **Charan Ranganath:** The Hippocampus: Does it compute?
- **Jordana Wynn:** Eye movements support active memory retrieval
- **Simona Ghetti:** Eye movement signatures of memory development

5:00pm - 6:00pm **Keynote Address** (open to the public)

- **Alcino Silva:** Molecular, cellular systems and brain region mechanisms of temporal memory structures

7:00pm - 9:30pm **Banquet Dinner** (Luskin Center - Centennial Ballroom; *ticket required*)



Saturday Sept 23rd

UCLA Neuroscience Research Building Auditorium

635 Charles E Young Dr S, Los Angeles, CA 90095

8:15am - 9:00am Breakfast

9:00am - 10:30am **Symposium #5: Neuromodulatory influences of dopamine and noradrenaline on memory and implications for aging and Alzheimer's disease**

- **Mara Mather (chair):** Structural MRI contrast measures of dopaminergic and noradrenergic brain regions are associated with different aspects of late life memory performance
- **Federico Bermudez-Rattoni:** Perceptual salience: How dopaminergic activity modulates recognition memory
- **Emrah Düzel:** Examining the role of dopamine release during encoding using concurrent fMRI and PET
- **Anne Berry:** The influence of monoamine systems on cognition in aging: resilience and risk

10:30am - 10:45am Coffee Break

10:45am - 12:45pm **Open Paper Talks**

- **Tarek Amer:** Aging clutters memory representations
- **Simon Davis:** Representational change underlying the parietal stimulation benefit in MCI
- **Nicole Anderson:** Familiarity deficits in amnesic mild cognitive impairment
- **Elizabeth Race:** Protecting memory from misinformation: Neural and cognitive factors that influence memory distortion
- **Jarrold Lewis-Peacock:** Suppressing information from working memory

(5 min break)

- **Anna Schapiro:** Recent statistics shift object representations in parahippocampal cortex
- **Ben Hutchinson:** Representational similarity across long timescales predicts benefit of spaced learning
- **Shayna Rosenbaum:** Impaired and enhanced perceptual discrimination in rodents and humans
- **Michael Miller:** New directions in split-brain research
- **Buddhika Bellana:** Stories as a window into human memory and spontaneous thought

12:45pm - 1:00pm Meeting Adjourned; Boxed Lunches Available

1:30pm - 3:30pm Getty Center Museum Visit (optional excursion; 8 min drive from campus)
1200 Getty Center Dr, Los Angeles, CA 90049

