# **Mariam Aly**

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## **FIELDS OF SPECIALIZATION**

**Disciplines**: Psychology | Cognitive Neuroscience **Topics**: Long-term Memory | Perception | Attention

**Methods**: Behavior | Functional Neuroimaging | Neuropsychology

#### **EDUCATION**

Ph.D. (Psychology)	University of California, Davis Primary advisor: Dr. Andrew Yonelinas Secondary mentor: Dr. Charan Ranganath	2010 – 2013
	Dissertation: Functional Characteristics and Neural Underpinnings of State- and Strength-Based Visual Perception	
	Published as: Aly & Yonelinas, 2012, PLoS ONE Aly, Ranganath, & Yonelinas, 2013, Neuron Aly, Ranganath, & Yonelinas, 2014, Journal of Cognitive Neuroscien	се
M.A. (Psychology)	University of California, Davis Primary advisor: Dr. Andrew Yonelinas Secondary mentor: Dr. Charan Ranganath	2008 – 2010
H.B.Sc. (Psychology)	University of Toronto Advisors: Dr. Morris Moscovitch and Dr. Ian Spence	2004 – 2008

# **ACADEMIC APPOINTMENTS**

Acting Associate Professor	Department of Psychology, University of California, Berkeley	2024 –
Adjunct Research Scientist	Department of Psychology, Columbia University	2024 –
Affiliated Faculty	Cognitive Science, Barnard College	2022 – 2024
Affiliate Member	Zuckerman Mind Brain Behavior Institute, Columbia University	2019 – 2024
Training Faculty	Doctoral Program in Neurobiology and Behavior Columbia University	2019 – 2024
Assistant Professor	Department of Psychology, Columbia University	2017 – 2024
Postdoctoral Research Associate	Princeton University Advisor: Dr. Nicholas Turk-Browne	2013 – 2017

## **HONORS, AWARDS, & FELLOWSHIPS**

Fellow of the UC Irvine Center for the Neurobiology of Learning and Memory Presidential Award for Outstanding Teaching, Columbia University Rising Star, Association for Psychological Science Psychonomic Society Fellow (FPsyS)	2	2023 2022 2019 2018
Provost's Dissertation Year Fellowship, University of California, Davis	2012 – 2	
Floyd and Mary Schwall Dissertation Year Fellowship, University of California, Davis	2012 – 2	
Don Owings Memorial Prize, University of California, Davis	2	2012
for 1st place talk at the Department of Psychology Spring Conference		
University College Medal for Best Degree in Science, University of Toronto	_	2008
Rose Sheinin Award, University of Toronto	2	2008
for most outstanding female student graduating in a science program		
McNab Scholarship in Psychology, University of Toronto	2	2008
Reuben Wells Leonard Open Scholarship, University of Toronto	2	2007
John Davidson Ketchum Memorial Scholarship in Psychology, University of Toronto	2	2007
Natural Sciences and Engineering Research Council of Canada	2	2006
Undergraduate Student Research Award; \$4,500 CAD		
Dr. James A. & Connie P. Dickson Scholarship in the Sciences and Mathematics, <i>University of Toronto</i>	2	2006
Department of Psychology Student Award, University of Toronto	2	2006
Vincent Bladen In-Course Scholarship, University of Toronto	2	2005
Queen Elizabeth Scholarship	2004 – 2	2008
University of Toronto Scholar	2004 – 2	2008
Dean's List Scholar, University of Toronto	2004 – 2	2008
Entrance Scholarship, University of Toronto	2	2004
First Year Honor's List, University of Toronto	2	2004

## **FUNDING**

## **Principal Investigator or Co-Investigator**

National Institutes of Health Research Project Grant (R01EY03443)	Nationa	Unstitutes	of Health	Research	Project	Grant (	(R01FY034	436)
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2023 - 2028

National Eye Institute

Title: Hierarchies of spatiotemporal anticipation in the human brain

Role: PI

MPI: Dr. Christopher Baldassano

Award Amount Including Supplement: \$2,106,300 (total direct + indirect costs; direct costs = \$1,295,563)

Award Amount Excluding Supplement: \$2,034,841.00 (total direct + indirect costs; direct costs = \$1,250,000)

Supplement Amount: \$71,459 (direct + indirect costs; direct costs = \$45,563)

## National Science Foundation CAREER Award (BCS-1844241, BCS-2435322)

2019 - 2026

Division of Behavioral and Cognitive Sciences

Two-year no-cost extension due to COVID-19 and institution move

Title: How Memory Contributes to Goal-Directed Attention

Role: PI

Amount: \$889,840 (total direct + indirect costs; direct costs = \$583,509)

National Science Foundation Innovations in Graduate Education Grant

2022 - 2025

(DGE-2224777; DGE-2436430)	
Division of Graduate Education	
Title: Reviewer Zero: Changing the culture of peer review to increase diversity, equity, & inclusion Role: PI	
Other Pls: Dr. Amanda Diekman; Dr. Pablo Gomez	
Total Award Amount: \$498,860 (total direct + indirect costs; direct costs = \$318,038)	
PI Aly's Award Amount: \$107,709 (total direct + indirect costs; direct costs = \$65,477)	
Canadian Institutes of Health Research Project Grant	2020 – 2025
Institute of Neurosciences, Mental Health, and Addiction	
Title: Investigating the Dynamics of Thought using Brain Connectivity and Experience Sampling Role: Co-Investigator	
Principal Investigator: Dr. Kalina Christoff; Other Co-Investigators: Dr. Jessica Andrews-Hanna; Dr. G Amount: \$795,600 CAD (direct costs)	Caitlin Mills
NARSAD Young Investigator Grant (Brain & Behavior Research Foundation, Grant #27893)  Title: Balancing Internally- and Externally-Focused Thought in the Brain  Role: PI	2020 – 2022
Amount: \$69,454 (direct costs)	
Zuckerman Institute Seed Grant for MR Studies (CU-ZI-MR-S-0016)  Title: Multiple Timescales of Prediction in the Brain During Naturalistic Perception  Role: PI	2019 – 2021
Co-PI: Dr. Christopher Baldassano	
60 scanning hours = \$36,000 in scanning costs	
Provost's Grant for Junior Faculty who Contribute to the Diversity Goals of the University  Title: Complementary Forms of Goal-Directed Behavior  Role: PI	2018 – 2019
Amount: \$25,000 (direct costs)	
Zuckerman Institute Seed Grant for MR Studies (CU-ZI-MR-S-0001)	2018 – 2019
Title: Modulation of Representational Connectivity by Memory-Guided Attention Role: PI	
64 scanning hours = \$38,400 in scanning costs	
Lenfest Junior Faculty Development Grant	2018 – 2019
Title: Guidance of Attention and Visual Exploration by the Hippocampus Role: PI	

Natural Sciences and Engineering Research Council of Canada PGS-D (NSERC-433638) Doctoral Postgraduate Scholarship (Foreign)

Title: The Role of the Perirhinal Cortex in Associative Memory

Role: PI

Amount: \$11,000 (direct costs)

2009 - 2012

Amount: \$63,000 CAD (direct costs)

## Natural Sciences and Engineering Research Council of Canada PGS-M (NSERC-405293)

2008 - 2009

*Master's Postgraduate Scholarship (Foreign)* 

Title: Episodic and Procedural Memory Consolidation in Older and Younger Adults

Role: PI

Amount: \$17, 500 CAD (direct costs)

#### Other Grants (Non-PI / Non-Co-I Role)

#### APA Commission on Ethnic Minority Recruitment, Retention, and Training Grant

2020 - 2022

Title: Reviewer Zero: Evaluating and Improving the Peer Review Experience for Ethnic Minority Psychologists
Role: Member of the Reviewer Zero Organizing Committee; Key role in running Reviewer Zero; Wrote letter of support
Pls: Dr. Molly Crockett and Dr. Anna Fisher

Amount: \$10,000 (direct costs)

#### **PUBLICATIONS**

**Conventions in the field for authorship of publications:** Senior author (lead Principal Investigator) is listed last. First and last authors have the largest roles. \* indicates individuals with equal contributions.

#### **Preprints (under review)**

Poskanzer C\*, Tarder-Stoll H\*, Javid R, Spolaore E, **Aly M**. (2024). Prediction and encoding are coupled, not competitive. *PsyArXiv*. <a href="https://doi.org/10.31234/osf.io/usjv2">https://doi.org/10.31234/osf.io/usjv2</a>

\*These authors contributed equally

Jayakumar M, Tsegai Moore A, Nemeth C, **Aly M**. (2024). Pupil size at encoding predicts the temporal structure of memory. *PsyArXiv*. <a href="https://doi.org/10.31234/osf.io/bzqfu">https://doi.org/10.31234/osf.io/bzqfu</a>

Favila SE, **Aly M**. (2023). Hippocampal mechanisms resolve competition in memory and perception. *bioRxiv*. <a href="https://doi.org/10.1101/2023.10.09.561548">https://doi.org/10.1101/2023.10.09.561548</a>

#### **Peer-Reviewed Publications**

Wakeland-Hart C, **Aly M**. (in press). Predicting image memorability from evoked feelings. In press at *Behavior Research Methods*. Manuscript available on *PsyArXiv*. <a href="https://doi.org/10.31234/osf.io/grxdz">https://doi.org/10.31234/osf.io/grxdz</a>

Kathios N, Bloom PA, Singh A, Bartlett E, Algharazi S, Siegelman M, Shen F, Beresford L, DiMaggio-Potter ME, Bennett S, Natarajan N, Ou Y, Loui P, **Aly M**\*, Tottenham N\*. (2024). On the role of familiarity and developmental exposure in music-evoked autobiographical memories. *Memory*. <a href="https://doi.org/10.1080/09658211.2024.2420973">https://doi.org/10.1080/09658211.2024.2420973</a> \*These authors are co-Pls of this work

Tarder-Stoll H, Baldassano C\*, **Aly M**\*. (2024). The brain hierarchically represents the past and future during multistep anticipation. *Nature Communications*, 15, 9094. <a href="https://doi.org/10.1038/s41467-024-53293-3">https://doi.org/10.1038/s41467-024-53293-3</a> \*These authors are co-Pls of this work

Tarder-Stoll H, Baldassano C\*, **Aly M**\*. (2024). Consolidation enhances sequential multistep anticipation but diminishes access to perceptual features. *Psychological Science*, 35, 1178-1199. https://doi.org/10.1177/09567976241256617

\*These authors are co-PIs of this work

Cohanpour M, **Aly M**\*, Gottlieb J\*. (2024). Neural representations of sensory uncertainty and confidence are associated with perceptual curiosity. *Journal of Neuroscience*, 44(33):e0974232024. https://doi.org/10.1523/JNEUROSCI.0974-23.2024

\*These authors are co-PIs of this work

Thieu M, Wilkins L, **Aly M**. (2024). Episodic-semantic linkage for \$1000: New semantic knowledge is more strongly coupled with episodic memory in trivia experts. *Psychonomic Bulletin & Review*, 31, 1867–1879. https://doi.org/10.3758/s13423-024-02469-5

Featured in *Scientific American*: <a href="https://www.scientificamerican.com/article/jeopardy-winner-reveals-entwined-memory-systems-make-a-trivia-champion/">https://www.scientificamerican.com/article/jeopardy-winner-reveals-entwined-memory-systems-make-a-trivia-champion/</a>

Featured by *Science Friday* (WNYC Studios and NPR): https://www.sciencefriday.com/segments/jeopardy-winner-memory-recall/

Featured by NPR's Weekend Edition:

https://www.npr.org/2024/02/18/1232301993/a-new-study-finds-the-memory-systems-that-give-trivia-champions-an-edge

Yonelinas A, Hawkins C, Abovian A, **Aly M**. (2024). The role of recollection, familiarity, and the hippocampus in episodic and working memory. *Neuropsychologia*, 193, 108777. https://doi.org/10.1016/j.neuropsychologia.2023.108777

**Aly M**, Colunga E, Crockett MJ, Goldrick M, Gomez P, Kung FYH, McKee PC, Pérez M, Stilwell SM, Diekman AB. (2023). Changing the culture of peer review for a more inclusive and equitable psychological science. *Journal of Experimental Psychology: General*, 152, 3546–3565. <a href="https://doi.org/10.1037/xge0001461">https://doi.org/10.1037/xge0001461</a>

Poskanzer C, **Aly M**. (2023). Switching between external and internal attention in hippocampal networks. *Journal of Neuroscience*, 43, 6538–6552. <a href="https://doi.org/10.1523/JNEUROSCI.0029-23.2023">https://doi.org/10.1523/JNEUROSCI.0029-23.2023</a>

Silston B, Ochsner KN, **Aly M**. (2023). Threat impairs flexible use of a cognitive map. *Motivation and Emotion*, 47, 908-927. <a href="https://doi.org/10.1007/s11031-023-10036-z">https://doi.org/10.1007/s11031-023-10036-z</a>

Bornstein AM, **Aly M**, Feng SF, Turk-Browne NB, Norman KA, Cohen JD. (2023). Associative memory retrieval resolves anticipated uncertainty of upcoming perceptual decisions. *Cognitive, Affective, and Behavioral Neuroscience*, 23, 645–665. <a href="https://doi.org/10.3758/s13415-023-01092-6">https://doi.org/10.3758/s13415-023-01092-6</a>

Featured by the Psychonomic Society:

https://featuredcontent.psychonomic.org/when-looks-are-deceiving-our-memory-can-help/

Jayakumar M, Balusu C, **Aly M**. (2023). Attentional fluctuations and the temporal organization of memory. *Cognition*, 235, 105408, 1-32. <a href="https://doi.org/10.1016/j.cognition.2023.105408">https://doi.org/10.1016/j.cognition.2023.105408</a>

Bloom PA, Bartlett E, Kathios N, Algharazi S, Siegelman M, Shen F, Beresford L, DiMaggio-Potter M, Singh A, Bennett S, Natarajan N, Lee H, Sajid S, Joyce E, Fischman R, Hutchinson SJ, Pan S, Tottenham N\*, **Aly M**\*. (2023). Effects of familiar music exposure on deliberate retrieval of remote episodic and semantic memories in healthy aging adults. *Memory*, 31, 428-456. <a href="https://doi.org/10.1080/09658211.2023.2166078">https://doi.org/10.1080/09658211.2023.2166078</a>

\*These authors are co-PIs of this work

Hirschstein Z, **Aly M**. (2023). Long-term memory and working memory compete and cooperate to guide attention. *Attention, Perception, & Psychophysics*, 85, 1517-1549. <a href="https://doi.org/10.3758/s13414-022-02593-1">https://doi.org/10.3758/s13414-022-02593-1</a>

Bloom PA, VanTieghem M, Gabard-Durnam L, Gee DG, Flannery J, Caldera C, Goff B, Telzer EH, Humphreys KL, Fareri DS, Shapiro M, Algharazi S, Bolger N, **Aly M**, Tottenham N. (2022). Age-related change in task-evoked amygdala-prefrontal circuitry: A multiverse approach with an accelerated longitudinal cohort aged 4-22 years. *Human Brain Mapping*, 43, 3221-3244. https://doi.org/10.1002/hbm.25847

Lee CS, **Aly M**, Baldassano C. (2021). Anticipation of temporally structured events in the brain. *eLife*. 10:e64972. https://doi.org/10.7554/eLife.64972

(reviewed and accepted prior to publication model change in 2023)

Featured in a Journal Club article in *PNAS*:

https://www.pnas.org/post/journal-club/several-brain-regions-help-us-anticipate-whats-going-to-happennext

Ruiz NA\*, Thieu MK\*, **Aly M**. (2021). Cholinergic modulation of hippocampally mediated attention and perception. *Behavioral Neuroscience*, 135, 51-70. <a href="https://doi.org/10.1037/bne0000405">https://doi.org/10.1037/bne0000405</a> \*These authors contributed equally

Ruiz NA, Meager MR, Agarwal S, **Aly M**. (2020). The medial temporal lobe is critical for spatial relational perception. *Journal of Cognitive Neuroscience*, 32, 1780-1795. <a href="https://doi.org/10.1162/jocn\_a\_01583">https://doi.org/10.1162/jocn\_a\_01583</a>

Schaumberg AJ, Juarez-Nicanor W, Choudhury SJ, Pastrián LG, Pritt BS, Prieto Pozuelo M, Sotillo Sánchez R, Ho K, Zahra N, Sener BD, Yip S, Xu B, Rao Annavarapu S, Morini A, Jones KA, Rosado-Orozco K, Mukhopadhyay S, Miguel C, Yang H, Rosen Y, Ali RH, Folaranmi OO, Gardner JM, Rusu C, Stayerman C, Gross J, Suleiman DE, Sirintrapun SJ, **Aly M\***, Fuchs TJ\*. (2020). Interpretable multimodal deep learning for real-time pan-tissue pan-disease pathology search on social media. *Modern Pathology*, 33, 2169-2185. <a href="https://doi.org/10.1038/s41379-020-0540-1">https://doi.org/10.1038/s41379-020-0540-1</a>
\*These authors are co-Pls of this work

Günseli E, **Aly M**. (2020). Preparation for upcoming attentional states in the hippocampus and medial prefrontal cortex. *eLife*. 9:e53191. <a href="http://doi.org/10.7554/eLife.53191">http://doi.org/10.7554/eLife.53191</a> (reviewed and accepted prior to publication model change in 2023)

Tarder-Stoll H\*, Jayakumar M\*, Dimsdale-Zucker HR, Günseli E, **Aly M**. (2020). Dynamic internal states shape memory retrieval. *Neuropsychologia*, 138, 107328. <a href="http://doi.org/10.1016/j.neuropsychologia.2019.107328">http://doi.org/10.1016/j.neuropsychologia.2019.107328</a> \*These authors contributed equally

Córdova NI, Turk-Browne NB, **Aly M**. (2019). Focusing on what matters: Modulation of the human hippocampus by relational attention. *Hippocampus*, 29, 1025-1037. <a href="https://doi.org/10.1002/hipo.23082">https://doi.org/10.1002/hipo.23082</a>

**Aly M**, Turk-Browne NB. (2018). Flexible weighting of diverse inputs makes hippocampal function malleable. *Neuroscience Letters*, 680, 13-22. http://doi.org/10.1016/j.neulet.2017.05.063

**Aly M**, Chen J, Turk-Browne NB, Hasson U. (2018). Learning naturalistic temporal structure in the posterior medial network. *Journal of Cognitive Neuroscience*, 30, 1345–1365. <a href="https://doi.org/10.1162/jocn\_a\_01308">https://doi.org/10.1162/jocn\_a\_01308</a>

Borders AA, **Aly M**, Parks CM, Yonelinas AP. (2017). The hippocampus is particularly important for building associations across stimulus domains. *Neuropsychologia*, 99, 335-342.

### https://doi.org/10.1016/j.neuropsychologia.2017.03.032

**Aly M**, Turk-Browne NB. (2017). How hippocampal memory shapes, and is shaped by, attention. In *The Hippocampus from Cells to Systems*. (Eds. Deborah E. Hannula and Melissa C. Duff). Springer International Publishing AG: Switzerland. pp. 369-403. <a href="https://doi.org/10.1007/978-3-319-50406-3">https://doi.org/10.1007/978-3-319-50406-3</a> 12

**Aly M**, Turk-Browne NB. (2016). Attention promotes episodic encoding by stabilizing hippocampal representations. *Proceedings of the National Academy of Sciences*, 113, E420-E429. https://doi.org/10.1073/pnas.1518931113

**Aly M**, Turk-Browne NB. (2016). Attention stabilizes representations in the human hippocampus. *Cerebral Cortex*, 26, 783-796. <a href="http://doi.org/10.1093/cercor/bhv041">http://doi.org/10.1093/cercor/bhv041</a>

**Aly M**, Wansard M, Segovia F, Yonelinas AP, Bastin C. (2014). Cortical and subcortical contributions to state- and strength-based perceptual judgments. *Neuropsychologia*, 64, 145-156. https://doi.org/10.1016/j.neuropsychologia.2014.09.025

Elfman KW, **Aly M**, Yonelinas AP. (2014). Neurocomputational account of memory and perception: Thresholded and graded signals in the hippocampus. *Hippocampus*, 24, 1672-1686. <a href="http://doi.org/10.1002/hipo.22345">http://doi.org/10.1002/hipo.22345</a>

**Aly M**, Ranganath C, Yonelinas AP. (2014). Neural correlates of state- and strength-based perception. *Journal of Cognitive Neuroscience*, 26, 792-809. <a href="https://doi.org/10.1162/jocn\_a\_00532">https://doi.org/10.1162/jocn\_a\_00532</a>

Koen JD, **Aly M**, Wang WC, Yonelinas AP. (2013). Examining the causes of memory strength variability: Recollection, attention failure, or encoding variability? *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 39, 1726-41. <a href="http://doi.org/10.1037/a0033671">http://doi.org/10.1037/a0033671</a>

**Aly M**, Ranganath C, Yonelinas AP. (2013). Detecting changes in scenes: The hippocampus is critical for strength-based perception. *Neuron*, 78, 1127-37. [Selected for journal cover] <a href="https://doi.org/10.1016/j.neuron.2013.04.018">https://doi.org/10.1016/j.neuron.2013.04.018</a>

**Aly M**, Yonelinas AP. (2012). Bridging consciousness and cognition in memory and perception: Evidence for both state and strength processes. *PLoS ONE*, 7(1):e30231, 1-16. <a href="https://doi.org/10.1371/journal.pone.0030231">https://doi.org/10.1371/journal.pone.0030231</a>

**Aly M**, Yonelinas AP, Kishiyama M, Knight RT. (2011). Damage to the lateral prefrontal cortex impairs familiarity but not recollection. *Behavioral Brain Research*, 225, 297-304. <a href="https://doi.org/10.1016/j.bbr.2011.07.043">https://doi.org/10.1016/j.bbr.2011.07.043</a>

Yonelinas AP, **Aly M**, Wang W, Koen JD. (2010). Recollection and familiarity: Examining controversial assumptions and new directions. *Hippocampus*, 20, 1178-94. <a href="http://doi.org/10.1002/hipo.20864">http://doi.org/10.1002/hipo.20864</a>

**Aly M**, Knight RT, Yonelinas AP. (2010). Faces are special but not too special: Spared face recognition in amnesia is based on familiarity. *Neuropsychologia*, 48, 3941-8. <a href="https://doi.org/10.1016/j.neuropsychologia.2010.09.005">https://doi.org/10.1016/j.neuropsychologia.2010.09.005</a>

**Aly M**, Moscovitch M. (2010). The effects of sleep on episodic memory in older and younger adults. *Memory*, 18, 327-34. https://doi.org/10.1080/09658211003601548

#### **Editorials, Commentaries, & Perspectives**

Aly M. (in press). Dying to live. In Growing Up in Science. (Ed. Weiji Ma). Princeton University Press.

**Aly M**, Ansari S, Colunga E, Crockett MJ, Diekman AB, Goldrick M, Gomez P, Kung FYH, McKee PC, Pérez M, Stilwell SM. (2024). Mentorship practices that improve the culture of peer review. *Nature Reviews Psychology*, 3, 2-3. <a href="https://doi.org/10.1038/s44159-023-00261-1">https://doi.org/10.1038/s44159-023-00261-1</a>

**Aly M**. (2020). Brain dynamics underlying memory for lifetime experiences. *Trends in Cognitive Sciences*, 24, 780-781. https://doi.org/10.1016/j.tics.2020.06.010

**Aly M**. (2019). Studying and experiencing mental illness. *Journal of Science Stories*. https://storiesinscience.org/2019/06/12/studying-and-experiencing-mental-illness/

Featured in Nature's daily briefing: https://www.nature.com/articles/d41586-019-01898-w

Aly M. (2018). The key to a happy lab life is in the manual. *Nature*, 561, 7.

# https://doi.org/10.1038/d41586-018-06167-w

My lab manual is publicly available and has been used all over the world to inspire other lab manuals. https://github.com/alylab/labmanual

**Aly M**, Ranganath C. (2018). New perspectives on the hippocampus and memory. *Neuroscience Letters*, 680, 1-3. https://doi.org/10.1016/i.neulet.2018.05.047

Aly M. (2018). In sight, in mind. eLife, 7:e35663, 1-3. http://doi.org/10.7554/eLife.35663

#### **CONFERENCE PRESENTATIONS**

Favila SE, **Aly M**. (Nov 2024). Resolving competition in long-term memory-guided visual attention. Talk by S. Favila at the Psychonomic Society Meeting. New York, NY.

Al-Zahli N, **Aly M**\*, Baldassano C\*. (Oct 2024). Investigating timescale changes in the brain during repeated film viewing. Nanosymposium talk at the Society for Neuroscience Meeting. Chicago, IL.

Hirschstein Z, **Aly M**\*, Baldassano C\*. (Oct 2024). Decoupling feature and timescale hierarchies in visual cortex. Poster at the Society for Neuroscience Meeting. Chicago, IL.

Poskanzer C, Javid R, Tarder-Stoll H, **Aly M**. (Oct 2024). Cooperation vs. competition between encoding and retrieval in behavior and in the hippocampus. Poster at the Society for Neuroscience Meeting. Chicago, IL.

Poskanzer C, Tarder-Stoll H, Javid R, **Aly M**. (April 2024). Do encoding and prediction compete or cooperate? Poster at the Cognitive Neuroscience Society Meeting. Toronto, ON.

Tarder-Stoll, Baldassano C\*, **Aly M**\*. (April 2024). Flexible updating of hippocampal representations guides multi-step prediction. Poster at the Cognitive Neuroscience Society Meeting. Toronto, ON.

Wakeland-Hart C, **Aly M**. (April 2024). Predicting image memorability from evoked feelings. Poster at the Cognitive Neuroscience Society Meeting. Toronto, ON.

Yonelinas A, Hawkins C, Abovian A, Aly M. (April 2024). How Does the Hippocampus Support Subjective Reports

of Confidence in Episodic and Working Memory? Talk by A. Yonelinas at the Cognitive Neuroscience Society Meeting. Symposium: Subjectivity: Who cares? Toronto, ON.

Tarder-Stoll, Baldassano C\*, **Aly M**\*. (Nov 2023). Prospective and retrospective representations of temporal structure across hippocampal and visual regions. Poster at the Society for Neuroscience Meeting. Washington, DC.

Javid R, Poskanzer C, Tarder-Stoll H, **Aly M**. (Nov 2023). Predicting the future comes at a cost to encoding the present. Poster at the Annual Biomedical Research Conference for Minoritized Scientists. Phoenix, AZ.

Jayakumar M, Tsegai-Moore AS, Nemeth C, Khine M, **Aly M**. (Nov 2023). Pupil size at encoding predicts the temporal organization of memory. Poster at the Psychonomic Society Annual Meeting. San Francisco, CA.

Favila SE, **Aly M**. (Sept 2023). Resolving competition in memory-guided attention. Talk by M. Aly at the Memory Disorders Research Society Meeting. Los Angeles, CA.

Tarder-Stoll H, Baldassano C\*, **Aly M**\*. (May 2023). Multistep anticipation improves with consolidation but loses perceptual detail. Data blitz at the Context and Episodic Memory Symposium. Walt Disney World, Florida. \*co-Pls

Favila SE, **Aly M**. (May 2023). Hippocampal and visual cortex contributions to resolving competition during memory-guided attention. Poster at the Vision Sciences Society Meeting. St. Pete Beach, FL.

Favila SE, **Aly M**. (March 2023). Hippocampal differentiation and visual cortex anticipation resolve competition during memory-guided attention. Poster at the Cognitive Neuroscience Society Meeting. San Francisco, CA.

Poskanzer C, **Aly M**. (March 2023). Switching between external and internal attention in hippocampal networks. Poster at the Cognitive Neuroscience Society Meeting. San Francisco, CA.

Thieu MK, Wilkins L, **Aly M**. (March 2023). Episodic-Semantic Linkage for \$1000: Episodic memory bolsters acquisition of new semantic knowledge in trivia experts. Poster at the Cognitive Neuroscience Society Meeting. San Francisco, CA.

Favila SE, **Aly M**. (Sept 2022). Resolving competition during memory-guided visual attention. Talk at the Manhattan Area Memory Meeting. New York, NY.

Hirschstein Z, **Aly M**. (Sept 2022). Cooperation and competition in memory-guided attention. Talk at the Manhattan Area Memory Meeting. New York, NY.

Tarder-Stoll H, Baldassano C\*, **Aly M**\*. (Sept 2022). Top-down modulation of multi-step anticipation in changing environments. Talk at the Manhattan Area Memory Meeting. New York, NY. \*co-Pls

Cohanpour M, **Aly M**\*, Gottlieb J\*. (April 2022). Towards a mechanistic account of perceptual curiosity. Poster at the Cognitive Neuroscience Society Meeting. San Francisco, CA. \*co-Pls

Favila SE, **Aly M**. (April 2022). Resolving competition during memory-guided visual attention. Poster at the Cognitive Neuroscience Society Meeting. San Francisco, CA.

Hirschstein Z, **Aly M**. (April 2022). Cooperation and competition in memory-guided attention. Poster at the Cognitive Neuroscience Society Meeting. San Francisco, CA.

Tarder-Stoll H, Baldassano C\*, **Aly M**\*. (April 2022). Top-down modulation of multi-step anticipation in changing environments. Poster at the Cognitive Neuroscience Society Meeting. San Francisco, CA. \*co-Pls

Cohanpour M, **Aly M**\*, Gottlieb J\*. (Nov 2021). Towards a mechanistic account of perceptual curiosity. Poster at the Society for Neuroscience (Virtual) Meeting. \*co-Pls

Singh A, Bloom PA, Bartlett E, Kathios N, Algharazi S, Tottenham N\*, **Aly M**\*. (Nov 2021). Temporal structure of episodic and semantic details within autobiographical memory recall. Data Blitz presented at the Harvard Women in Psychology Trends in Psychology Summit.

\*co-PIs

Kathios N, Bloom PA, Bartlett E, Algharazi S, **Aly M**\*, Tottenham N\*. (Nov 2021). Self-reported emotion valence evoked by popular music in healthy aging. Poster presented at the International Conference of Students of Systematic Musicology.

\*co-PIs

Singh A, Bloom PA, Bartlett E, Kathios N, Algharazi S, Tottenham N\*, **Aly M**\*. (Oct 2021). Temporal structure of episodic and semantic details within autobiographical memory recall. Poster presented at the 11<sup>th</sup> Annual oSTEM (Virtual) Conference.

\*co-PIs

Silston B, Ochsner K, **Aly M**. (Oct 2021). Threat impairs flexible use of a cognitive map. Talk by M. Aly at the Memory Disorders Research Society (Virtual) Meeting.

Jayakumar M, Balusu C, **Aly M**. (Aug 2021). Spontaneous attentional fluctuations and the temporal organization of recall. Poster at the Context and Episodic Memory Symposium. Philadelphia, PA.

Bloom PA, VanTieghem M, Gabard-Durnam L, Gee D, Flannery J, Caldera C, Telzer E, Humphreys KL, Fareri D, Shapiro M, Bolger N, **Aly M**, Tottenham N. (April 2021). Age-related change in stimulus-elicited amygdala-prefrontal circuitry: A longitudinal multiverse approach. Flash talk at the Society for Research in Child Development Biennial Meeting, Virtual.

Bloom PA, Bartlett E, Kathios N, Algharazi S, Siegelman M, Shen F, Beresford L, DiMaggio-Potter M, Tottenham N\*, **Aly M**\*. (March 2021). Effects of familiar music exposure on retrieval of remote episodic and semantic memories in healthy aging adults. Poster at the Cognitive Neuroscience Society Virtual Meeting. \*co-Pls

Cohanpour M, **Aly M**\*, Gottlieb J\*. (March 2021). Towards a mechanistic account of perceptual curiosity. Poster at the Cognitive Neuroscience Society Virtual Meeting. \*co-Pls

Dimsdale-Zucker HR, **Aly M**\*, Baldassano C\*. (March 2021). Using contexts defined by temporal structure to guide memory. Poster at the Cognitive Neuroscience Society Virtual Meeting. \*co-Pls

Favila SE, **Aly M**. (March 2021). Resolving competition during memory-guided visual exploration. Poster at the Cognitive Neuroscience Society Virtual Meeting.

Jayakumar M, Balusu C, **Aly M**. (March 2021). Spontaneous attentional fluctuations and the temporal organization of recall. Poster at the Cognitive Neuroscience Society Virtual Meeting.

Schaumberg AJ, Stayerman C, Yip S, Mukhopadhyay S, Pastrián LG, Prieto Pozuelo M, Sener BD, Rao Annavarapu S, Morini A, Jones KA, Rosado-Orozco K, Miguel Ruiz C, Yang H, Rosen Y, Folaranmi OO, Gardner JM, Gross J,

Suleiman DE, Takashi, F, Riddle N, Ong M, Cecchini M, Gibier JB, Pijuan L, Lu MY, Fuchs TJ, **Aly M**\*, Mahmood F\*. (Oct 2020). Deep learning of attention-guided multimodal histopathology search on social media. Poster at Pathology Visions. [awarded Best Poster by a Trainee]

Extended abstract published in J Pathol Inform. 2021; 12: 37. PMCID: PMC8546358 \*co-Pls

Bloom PA, VanTieghem M, Gabard-Durnam L, Gee D, Flannery J, Caldera C, Goff B, Telzer E, Humphreys K, Shapiro M, Bolger N, **Aly M**, Tottenham N. (Aug 2020). Age-related change in stimulus-elicited amygdala-prefrontal circuitry: a longitudinal multiverse approach. Poster at the Flux 2020 Virtual Congress.

Tarder-Stoll H, Baldassano C, **Aly M**. (May 2020). Multi-step prediction and integration in naturalistic environments. Poster presented at the Cognitive Neuroscience Society meeting. Physical meeting canceled because of the COVID-19 pandemic. Poster presented virtually.

Günseli E, **Aly M**. (Oct 2019). Memory-guided attentional states are established by the hippocampus and medial prefrontal cortex. Poster at the Society for Neuroscience Meeting. Chicago, IL.

Lee C, **Aly M**, Baldassano C. (Oct 2019). Anticipation of temporally structured events in the brain. Poster at the Society for Neuroscience Meeting. Chicago, IL.

Ruiz N, **Aly M**. (Oct 2019). Cholinergic modulation enhances hippocampally-dependent spatial relational attention. Poster at the Society for Neuroscience Meeting. Chicago, IL.

Schaumberg AJ, Juarez W, Choudhury SJ, Pastrián LG, Pritt BS, Prieto Pozuelo M, Sotillo Sánchez R, Ho K, Zahra N, Sener BD, Yip S, Xu B, Rao Annavarapu S, Morini A, Jones KA, Rosado-Orozco K, Mukhopadhyay S, Miguel C, Yang H, Rosen Y, Ali RH, Folaranmi O, Gardner JM, Rusu C, Stayerman C, Gross J, Suleiman D, Sirintrapun SJ, **Aly M**\*, Fuchs TJ\*. (Oct 2019). Machine learning for real-time search and prediction of disease state to aid pathologist collaboration on social media. Poster at Pathology Visions. Orlando, FL. [ awarded Best Image Analysis poster ] Extended abstract published in J Pathol Inform. 2020; 11: 1. PMCID: PMC7003557
\*\*co-Pls

Günseli E, **Aly M**. (May 2019). Memory-guided attentional states are established by the hippocampus and medial prefrontal cortex. Talk by E. Günseli at the Manhattan Area Memory Meeting. Princeton, NJ.

Silston B, Ochsner K, **Aly M**. (May 2019). Threat impairs flexible use of a cognitive map. Talk by B. Silston at the Manhattan Area Memory Meeting. Princeton, NJ.

**Aly M.** (May 2019). Beyond memory and perception: Operations and representations in the brain. Discussion talk at the Context and Episodic Memory Symposium. Philadelphia, PA.

Günseli E, **Aly M**. (May 2019). Establishing memory-driven attentional goals via hippocampus and medial prefrontal cortex. Poster at the Context and Episodic Memory Symposium. Philadelphia, PA.

Lee C, **Aly M**, Baldassano C. (May 2019). Anticipation of temporally structured events in the brain. Poster at the Context and Episodic Memory Symposium. Philadelphia, PA.

Ruiz N, **Aly M**. (May 2019). Cholinergic modulation enhances hippocampally-dependent spatial relational attention. Poster at the Context and Episodic Memory Symposium. Philadelphia, PA.

Silston B, Ochsner K, **Aly M**. (May 2019). Threat impairs flexible use of a cognitive map. Poster at the Context and Episodic Memory Symposium. Philadelphia, PA.

Günseli E, **Aly M**. (March 2019). Switching between attention and memory in the hippocampus and medial prefrontal cortex. Poster at the Cognitive Neuroscience Society meeting. San Francisco, CA.

Ruiz N, **Aly M**. (March 2019). Cholinergic modulation enhances hippocampally-dependent spatial relational attention. Poster at the Cognitive Neuroscience Society meeting. San Francisco, CA.

Silston B, Ochsner K, **Aly M**. (March 2019). Threat impairs flexible use of a cognitive map. Poster at the Cognitive Neuroscience Society meeting. San Francisco, CA.

Schaumberg AJ, Juarez W, Choudhury SJ, Pastrian LG, Pritt BS, Pozuelo MP, Sanchez RS, Ho K, Zahra N, Sener BD, Yip S, Xu B, Annavarapu SR, Morini A, Jones KA, Rosado-Orozco K, Sirintrapun SJ, **Aly M\***, Fuchs TJ\*. (Sept 2018). Large-scale annotation of histopathology images from social media. Poster at the Memorial Sloan-Kettering Cancer Center csBio Annual Retreat. Skytop, PA, USA. [awarded best poster]
\*co-Pls

Schaumberg AJ, Juarez W, Choudhury SJ, Pastrian LG, Pritt BS, Pozuelo MP, Sanchez RS, Ho K, Zahra N, Sener BD, Yip S, Xu B, Annavarapu SR, Morini A, Jones KA, Rosado-Orozco K, Sirintrapun SJ, **Aly M\***, Fuchs TJ\*. (Aug 2018). Large-scale annotation of histopathology images from social media. Poster presented by high school students W. Juarez and S. Choudhury, with graduate student A. Schaumberg advising, at the Weill Cornell High School Science Immersion Program Poster Session. New York, NY, USA. [awarded best poster]
\*co-Pls

Schaumberg AJ, Juarez W, Choudhury SJ, Pastrian LG, Pritt BS, Pozuelo MP, Sanchez RS, Ho K, Zahra N, Sener BD, Yip S, Xu B, Annavarapu SR, Morini A, Jones KA, Rosado-Orozco K, Sirintrapun SJ, **Aly M**\*, Fuchs TJ\*. (Aug 2018). Large-scale annotation of histopathology images from social media. Poster at the 11th Annual Computational Biology and Medicine Symposium. Delaware, PA, USA. \*co-Pls

Ruiz N, **Aly M**. (May 2018). The hippocampus is necessary for spatial relational attention. Talk by N. Ruiz at the Manhattan Area Memory Meeting. New York, NY.

**Aly M**. (Jan 2018). Attentional state as a context in hippocampal memory. Talk at the Winter Conference on the Neurobiology of Learning and Memory. Park City, Utah.

**Aly M**, Chen J, Turk-Browne NB, Hasson U. (Nov 2016). Narrative coherence and temporal structure in the posterior medial network. Poster at the Society for Neuroscience Meeting. San Diego, CA.

Antony J, Baldassano C, **Aly M**, Norman KA, Turk-Browne NB. (Nov 2016). Using an inverted encoding model to reconstruct spatial position and forward planning in a virtual reality environment. Poster at the Society for Neuroscience Meeting. San Diego, CA.

Bornstein AM, **Aly M**, Feng SF, Turk-Browne NB, Norman KA, Cohen JD. (Nov 2016). First you remember, then you see: Dynamic sampling from learned associations biases perceptual inference. Poster at the Society for Neuroscience Meeting. San Diego, CA.

**Aly M**, Chen J, Turk-Browne NB, Hasson U. (May 2016). Narrative coherence and temporal structure in the posterior medial network. Talk at the Manhattan Area Memory Meeting. New York, NY.

**Aly M**, Turk-Browne NB. (Oct 2015). Attention promotes episodic encoding by stabilizing hippocampal representations. Talk at the Society for Neuroscience Meeting. Chicago, IL.

Bornstein AM, **Aly M**, Feng SF, Turk-Browne NB, Norman KA, Cohen JD. (Oct 2015). Memory-guided perception: Sampling from past experience during perceptual inference. Poster at the Society for Neuroscience Meeting. Chicago, IL.

**Aly M**, Turk-Browne NB. (May 2015). Attention promotes episodic encoding by stabilizing hippocampal representations. Talk at the Manhattan Area Memory Meeting. Princeton, NJ.

**Aly M**, Turk-Browne NB. (May 2015). Hippocampal representations of attentional state predict the formation of visual memories. Talk at the Vision Sciences Society Meeting. St. Pete Beach, FL.

**Aly M**, Turk-Browne NB. (May 2015). Hippocampal representations of attentional state predict the formation of episodic memory. Poster at the Context and Episodic Memory Symposium. Philadelphia, PA.

Córdova NI, **Aly M**, Turk-Browne NB. (Nov 2014). Focusing on what matters: Modulation of the human hippocampus by relational attention. Poster at the Society for Neuroscience Meeting. Washington, DC.

**Aly M**, Turk-Browne NB. (June 2014). Attention stabilizes representations in the human hippocampus. Talk at the Manhattan Area Memory Meeting. New York, NY.

**Aly M**, Turk-Browne NB. (May 2014). Top-down attention modulates representational stability in the medial temporal lobe. Poster at the Vision Sciences Society Meeting. Abstract published in *J Vision*, *14*, 631. St. Pete Beach, FL.

**Aly M**, Turk-Browne NB. (May 2014). Attention stabilizes representations in the human hippocampus. Data blitz talk at the Context and Episodic Memory Symposium. Philadelphia, PA.

**Aly M**. (May 2014). Putting attention in context: Behavioral and neural modulation of mnemonic representations. Discussion talk at the Context and Episodic Memory Symposium. Philadelphia, PA.

**Aly M**, Turk-Browne NB. (Nov 2013). Attentional states in the medial temporal lobe. Poster at the Learning to Attend, Attending to Learn Conference. San Diego, CA.

**Aly M**, Yonelinas AP, Ranganath C. (April 2013). A critical role for the hippocampus in assessing the strength of perception. Poster at the Cognitive Neuroscience Society meeting. San Francisco, CA.

Borders A, **Aly M**, Yonelinas AP. (April 2013). Associative recognition in amnesia: Crossing stimulus domains matters, temporal separation does not. Poster at the Cognitive Neuroscience Society meeting. San Francisco, CA.

Yonelinas AP, **Aly M**. (Nov 2012). From memory to perception: The medial temporal lobe and visual discrimination. Talk by A.P. Yonelinas at the Psychonomic Society Meeting. Minneapolis, MN.

**Aly M**, Yonelinas AP, Ranganath C. (Oct 2012). Separating state and strength processes in the detection of visual change: Neural correlates of perceiving and knowing. Talk at the Society for Neuroscience Meeting. New Orleans, LA.

**Aly M**, Yonelinas AP, Ranganath C. (Aug 2012). A critical role for the medial temporal lobe in assessing the varying strength of perception. Poster at the Bay Area Memory Meeting. Davis, CA.

**Aly M**, Yonelinas AP, Ranganath C. (May 2012). Investigating conscious awareness based on state and strength processes. Talk at the Department of Psychology Conference, UC Davis. Davis, CA.

Koen JD, **Aly M**, Wang WC, Kroll NEA, Yonelinas AP. (Nov 2011). The necessity of theoretical validation in signal-detection models of recognition memory. Poster at the Psychonomic Society Meeting. Seattle, WA.

**Aly M**, Yonelinas AP. (Aug 2011). Watching perception (and memory) unfold: Step functions and gradual transitions. Talk at the Bay Area Memory Meeting. Berkeley, CA.

**Aly M**, Yonelinas AP. (Nov 2010). Recollection and familiarity in long-term memory, perception, and everything in between. Poster at the Psychonomic Society Meeting. St. Louis, MO.

**Aly M**, Yonelinas AP. (Aug 2010). Recollection and familiarity in long-term memory, perception, and everything in between. Talk at the Bay Area Memory Meeting. Stanford, CA.

Koen JD, Yonelinas AP, Parks CM, **Aly M**, Ranganath C. (Aug 2010). The neural correlates supporting recognition memory of temporally continuous and discontinuous associations: An fMRI study. Talk by J.D. Koen at the Bay Area Memory Meeting. Stanford, CA.

Yonelinas AP, **Aly M**. (July 2010). Memory, perception, and everything in between. Talk by A.P. Yonelinas at the Cognitive Sciences Association for Interdisciplinary Learning. Hood River, OR.

Koen JD, Yonelinas AP, Ranganath C, Parks CM, **Aly M**. (Nov 2010). Medial-temporal lobe contributions to encoding novel across-domain associations: An examination of temporal discontinuity. Talk by J.D. Koen at the Society for Neuroscience Meeting. San Diego, CA.

#### **INVITED TALKS**

#### **Invited Seminars & Colloquia**

University of Michigan (Cognition & Cognitive Neuroscience Forum)	Jan 2024
Carnegie Mellon University (Psychology & Neuroscience Colloquium)	Jan 2024
University of California, Berkeley (Cognition Colloquium)	Nov 2023
Purdue University (Cognitive & Mathematical and Computational Psychology Colloquium)	Nov 2023
University of Minnesota (Neuroscience Seminar Series)	Oct 2023
Rotman Research Institute (Rounds Series)	Oct 2023
Washington University in St. Louis (Psychological & Brain Sciences Distinguished Visiting Speaker Series	) Sept 2023
Leibniz Research Centre for Working Environment and Human Factors (Neurocognition & Work Series)	June 2023
University of Pennsylvania (MindCORE Seminar Series)	Jan 2023
Brown University (Social-Cognitive Seminar Series)	Dec 2022
University of British Columbia (Psychology Colloquium)	Oct 2022
University of Arizona (Careers in Cognitive Neuroscience)	Sept 2022
Lehigh University (Cognitive Area Group Meeting)	Sept 2021
Vanderbilt University (Cognitive Science/Cognitive Neuroscience Seminar)	Sept 2021
Innovators in Cognitive Neuroscience	Aug 2021
(joint seminar: Dartmouth, Penn, Yale, MIT, Princeton, Harvard, Columbia, Gallaudet)	
University of Cambridge (MRC Cognition and Brain Sciences Unit, Chaucer Club)	May 2021
Cornell University (Annual Neisser Lecture, Students' Choice Speaker, Depts. Psych. & Human Dev.)	May 2021
University of Chicago (Cognitive Workshop)	May 2021
University of California, Riverside (Cognition and Cognitive Neuroscience Brown Bag)	April 2021
University of Texas at Dallas (Center for Vital Longevity Science Series)	April 2021
Queen's University (Cognitive Neuroscience Brown Bag)	April 2021
Vrije Universiteit Amsterdam (Cognitive Psychology Colloquium)	April 2021
University of California, Davis (Perception, Cognition, & Cognitive Neuroscience Brownbag)	Jan 2021
Ludwig Maximilian University of Munich (Experimental / Neuro-Cognitive Psychology Colloquium)	Nov 2020
Royal Holloway, University of London (Psychology Seminar)	Nov 2020
University of California, Los Angeles (Cognitive Psychology Forum)	Oct 2020
New York University (Cognition and Perception Colloquium)	Oct 2020
University of Oxford (Behavioral and Cognitive Neuroscience Seminar)	Oct 2020

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University of Notre Dame (Cognition, Brain, and Behavior Seminar)	Oct 2020
Northwestern University (Cognitive Brain Mapping Group)	Oct 2020
York University (Clinical Neuropsychology Series)	Oct 2020
University College London (Brain Meeting Seminar, Wellcome Centre for Human Neuroimaging)	Sept 2020
Georgia Tech (Neuro Seminar Series)	Sept 2020
University of Oslo (Cognitive Neuroscience Seminar)	Sept 2020
Rotman Research Institute (Rounds Series)	Nov 2019
Dartmouth College (Cognitive Brown Bag)	Oct 2019
Max Planck Institute for Cognitive and Brain Sciences (Mind Meeting Seminar Series)	Aug 2019
New York State Psychiatric Institute (Clinical, Cognitive, and Computational Neuroscience Seminar)	Aug 2019
Duke University (Cognitive & Cognitive Neuroscience Colloquium Series)	Nov 2018
Columbia University (Theoretical Neuroscience Seminar)	Sep 2018
New York University (Cognition and Perception Seminar)	Sep 2018
Boston University (Brain, Behavior, and Cognition Seminar)	May 2018
University of Waterloo (Theoretical Neuroscience Seminar)	Nov 2017
SUNY Downstate Medical Center (Neural and Behavioral Science Seminar)	Oct 2017
Columbia University Medical Center (Movement Disorders Seminar)	Aug 2017
Columbia University Medical Center (Cognitive Neuroscience Seminar)	May 2017
Baylor College of Medicine (Core for Advanced MRI [CAMRI] Seminar)	April 2017
University of Massachusetts, Amherst (Neuroscience and Behavior Colloquium Series)	March 2017
Icahn School of Medicine at Mount Sinai (Cognition Club)	Feb 2017
University of Arizona (Cognitive Science Colloquium Series)	Oct 2016
University of Oregon (Department of Psychology talk)	Feb 2016
Columbia University (Department of Psychology talk)	Dec 2015
University of Toronto (Psychology Department talk)	July 2011
Invited Symposia, Workshops, Discussions, & Panels	
So You Want to Participate in Peer Review: How to Write Inclusive and Equitable Reviews	Dec 2024
Black in Neuro x Reviewer Zero Workshop providing peer review training	
Hippocampal Predictions Link Perception and Memory	April 2024
Cognitive Neuroscience Society Meeting (Organized Symposium); Toronto, Ontario	•
Peer Review 101	
	Nov 2023
Black in Neuro x Reviewer Zero Workshop illuminating the hidden curriculum of peer review	Nov 2023
Black in Neuro x Reviewer Zero Workshop illuminating the hidden curriculum of peer review Diversity Salon, Northwestern University	
Diversity Salon, Northwestern University	Nov 2023 May 2023
Diversity Salon, Northwestern University  Diversity, Equity, and Inclusion series for Psychology graduate students	
Diversity Salon, Northwestern University  Diversity, Equity, and Inclusion series for Psychology graduate students  Topic: Reviewer Zero: Changing the culture of peer review	May 2023
Diversity Salon, Northwestern University Diversity, Equity, and Inclusion series for Psychology graduate students Topic: Reviewer Zero: Changing the culture of peer review Grants and External Funding Panel: NSF, NIH, DoD, VA, Acts of Congress, and other funding sources	
Diversity Salon, Northwestern University Diversity, Equity, and Inclusion series for Psychology graduate students Topic: Reviewer Zero: Changing the culture of peer review Grants and External Funding Panel: NSF, NIH, DoD, VA, Acts of Congress, and other funding sources - writing, reviewing, and committees	May 2023
Diversity Salon, Northwestern University Diversity, Equity, and Inclusion series for Psychology graduate students Topic: Reviewer Zero: Changing the culture of peer review  Grants and External Funding Panel: NSF, NIH, DoD, VA, Acts of Congress, and other funding sources - writing, reviewing, and committees Brigham and Women's Hospital Postdoc Association Career Development Series	May 2023 Feb 2023
Diversity Salon, Northwestern University  Diversity, Equity, and Inclusion series for Psychology graduate students  Topic: Reviewer Zero: Changing the culture of peer review  Grants and External Funding Panel: NSF, NIH, DoD, VA, Acts of Congress, and other funding sources  - writing, reviewing, and committees  Brigham and Women's Hospital Postdoc Association Career Development Series  Developing a Leadership Vision: Best Practices for Developing and Implementing Lab Manuals	May 2023
Diversity Salon, Northwestern University Diversity, Equity, and Inclusion series for Psychology graduate students Topic: Reviewer Zero: Changing the culture of peer review Grants and External Funding Panel: NSF, NIH, DoD, VA, Acts of Congress, and other funding sources writing, reviewing, and committees Brigham and Women's Hospital Postdoc Association Career Development Series Developing a Leadership Vision: Best Practices for Developing and Implementing Lab Manuals American Society for Biochemistry and Molecular Biology	May 2023 Feb 2023 Nov 2022
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Diversity Salon, Northwestern University Diversity, Equity, and Inclusion series for Psychology graduate students Topic: Reviewer Zero: Changing the culture of peer review  Grants and External Funding Panel: NSF, NIH, DoD, VA, Acts of Congress, and other funding sources writing, reviewing, and committees Brigham and Women's Hospital Postdoc Association Career Development Series  Developing a Leadership Vision: Best Practices for Developing and Implementing Lab Manuals American Society for Biochemistry and Molecular Biology  Effective Teaching and Mentoring in the Classroom and the Lab Brigham and Women's Hospital Postdoc Association Career Development Series  Open Science Room Table Talk: Lab Culture Organization for Human Brain Mapping, Open Science Special Interest Group	May 2023  Feb 2023  Nov 2022  Oct 2022  June 2022
Diversity Salon, Northwestern University Diversity, Equity, and Inclusion series for Psychology graduate students Topic: Reviewer Zero: Changing the culture of peer review  Grants and External Funding Panel: NSF, NIH, DoD, VA, Acts of Congress, and other funding sources writing, reviewing, and committees Brigham and Women's Hospital Postdoc Association Career Development Series  Developing a Leadership Vision: Best Practices for Developing and Implementing Lab Manuals American Society for Biochemistry and Molecular Biology  Effective Teaching and Mentoring in the Classroom and the Lab Brigham and Women's Hospital Postdoc Association Career Development Series  Open Science Room Table Talk: Lab Culture Organization for Human Brain Mapping, Open Science Special Interest Group  From Post-Doc to Tenure-Track Faculty: What's the Process Like?	May 2023 Feb 2023 Nov 2022 Oct 2022
Diversity Salon, Northwestern University Diversity, Equity, and Inclusion series for Psychology graduate students Topic: Reviewer Zero: Changing the culture of peer review Grants and External Funding Panel: NSF, NIH, DoD, VA, Acts of Congress, and other funding sources writing, reviewing, and committees Brigham and Women's Hospital Postdoc Association Career Development Series  Developing a Leadership Vision: Best Practices for Developing and Implementing Lab Manuals American Society for Biochemistry and Molecular Biology  Effective Teaching and Mentoring in the Classroom and the Lab Brigham and Women's Hospital Postdoc Association Career Development Series  Open Science Room Table Talk: Lab Culture Organization for Human Brain Mapping, Open Science Special Interest Group  From Post-Doc to Tenure-Track Faculty: What's the Process Like? Brigham and Women's Hospital Postdoc Association Career Development Series	May 2023  Feb 2023  Nov 2022  Oct 2022  June 2022  March 2022
Diversity Salon, Northwestern University Diversity, Equity, and Inclusion series for Psychology graduate students Topic: Reviewer Zero: Changing the culture of peer review  Grants and External Funding Panel: NSF, NIH, DoD, VA, Acts of Congress, and other funding sources - writing, reviewing, and committees Brigham and Women's Hospital Postdoc Association Career Development Series  Developing a Leadership Vision: Best Practices for Developing and Implementing Lab Manuals American Society for Biochemistry and Molecular Biology  Effective Teaching and Mentoring in the Classroom and the Lab Brigham and Women's Hospital Postdoc Association Career Development Series  Open Science Room Table Talk: Lab Culture Organization for Human Brain Mapping, Open Science Special Interest Group  From Post-Doc to Tenure-Track Faculty: What's the Process Like? Brigham and Women's Hospital Postdoc Association Career Development Series  Academic Application Boot Camp, Columbia University	May 2023  Feb 2023  Nov 2022  Oct 2022  June 2022
Diversity Salon, Northwestern University Diversity, Equity, and Inclusion series for Psychology graduate students Topic: Reviewer Zero: Changing the culture of peer review Grants and External Funding Panel: NSF, NIH, DoD, VA, Acts of Congress, and other funding sources - writing, reviewing, and committees Brigham and Women's Hospital Postdoc Association Career Development Series  Developing a Leadership Vision: Best Practices for Developing and Implementing Lab Manuals American Society for Biochemistry and Molecular Biology  Effective Teaching and Mentoring in the Classroom and the Lab Brigham and Women's Hospital Postdoc Association Career Development Series  Open Science Room Table Talk: Lab Culture Organization for Human Brain Mapping, Open Science Special Interest Group  From Post-Doc to Tenure-Track Faculty: What's the Process Like? Brigham and Women's Hospital Postdoc Association Career Development Series  Academic Application Boot Camp, Columbia University Office of Postdoctoral Affairs and the Zuckerman Institute Programs Office	May 2023  Feb 2023  Nov 2022  Oct 2022  June 2022  March 2022
Diversity Salon, Northwestern University Diversity, Equity, and Inclusion series for Psychology graduate students Topic: Reviewer Zero: Changing the culture of peer review  Grants and External Funding Panel: NSF, NIH, DoD, VA, Acts of Congress, and other funding sources - writing, reviewing, and committees Brigham and Women's Hospital Postdoc Association Career Development Series  Developing a Leadership Vision: Best Practices for Developing and Implementing Lab Manuals American Society for Biochemistry and Molecular Biology  Effective Teaching and Mentoring in the Classroom and the Lab Brigham and Women's Hospital Postdoc Association Career Development Series  Open Science Room Table Talk: Lab Culture Organization for Human Brain Mapping, Open Science Special Interest Group  From Post-Doc to Tenure-Track Faculty: What's the Process Like? Brigham and Women's Hospital Postdoc Association Career Development Series  Academic Application Boot Camp, Columbia University Office of Postdoctoral Affairs and the Zuckerman Institute Programs Office Topic: Establishing positive lab culture with a lab manual	May 2023  Feb 2023  Nov 2022  Oct 2022  June 2022  March 2022  Sept 2021
Diversity, Salon, Northwestern University Diversity, Equity, and Inclusion series for Psychology graduate students Topic: Reviewer Zero: Changing the culture of peer review  Grants and External Funding Panel: NSF, NIH, DoD, VA, Acts of Congress, and other funding sources - writing, reviewing, and committees Brigham and Women's Hospital Postdoc Association Career Development Series  Developing a Leadership Vision: Best Practices for Developing and Implementing Lab Manuals American Society for Biochemistry and Molecular Biology  Effective Teaching and Mentoring in the Classroom and the Lab Brigham and Women's Hospital Postdoc Association Career Development Series  Open Science Room Table Talk: Lab Culture Organization for Human Brain Mapping, Open Science Special Interest Group  From Post-Doc to Tenure-Track Faculty: What's the Process Like? Brigham and Women's Hospital Postdoc Association Career Development Series  Academic Application Boot Camp, Columbia University Office of Postdoctoral Affairs and the Zuckerman Institute Programs Office Topic: Establishing positive lab culture with a lab manual  Navigating a Career in Academia	May 2023  Feb 2023  Nov 2022  Oct 2022  June 2022  March 2022
Diversity Salon, Northwestern University Diversity, Equity, and Inclusion series for Psychology graduate students Topic: Reviewer Zero: Changing the culture of peer review  Grants and External Funding Panel: NSF, NIH, DoD, VA, Acts of Congress, and other funding sources - writing, reviewing, and committees Brigham and Women's Hospital Postdoc Association Career Development Series  Developing a Leadership Vision: Best Practices for Developing and Implementing Lab Manuals American Society for Biochemistry and Molecular Biology  Effective Teaching and Mentoring in the Classroom and the Lab Brigham and Women's Hospital Postdoc Association Career Development Series  Open Science Room Table Talk: Lab Culture Organization for Human Brain Mapping, Open Science Special Interest Group  From Post-Doc to Tenure-Track Faculty: What's the Process Like? Brigham and Women's Hospital Postdoc Association Career Development Series  Academic Application Boot Camp, Columbia University Office of Postdoctoral Affairs and the Zuckerman Institute Programs Office Topic: Establishing positive lab culture with a lab manual	May 2023  Feb 2023  Nov 2022  Oct 2022  June 2022  March 2022  Sept 2021

Workshop: Memory, Culture, and Brain Session: Inside the Head Originally scheduled for Oct 2020; canceled due to COVID-19	
Candid Conversations with Faculty, Northwestern University	Oct 2020
Columbia University Career Panel Series: Academic Careers  Office of Postdoctoral Affairs	June 2020
Pursuing Academic Research Following Graduate School, Association for Psychological Scienc Originally scheduled for May 2020; canceled because of COVID-19	e canceled
Professional Development Panel, Cognitive Neuroscience Society Trainee Association	May 2020
Stories in Science Journal Club, Columbia Neuroscience Society	Nov 2019
The Ubiquitous and Adaptive Function of Episodic Memory	Oct 2019
Memory Disorders Research Society Annual Meeting (Organized Symposium); New York, NY	
Creating a Lab Manual	Oct 2019
Office of Research Compliance & Training, and Zuckerman Mind Brain Behavior Institute, Colu	
Social Media for Early Career Researchers, Columbia University Postdoctoral Society	May 2019
Creating a Course, Center for Teaching and Learning, Columbia University	April 2019
Communicating Science, Women in Science at Columbia: After Hours Series, Columbia University	-
Science of Understanding, Madison, WI	July 2018
Women in Science at Columbia: Research Symposium, Columbia University	April 2018
Facing forward: Effective science communication  Research Methods Symposium, Tagshare College, College College Indiversity	April 2017
Research Methods Symposium, Teachers College, Columbia University  Brain and being: Subjectivity in the age of neuroimaging	April 2017
The Lapsing Brain: How Attentional Fluctuations Impact Cognition	March 2017
Cognitive Neuroscience Society Meeting (Invited Symposium); San Francisco, CA	March 2017
INVITED SOCIETY MEMBERSHIPS	
Memory Disorders Research Society  Executive Committee Member (Chair for 2024-2025)  Justice, Equity, Diversity, & Inclusion Committee Member  TEACHING	2017 – 2023 – 2021 – 2023
Memory Disorders Research Society  Executive Committee Member (Chair for 2024-2025)	2023 –
Memory Disorders Research Society  Executive Committee Member (Chair for 2024-2025)  Justice, Equity, Diversity, & Inclusion Committee Member  TEACHING  Topical Seminars in Cognitive Psychology: Memory – Brain to Behavior, UC Berkeley	2023 - 2021 - 2023
Memory Disorders Research Society  Executive Committee Member (Chair for 2024-2025)  Justice, Equity, Diversity, & Inclusion Committee Member  TEACHING  Topical Seminars in Cognitive Psychology: Memory – Brain to Behavior, UC Berkeley  Course instructor (undergraduate seminar)  Seminars: Cognition – Memory Systems in Cognition, UC Berkeley	2023 – 2021 – 2023 upcoming in 2025
Memory Disorders Research Society  Executive Committee Member (Chair for 2024-2025)  Justice, Equity, Diversity, & Inclusion Committee Member  TEACHING  Topical Seminars in Cognitive Psychology: Memory – Brain to Behavior, UC Berkeley  Course instructor (undergraduate seminar)  Seminars: Cognition – Memory Systems in Cognition, UC Berkeley  Course instructor (graduate seminar)  Cognitive Neuroscience, UC Berkeley  Guest lecturer (undergraduate lecture; course instructor: Dr. Richard Ivry)	2023 – 2021 – 2023 upcoming in 2025

Non-mnemonic Functions of Memory Systems, Columbia University  Course instructor (graduate & advanced undergraduate seminar; one semester a year)	2018 – 2024
The Brain & Memory, Columbia University  Course instructor (undergraduate seminar; one semester a year)	2017 – 2024
Cognitive Neuroscience, Columbia University Course instructor (undergraduate lecture course; one semester a year)	2019 – 2023
Research Seminar in Cognition, Columbia University Guest lecturer (graduate seminar; course instructor: Dr. Lila Davachi)	2021
Mind, Brain, & Behavior, Columbia University Course instructor (undergraduate lecture course)	2018
Communicating Science, Columbia University Guest lecturer (graduate seminar; course instructor: Dr. Rae Silver)	2018
Communicating Science, Columbia University Guest lecturer (graduate seminar; course instructor: Dr. Rae Silver)	2017
Human Learning, University of California, Davis Teaching assistant & lab instructor (undergraduate lecture course; course instructor: Dr. Andrew Yonelin	2012 nas)
Cognitive Neuroscience, University of California, Davis Teaching assistant (undergraduate lecture course; course instructor: Dr. George R. Mangun)	2011
Introduction to Cognitive Psychology, University of California, Davis Teaching assistant & guest lecturer (undergraduate lecture course; course instructor: Dr. Steven J. Luck)	2010
Introduction to Cognitive Psychology, University of California, Davis Teaching assistant (undergraduate lecture course; course instructor: Dr. Katherine Gibbs)	2008
MENTORING	
Postdoctoral Researchers	van i maa i van i va
Serra Favila, Columbia University (NIH D-SPAN F99/K00 Award)	2019 – 2024
(now: faculty at Brown University)  Halle Dimsdale-Zucker, Columbia University (NIH NRSA Postdoctoral Fellowship [F32])  (now: faculty at UC Riverside)	2019 – 2021
Eren Günseli, Columbia University (now: faculty at Sabancı University)	2017 – 2019
PhD Students (Primary advisor or co-advisor)	
Zall Hirschstein, Columbia University	2023 –
Craig Poskanzer, Columbia University	2021 –
Cheyenne Wakeland-Hart, Columbia University (NSF GRFP award) Manasi Jayakumar, Columbia University	2021 – 2018 – 2024
Michael Cohanpour, Columbia University (NIH NRSA Predoctoral Fellowship [F31])	2019 – 2023
Hannah Tarder-Stoll, Columbia University	2018 – 2023

Jorge Mallea, Columbia University	2020 – 2024
Celia Durkin, Columbia University	2018 - 2023
Jonathan Nicholas, Columbia University	2018 – 2023
Paul Bloom, Columbia University (NSF GRFP Award)	2018 – 2022
Monica Thieu, Columbia University (NSF GRFP Honorable Mention)	2018 – 2022
Brian Silston, Columbia University	2019 – 2021
Ellen Tedeschi, Columbia University	2017 – 2020
Erin Kendall Braun, Columbia University	2016 – 2018
PhD Students (Outside project supervisor)	
Nick Hoang, University of Toronto	2021 – 2024
Lab Staff	
Narjes Al-Zahli, Columbia University and UC Berkeley	2023 –
Raheema Javid, Columbia University, Columbia Access to Doctoral Readiness Post-Bac Program	2023 –
Aria Tsegai-Moore, Columbia University, Bridge to PhD Scholar	2021 – 2023
Zall Hirschstein, Columbia University (now: PhD Student at Columbia University)	2020 – 2023
Nicholas Ruiz, Columbia University (now: PhD Student at Temple University)	2017 – 2020
Undergraduate Students	
Kaylee Wang, Columbia University (Honors student)	2020 – 2022
Edoardo Spolaore, Columbia University (Honors student)	2019 – 2021
Tamar Mosulishvili, Columbia University (Honors student)	2018 – 2020
Nikita Datta, Columbia University (Honors student)	2017 – 2019
Sahiba Singh, Princeton University (Honors student)	2015 – 2016
Cathy Li, University of California, Davis	2012 – 2013
Sara Fraser, University of California, Davis	2012
Michelle Dylla, University of California, Davis	2011 – 2012
Garrett Kronland, University of California, Davis	2011
Rita Kao, University of California, Davis	2010 – 2011
Ashna Singh, University of California, Davis	2010 – 2011
Elyse Wallash, University of California, Davis	2008 – 2010
Other Mentorship	2020
Women in Learning mentor (https://www.womeninlearning.com/)	2020 –
COMMITTEES FOR GRADUATE STUDENTS	
	lad had had had had had had had had had h
Master's Degree Committees	2022
Craig Poskanzer, Psychology, Columbia University Title: Switching between external and internal attention in hippocampal networks	2023
Cheyenne Wakeland-Hart, Psychology, Columbia University	2023
Title: Predicting image memorability from evoked feelings	
Manasi Jayakumar, Psychology, Columbia University	2020
Title: The influence of attentional fluctuations on temporal organization of memory	

Jorge Mallea, Psychology, Columbia University Title: Probability, uncertainty, and reward rate affect different aspects of anticipatory behavior	2020
Hannah Tarder-Stoll, Psychology, Columbia University Title: Multi-step prediction and integration in naturalistic environments	2020
Paul Bloom, Psychology, Columbia University Title: Longitudinal growth charts for amygdala reactivity to emotional faces: A multiverse approach	2019
Celia Durkin, Psychology, Columbia University Title: The temporal dynamics of abstraction	2019
Jonathan Nicholas, Psychology, Columbia University Title: Uncertainty-based arbitration between incremental and episodic control over decisions	2019
Monica Thieu, Psychology, Columbia University Title: Emotion expression and categorial perception	2019
Brian Silston, Psychology, Columbia University Title: Effects of threat on ongoing cognition and behavior in dynamic virtual environments	2017
Ellen Tedeschi, Psychology, Columbia University Title: The effects of aging on curiosity and memory	2017
Dissertation Proposal Committees	
Jack Burgess, Neuroscience Institute, Carnegie Mellon University	2024
Ani Abovian, Psychology, University of California, Davis	2024
Jorge Mallea, Psychology, Columbia University	2023
Manasi Jayakumar, Psychology, Columbia University	2022
Matthew Siegelman, Psychology, Columbia University	2022
Hannah Tarder-Stoll, Psychology, Columbia University	2022
Paul Bloom, Psychology, Columbia University	2021
Celia Durkin, Psychology, Columbia University	2021
Jonathan Nicholas, Psychology, Columbia University	2021
Monica Thieu, Psychology, Columbia University	2021
Brian Silston, Psychology, Columbia University	2019
Nicholas Singletary, Neurobiology & Behavior, Columbia University	2019
Ellen Tedeschi, Psychology, Columbia University	2019
Zachary Bucknoff, Psychology, Columbia University	2018
Matti Vuorre, Psychology, Columbia University	2017
Judy Xu, Psychology, Columbia University	2017
Dissertation Defense Committees	
Manasi Jayakumar, Psychology, Columbia University	2024
Title: Attentional fluctuations and the temporal organization of memory:	
Insights from behavioral and pupillometry measures	
Jorge Mallea, Psychology, Columbia University	2024
Title: Exploring the effects of the probability and rate of reward on goal- and sign-tracking behavior	
Hannah Tarder-Stoll, Psychology, Columbia University	2023
Title: Flexible representations of temporal structure guide multistep prediction	2023
ride. Hexiote representations of temporal structure galae mainstep prediction	

Michael Cohanpour, Neurobiology & Behavior, Columbia University Title: The cognitive and neural mechanisms of curiosity	2023
Matthew Siegelman, Psychology, Columbia University Title: Generating structured stimuli for investigations of human behavior and brain activity with computational models	2023
Celia Durkin, Psychology, Columbia University Title: The Beholder's Share: Bridging art and neuroscience to study subjective experience	2023
Nicholas Singletary, Neurobiology & Behavior, Columbia University Title: How we know when we don't know enough: Neural representations of probabilistic inference and information demand	2023
Jonathan Nicholas, Psychology, Columbia University Title: Hindsight for foresight: Adaptive uses of memory in value-based decision making	2023
Dara Huggins-James, Psychology, Columbia University Title: A diversity-conflict model of inclusion	2022
Paul Bloom, Psychology, Columbia University Title: Into the multiverse: Methods for studying developmental neuroscience	2022
Monica Thieu, Psychology, Columbia University Title: Exploring perception and categorization of social and affective stimuli	2022
Brian Silston, Psychology, Columbia University Title: Motivational influences on environmental and information exploration, cognition, memory and behavior	2021
Nora Rouast, Experimental Psychology, University of Oxford Title: Mutual influences between memory and attention	2021
Zachary Bucknoff, Psychology, Columbia University Title: Motivator and moralizer: How agency shapes choice and judgment	2020
Ellen Tedeschi, Psychology, Columbia University Title: Knowledge for the sake of knowledge: Understanding the relationship between curiosity, exploration and r	2020 reward
<b>Linbi Hong</b> , <i>Electrical Engineering</i> , <i>Columbia University Title: Mapping the spatiotemporal interactions of the human brain's attention reorienting and arousal systems using multimodal recording techniques</i>	2019
Emily Cowan, Cognitive Neuroscience, New York University Title: The effect of sleep on the neural organization of memory traces	2019
Raphael Gerraty, Psychology, Columbia University Title: Brain network mechanisms in learning behavior	2018
Erin Kendall Braun, Psychology, Columbia University Title: Brain Mechanisms of adaptive memory: Neuromodulation and behavior in humans	2018
<b>Judy Xu</b> , Psychology, Columbia University Title: Understanding the behavioral and neurocognitive relation between mind wandering and learning	2018

Matti Vuorre, Psychology, Columbia University Title: Using visual illusions to examine action-related perceptual changes	2018
Hongmi Lee, Cognitive Neuroscience, New York University Title: Mnemonic content representations in human posterior parietal cortex	2018
Andrew Heusser, Cognitive Neuroscience, New York University Title: The role of neural oscillations in the encoding and organization of sequential events	2016
UNIVERSITY SERVICE	
UC Berkeley Psychology Department Service	
Diversity, Equity, Inclusion, Belonging, and Justice Committee	2024 –
Columbia University Psychology Department Service	
Colloquium Committee, organizing departmental colloquia	2020 – 2023
(Co-chairs: Dr. Rae Silver & Dr. Nim Tottenham)	
Faculty advisor for Columbia University's Psi Chi Honor Society	2017 – 2023
Faculty mentor for Psychology Department post-docs, career development sessions for post-docs	2017 – 2023
Summer Internship Program in Psychological Science, faculty mentor	2022
Graduate Funding Committee, financial planning related to graduate student costs	2018 – 2019
Faculty Search Committee, for tenure-track assistant professor; joint search with Zuckerman Institute	2018 – 2019
Space Committee, to evaluate space needs of the department and plan for its future	2017 – 2019
Faculty Search Committee, for lecturer positions	2017 – 2018
Edward E. Smith Memorial Award Committee, selecting outstanding graduate students for an award	2017
Columbia University Service Beyond the Department	
Faculty advisor for Columbia's chapter of Synapse, social support for individuals with brain injuries	2019 – 2024
Selection Committee for the Presidential Awards for Outstanding Teaching	2023
Faculty Search Committee, for tenure-track assistant professor at Barnard Psychology	2022 – 2023
Junior Faculty Advisory Board	2019 – 2021
Chair of the Cognitive and Behavioral Neuroscience University Seminar (Co-chair: Dr. Herb Terrace)	2017 – 2020
	2000

2020

2020

2019

2017

# **SERVICE TO THE DISCIPLINE**

# **Reviewer** — Funding Agencies

Banting Postdoctoral Fellowships Program

Medical Research Council

National Institutes of Health

Human Complex Mental Function Study Section (temporary member)

Faculty panel for Bridge to Ph.D. participants, graduate admissions advice for under-represented groups

Faculty panel for Bridge to Ph.D. participants, graduate admissions advice for under-represented groups

National Science Foundation

Division of Behavioral and Cognitive Sciences

Cognitive Neuroscience Panel

Ad-hoc reviewer for Cognitive Neuroscience

Ad-hoc reviewer for Perception, Action, & Cognition

Presidential Scholars in Society and Neuroscience, application reviewer

Faculty panel of awardees of the Lenfest Junior Faculty Development Grant

#### Netherlands Organisation for Scientific Research

#### **Reviewer** — Journals

Attention, Perception, & Psychophysics

Behavioural Neurology

Brain

Brain Research

Journal of Neuroscience

Memory & Cognition

Nature Communications

Neurobiology of Aging

Cerebral Cortex Neurobiology of Learning and Memory

Cerebral Cortex Communications Neuron

Cognitive Neuroscience Neuropsychologia

Cortex Neuroscience & Biobehavioral Reviews

Current Biology PLoS ONE

eLife Psychological Science

eNeuro Psychonomic Bulletin & Review

Journal of Cognitive Psychology Psychological Review

Journal of Cognitive Neuroscience Quarterly Journal of Experimental Psychology

Journal of Experimental Psychology: Learning, Trends in Cognitive Sciences

Memory, & Cognition Visual Cognition

#### Reviewer — Other

## **NeurIPS Workshop Program Committee**

2022

reviewed submissions for workshop on "Memory in Artificial and Real Intelligence"

## JoCN and CNS Travel Fellowship Reviews

2022 - 2024

reviewed applications for travel fellowships to the annual Cognitive Neuroscience Society meeting; fellowships were provided by the Journal of Cognitive Neuroscience

This fellowship aims to promote geographic diversity at the CNS meeting by providing travel funding for trainees from Oceania and Southeast Asia, South Asia, Africa, and the Western Hemisphere (minus US and Canada)

#### **Editorial Roles**

Journal of Cognitive Neuroscience, Consulting Editor	2020 –
Neuroscience Letters, Guest Editor	2016 - 2018

#### **Edited Volumes**

New Perspectives on the Hippocampus and Memory, Neuroscience Letters <a href="https://www.sciencedirect.com/journal/neuroscience-letters/vol/680/suppl/C">https://www.sciencedirect.com/journal/neuroscience-letters/vol/680/suppl/C</a>

2018

#### **Organized Conferences**

# Memory Disorders Research Society, Annual Meeting

October 2019

with Dr. Daphna Shohamy & Dr. Lila Davachi

#### **DEI & Outreach Activities**

# Trainee Coordinator for Reviewer Zero

2020 –

pre-review mentorship network to illuminate hidden curriculum of peer review

#### Mentor for Cientifico Latino Graduate Student Mentorship Initiative

2024

mentorship for Latino graduate school applicant in Psychology; <a href="https://www.cientificolatino.com/">https://www.cientificolatino.com/</a>

#### Researcher Catalysts Interview

2024

interview for organization that exposes high school students to researchers in STEM

#### Mock Interviews for Cientifico Latino

2022, 2024

mock interviews for Latino graduate school applicants in Psychology; <a href="https://www.cientificolatino.com/">https://www.cientificolatino.com/</a>

## Black in Neuro Week Sponsor

2022, 2023

monetary contributions and in-kind services (career / grad school mentorship)

#### Justice, Equity, Diversity, and Inclusion (JEDI) Committee

2021 - 2023

DEI for the Memory Disorders Research Society

#### Information and advice for prospective graduate students at SACNAS

2021

Columbia Psychology booth at the Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) National Diversity in STEM Digital Conference

#### Mock Interviews for Black in Neuro

2021

mock interviews for Black graduate school applicants in Neuroscience; <a href="https://www.blackinneuro.com/">https://www.blackinneuro.com/</a>

Let's Talk Grad School 2020, 2021

graduate school advice for under-represented minoritized trainees; organized by Dr. Margaret Echelbarger

#### Career development sessions for under-represented minoritized trainees

2020

6 virtual sessions on academic jobs for students and post-docs who come from groups under-represented in STEM; sessions were attended by 100+ trainees all over the world

Participant in the World Science Festival's Lab Tours for Girls event

2018

#### **MEDIA**

## Framework for Open and Reproducible Research Training (FORRT), May 2024

https://forrt.org/educators-corner/016-reviewer-zero/

Co-written blog post by the Reviewer Zero team, discussing our work to increase equity and fairness in peer review

#### Science Friday (WNYC Studios and NPR), February 2024

https://www.sciencefriday.com/segments/jeopardy-winner-memory-recall/

Interviewed about our paper showing enhanced episodic-semantic coupling in trivia experts (Thieu, Wilkins, & Aly, 2024)

#### Scientific American, February 2024

https://www.scientificamerican.com/article/jeopardy-winner-reveals-entwined-memory-systems-make-a-trivia-champion/

Interviewed about our paper showing enhanced episodic-semantic coupling in trivia experts (Thieu, Wilkins, & Aly, 2024)

#### The Transmitter, February 2024

Interviewed about the challenges to the traditional view of the medial temporal lobe as a memory system

#### Researcher Catalysts, February 2024

https://researchercatalyst.wixsite.com/researcher-catalysts/general-8

Interview for organization that exposes high school students to researchers in STEM

#### The Transmitter, January 2024

https://www.thetransmitter.org/cognition/cognition-in-brainless-organisms-is-redefining-what-it-means-to-learn/

Interviewed about learning and cognition in organisms without a central nervous system

# Psychonomic Society Featured Content, October 2023

https://featuredcontent.psychonomic.org/when-looks-are-deceiving-our-memory-can-help/

Feature about our research showing how memory helps perceptual decision making (Bornstein, Aly, Feng, Turk-Browne, Norman, & Cohen, 2023)

## Brain Inspired, December 2022

https://braininspired.co/podcast/156/

Interviewed about my research for a podcast by Paul Middlebrooks, which explores the relationship between natural and artificial intelligence

# Brain Banter Podcast, Grey Matters CU, March 2022

Interviewed for a podcast about Columbia faculty's research and experience in academia

## CBC Radio (CBC Newfoundland Morning), January 2022

Interviewed about how the COVID-19 pandemic has affected people's sense of time and memory for life details

### The Washington Post, January 2022

https://www.washingtonpost.com/lifestyle/2022/01/20/pandemic-memory-covid-2020-2021-2022/ Interviewed about how the COVID-19 pandemic has affected memory and sense of time

#### The Pathologist, November 2021

https://thepathologist.com/diagnostics/pathobot-deep-learning-for-humans-and-machines

Interviewed for my role in a large multi-institution, international collaboration that integrates deep learning techniques and social media to help pathologists worldwide seek second opinions

#### Grey Matters, Columbia's Undergraduate Neuroscience Journal, October 2021

https://www.greymattersjournalcu.org/post/mind-the-migraine

Interviewed about my experience as a migraine sufferer

#### National Public Radio, August 2021

https://www.npr.org/2021/08/27/1031255390/reports-of-cheating-at-colleges-soar-during-the-pandemic Interviewed about academic misconduct in online courses during the COVID-19 pandemic

#### Proceedings of the National Academy of Sciences, Journal Club, April 2021

https://www.pnas.org/post/journal-club/several-brain-regions-help-us-anticipate-whats-going-to-happen-next Feature about our research showing anticipatory hierarchies in the brain (Baldassano, Aly, & Lee, 2021)

# American Psychological Association, Monitor, April 2021

https://www.apa.org/monitor/2021/04/cover-dismantle-racism

Interviewed with other members of Reviewer Zero for the article, "Psychology's urgent need to dismantle racism"

#### The Brain Made Plain, January 2021

Interviewed for a cognitive neuroscience podcast by Dr. Jonathan Peelle; aimed at undergraduate students and a lay audience

#### Harvard Women in Psychology, September 2020

Featured in the 'By the Brain' section of a monthly newsletter that presents interviews of women in psychology

#### Simply Neuroscience Podcast, College Neuro Network Series, August 2020

https://open.spotify.com/episode/67WsZZRTIdbS261sXi116S?si=d1417868965b4026

Interviewed for podcast about Psychology/Neuroscience programs, for interested high school students

Wonder Media Network's Memory Booster Podcast, June 2020

Interviewed for podcasts about working memory & visual memory

# ASBMB Today, November 2018

https://www.asbmb.org/asbmb-today/careers/110118/tweeting-for-rules

Interviewed about my lab manual, which was featured in Nature (see Editorials, Commentaries, & Perspectives)

Women's Health Magazine, October 2017

https://www.lesliegoldmanwrites.com/pdfs/who.pdf

Interviewed about memory and how to improve it