October 26, 2026

Mariam Aly

University of California, Berkeley
Berkeley, CA 94720
mariamaly@berkeley.edu
www.alylab.org

FIELDS OF SPECIALIZATION

Disciplines: Psychology | Cognitive Neuroscience
Topics: Long-term Memory | Perception | Attention
Methods: Behavior | Functional Neuroimaging | Neuropsychology

ACADEMIC APPOINTMENTS

University of California, Berkeley

Associate Professor, Department of Psychology	2026 –
Acting Associate Professor, Department of Psychology	2024 – 2026
Affiliated Faculty, Helen Wills Neuroscience Institute	2026 –
Training Faculty, Neuroscience PhD Program	2026 –
Affiliated Faculty, Cognitive Science	2024 –

Columbia University

Adjunct Associate Professor, Department of Psychology	2026 –
Adjunct Research Scientist, Department of Psychology	2024 – 2026
Assistant Professor, Department of Psychology	2017 – 2024
Affiliated Faculty, Cognitive Science (Barnard College)	2022 – 2024
Affiliate Member, Zuckerman Mind Brain Behavior Institute	2019 – 2024
Training Faculty, Doctoral Program in Neurobiology and Behavior	2019 – 2024

EDUCATION & TRAINING

Postdoctoral Research Associate (Neuroscience)	**Princeton University** Advisor: Dr. Nicholas Turk-Browne	2013 – 2017
Ph.D. (Psychology)	**University of California, Davis** Advisors: Dr. Andrew Yonelinas and Dr. Charan Ranganath	2010 – 2013
M.A. (Psychology)	**University of California, Davis** Advisors: Dr. Andrew Yonelinas and Dr. Charan Ranganath	2008 – 2010
H.B.Sc. (Psychology)	**University of Toronto** Advisors: Dr. Morris Moscovitch and Dr. Ian Spence	2004 – 2008

HONORS, AWARDS, & FELLOWSHIPS

Fellow of the UC Irvine Center for the Neurobiology of Learning and Memory	since 2023
Presidential Award for Outstanding Teaching, Columbia University	2022
Rising Star, Association for Psychological Science	2019
Psychonomic Society Fellow (FPsyS)	since 2018
Provost's Dissertation Year Fellowship, University of California, Davis	2012 – 2013
Floyd and Mary Schwall Dissertation Year Fellowship, University of California, Davis	2012 – 2013
Don Owings Memorial Prize, University of California, Davis	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	2008
for most outstanding female student graduating in a science program	
McNab Scholarship in Psychology, University of Toronto	2008
Reuben Wells Leonard Open Scholarship, University of Toronto	2007
John Davidson Ketchum Memorial Scholarship in Psychology, University of Toronto	2007
Natural Sciences and Engineering Research Council of Canada	2006
Undergraduate Student Research Award; $4,500 CAD	
Dr. James A. & Connie P. Dickson Scholarship in the Sciences and Mathematics, University of Toronto	2006
Department of Psychology Student Award, University of Toronto	2006
Vincent Bladen In-Course Scholarship, University of Toronto	2005
Queen Elizabeth Scholarship	2004 – 2008
University of Toronto Scholar	2004 – 2008
Dean's List Scholar, University of Toronto	2004 – 2008
Entrance Scholarship, University of Toronto	2004
First Year Honor's List, University of Toronto	2004

FUNDING

Principal Investigator or Co-Investigator

National Science Foundation (BCS-2520821) 2025 – 2028

Division of Behavioral and Cognitive Sciences

Title: Competition and Cooperation in Memory-Guided Attention

Role: PI

Amount: $604,425 (total direct + indirect costs; direct costs = $391,302)

National Institutes of Health Research Project Grant (R01EY034436) 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

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 – 2026
(DGE-2224777; DGE-2436430)
Division of Graduate Education
Title: Reviewer Zero: Changing the Culture of Peer Review to Increase Diversity, Equity, & Inclusion
Title changed by NSF in 2025 to: Reviewer Zero: Changing the Culture of Peer Review
Role: PI
Other PIs: 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. Caitlin Mills
Amount: $795,600 CAD (direct costs)

NARSAD Young Investigator Grant (Brain & Behavior Research Foundation, Grant #27893) 2020 – 2022
Title: Balancing Internally- and Externally-Focused Thought in the Brain
Role: PI
Amount: $69,454 (direct costs)

Zuckerman Institute Seed Grant for MR Studies (CU-ZI-MR-S-0016) 2019 – 2021
Title: Multiple Timescales of Prediction in the Brain During Naturalistic Perception
Role: PI
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 2018 – 2019
Title: Complementary Forms of Goal-Directed Behavior
Role: PI
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

Amount: $11,000 (direct costs)

Natural Sciences and Engineering Research Council of Canada PGS-D (NSERC-433638) 2009 – 2012
Doctoral Postgraduate Scholarship (Foreign)
Title: The Role of the Perirhinal Cortex in Associative Memory
Role: PI
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; Wrote letter of support
PIs: 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/revision)

Chen A, Vashel M, **Aly M**, Bunge S. (under review). What is common to memory retrieval and relational reasoning? Testing neural overlap in anterior lateral prefrontal cortex. *bioRxiv*. https://doi.org/10.64898/2026.09.06.749563

Jayakumar M, Tsegai Moore A, Nemeth C, **Aly M**. (under revision). Pupil size at encoding predicts the temporal structure of memory. *PsyArXiv*. https://doi.org/10.31234/osf.io/bzqfu

Raval VV, **Aly M**, Diekman A, Faragó F, Osborne KRM, Zhang C, Radovanovic M, Colunga E, Salinas-Quiroz F, Morris K. (under review). Transforming the culture of publishing to promote a relevant, representative, and contextualized developmental science.

Verschooren S, Egner T, **Aly M**. (under review). Competition, concurrence, and cooperation between external and internal attention. *PsyArXiv*. https://doi.org/10.31234/osf.io/ry94x_v2

Wakeland-Hart C, **Aly M**. (under review). Intrinsic memorability and evoked feelings shape visual memories over time. *PsyArXiv*. https://doi.org/10.31234/osf.io/45tg8_v2

Peer-Reviewed Publications

44. Hirschstein Z, **Aly M***, Baldassano C*. (2026). The SPOT Grid: Naturalistic Images with Predefined Settings, Patterns, Objects, and Textures. *Behavior Research Methods,* 58, 336, 1-22. https://doi.org/10.3758/s13428-026-03211-w

*These authors contributed equally

43. Favila SE, **Aly M**. (2026). Hippocampal mechanisms underlying the resolution of competition in memory and perception. *Nature Communications*, 17:10528, 1-21. https://doi.org/10.1038/s41467-026-77400-8

42. Tarder-Stoll H, Baldassano C*, **Aly M***. (2026). The hippocampus rapidly integrates sequence representations during novel multi-step predictions. *Philosophical Transactions of the Royal Society B,* 381, 20250237. https://doi.org/10.1098/rstb.2025.0237

*These authors contributed equally

41. Verschooren S, Dahl MJ, **Aly M**, Mittner M. (2026). Transition dynamics of external and internal attention across on-task and off-task states. *Nature Reviews Psychology*. https://doi.org/10.1038/s44159-026-00578-7

40. Al-Zahli N, **Aly M***, Baldassano C*. (2026). Repeated viewing of a film clip changes event timescales in the brain. *Journal of Neuroscience*, 46(17):e1657252026, 1-16. https://doi.org/10.1523/JNEUROSCI.1657-25.2026

*These authors contributed equally

39. Poskanzer C*, Tarder-Stoll H*, Javid R, Spolaore E, **Aly M**. (2025). Successful prediction is associated with enhanced encoding. *Open Mind*, 9: 959–991. https://doi.org/10.1162/opmi.a.15

*These authors contributed equally

38. Wakeland-Hart C, **Aly M**. (2025). Predicting image memorability from evoked feelings. *Behavior Research Methods,* 57:58, 1-13. https://doi.org/10.3758/s13428-024-02510-4

37. 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*. (2025). On the role of familiarity and developmental exposure in music-evoked autobiographical memories. *Memory*, 33, 178-192. https://doi.org/10.1080/09658211.2024.2420973

*These authors are co-PIs of this work

36. Tarder-Stoll H, Baldassano C*, **Aly M***. (2024). The brain hierarchically represents the past and future during multistep anticipation. *Nature Communications*, 15, 9094. https://doi.org/10.1038/s41467-024-53293-3

*These authors are co-PIs of this work

Featured by *Nature Neuroscience*: https://www.nature.com/articles/s41593-024-01840-y

35. 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

34. 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

33. 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 by ***Scientific American***: https://www.scientificamerican.com/article/jeopardy-winner-reveals-entwined-memory-systems-make-a-trivia-champion/

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

32. 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

31. 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. https://doi.org/10.1037/xge0001461

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

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

28. 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. https://doi.org/10.3758/s13415-023-01092-6

Featured by the Psychonomic Society: https://featuredcontent.psychonomic.org/when-looks-are-deceiving-our-memory-can-help/

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

26. 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. https://doi.org/10.1080/09658211.2023.2166078

*These authors are co-PIs of this work

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

24. 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

23. 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-happen-next

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

21. 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. https://doi.org/10.1162/jocn_a_01583

20. 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. https://doi.org/10.1038/s41379-020-0540-1
*These authors are co-PIs of this work

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

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

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

16. 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

15. 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. https://doi.org/10.1162/jocn_a_01308

14. 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

13. 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. https://doi.org/10.1007/978-3-319-50406-3_12

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

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

10. 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

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

8. Aly M, Ranganath C, Yonelinas AP. (2014). Neural correlates of state- and strength-based perception. *Journal of Cognitive Neuroscience*, 26, 792-809. https://doi.org/10.1162/jocn_a_00532

7. 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. http://doi.org/10.1037/a0033671

6. 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] https://doi.org/10.1016/j.neuron.2013.04.018

5. 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. https://doi.org/10.1371/journal.pone.0030231

4. 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. https://doi.org/10.1016/j.bbr.2011.07.043

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

2. 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. https://doi.org/10.1016/j.neuropsychologia.2010.09.005

1. 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

9. Aly M, Barense M, Kok P. (2026). The role of hippocampal predictions in cognition: Bridging perception and memory. *Philosophical Transactions of the Royal Society B*, 381, 20250236. https://doi.org/10.1098/rstb.2025.0236

8. Aly M. (in press). Dying to live. In *Growing Up in Science: The Untold Stories of Today's Brain Scientists.* (Ed. Weiji Ma). Princeton University Press.

7. Aly M. (2025). Eye movements provide insight into amnesia. *Nature Reviews Neuroscience*, 26, 588. https://doi.org/10.1038/s41583-025-00952-z

6. 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. https://doi.org/10.1038/s44159-023-00261-1

5. 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

4. Aly M. (2019). Studying and experiencing mental illness. *Journal of Science Stories*. https://storiesinscience.org/wp-content/uploads/2019/06/Aly_Mariam_Stories-in-Science-DOI_June-12_2019.pdf

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

3. 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

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

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

CONFERENCE PRESENTATIONS

Gumus M, Favila S, **Aly M**. (Nov 2026). Retinotopic coding in the hippocampus predicts memory-guided eye movements. Poster at the Society for Neuroscience Meeting. Washington DC.

Thieu M, **Aly M**. (Oct 2026). Episodic-Semantic Binding in *Jeopardy!*. Talk by M. Aly at the Memory Disorders Research Society Meeting. Toronto, ON.

Park J, Hu E, **Aly M**. (Sept 2026). The temporal dynamics of learning affect memory competition and memory updating. Poster at the Bay Area Memory Meeting. Berkeley, CA.

Lee C, Villamim DL, Lukac S, Chamberlain T, Bertilsson P, **Aly M**, Baldassano C. (Aug 2026). Neural signatures of event prediction in novel videos. Poster at the 9th Annual Conference on Cognitive Computational Neuroscience. New York, NY.

Lee C, Villamim DL, Lukac S, Chamberlain T, Hirschstein Z, Bertilsson P, **Aly M**, Baldassano C. (May 2026). Recall and prediction of event sequences in instructional videos. Poster at the Context and Episodic Memory Symposium. Philadelphia, PA.

Chen A, Vashel M, **Aly M**, Bunge S. (March 2026). Dissociable engagement in anterior lateral prefrontal cortex during retrieval monitoring and relational reasoning. Poster at the Cognitive Neuroscience Society Meeting. Vancouver, BC.

Chen A, Vashel M, **Aly M**, Bunge S. (Sept 2025). Probing the neural overlap between memory retrieval monitoring and reasoning in anterior prefrontal cortex. Poster at the UC Berkeley Neuroscience Retreat. Lake Tahoe, CA.

Chen A, Vashel M, **Aly M**, Bunge S. (Sept 2025). Probing the neural overlap between memory retrieval monitoring and reasoning in anterior prefrontal cortex. Poster at the Bay Area Memory Meeting. Davis, CA.

Kung FYH, **Aly M**, Ansari S, Colunga E, Crockett MJ, Diekman AB, Gomez P, McKee PC, Pérez M, Stilwell SM, Goldrick M. (Sept 2025). Peer review exercises to enhance trainees' readiness to confront unfair or biased reviews. Poster at the 10th International Congress on Peer Review and Scientific Publication. Chicago, IL.

Lee C, Villamin DLC, Bertilsson PM, **Aly M**, Baldassano C. (Aug 2025). Human predictions of event sequences for novel videos. Poster at the 8th Annual Conference on Cognitive Computational Neuroscience. Amsterdam, The Netherlands.
https://2025.ccneuro.org/abstract_pdf/Lee_2025_Human_predictions_event_sequences_novel_videos.pdf

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. *co-PIs

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. *co-PIs

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. *co-PIs

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. *co-PIs

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-PIs

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-PIs

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-PIs

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-PIs

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

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 11th 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-PIs

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

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-PIs

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

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-PIs

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-PIs

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-PIs

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-PIs

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 Arizona (Psychology Department Colloquium Series)	Dec 2026
University of California, Davis (Exploring the Mind Lecture Series, Center for Mind and Brain)	Oct 2026
Northeastern University (Psychology Seminar)	Sept 2026
University of Denver (Psychology Seminar)	Sept 2026
Goethe University Frankfurt (ARENA Lecture Series: Abstract Representations in Neural Architectures)	June 2026
University of California, Santa Cruz (Cognitive Colloquium)	Jan 2026
University of Waterloo (Psychology Seminar)	Mar 2025
Goethe University Frankfurt (Psychology Seminar)	Jan 2025
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)	Sep 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)	Sep 2022
Lehigh University (Cognitive Area Group Meeting)	Sep 2021
Vanderbilt University (Cognitive Science/Cognitive Neuroscience Seminar)	Sep 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)	Apr 2021
University of Texas at Dallas (Center for Vital Longevity Science Series)	Apr 2021
Queen's University (Cognitive Neuroscience Brown Bag)	Apr 2021
Vrije Universiteit Amsterdam (Cognitive Psychology Colloquium)	Apr 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
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)	Sep 2020
Georgia Tech (Neuro Seminar Series)	Sep 2020
University of Oslo (Cognitive Neuroscience Seminar)	Sep 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)	Apr 2017
University of Massachusetts, Amherst (Neuroscience and Behavior Colloquium Series)	Mar 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 Seminar)	Feb 2016
Columbia University (Department of Psychology Seminar)	Dec 2015
University of Toronto (Psychology Department Seminar)	July 2011

Invited Symposia, Workshops, Discussions, & Panels

Reviewer Zero: How to be an Effective Reviewer Virtual (free and open) workshop on writing inclusive and equitable reviews	June 2026
Black in Neuro x Reviewer Zero Workshop Getting Started in Academia: Responding Effectively to Reviews	Feb 2026
Cientifico Latino Webinar Faculty Panel on Admissions	Oct 2025
Reviewer Zero: Peer Review 101 Virtual (free and open) workshop illuminating the hidden curriculum of peer review	Oct 2025
Annual NSF CAREER Award Information Session, Berkeley Research Development Office Panel of current NSF CAREER Awardees; Q&A for prospective CAREER applicants	Apr 2025
Diversifying CNS at the University of Minnesota Peer Review 101: Reviewer Zero Workshop illuminating the hidden curriculum of peer review	Mar 2025
Bay Area Open Science Group Using the Open Science Framework for Lab Wikis	Mar 2025
Black in Neuro x Reviewer Zero Workshop So You Want to Participate in Peer Review: How to Write Inclusive and Equitable Reviews	Dec 2024
Cognitive Neuroscience Society Meeting Organized Symposium, Toronto, Ontario Hippocampal predictions link perception and memory	Apr 2024
Black in Neuro x Reviewer Zero Workshop Peer Review 101: Illuminating the hidden curriculum of peer review	Nov 2023
Diversity Salon, Northwestern University Diversity, Equity, and Inclusion series for Psychology graduate students Reviewer Zero: Changing the culture of peer review	May 2023
Brigham and Women's Hospital Postdoc Association Career Development Series Grants and External Funding Panel: NSF, NIH, DoD, VA, Acts of Congress, and other funding sources	Feb 2023
American Society for Biochemistry and Molecular Biology Developing a Leadership Vision: Best Practices for Developing and Implementing Lab Manuals	Nov 2022
Brigham and Women's Hospital Postdoc Association Career Development Series Effective Teaching and Mentoring in the Classroom and the Lab	Oct 2022
Organization for Human Brain Mapping, Open Science Special Interest Group Open Science Room Table Talk: Lab Culture	June 2022
Brigham and Women's Hospital Postdoc Association Career Development Series From Post-Doc to Tenure-Track Faculty: What's the Process Like?	Mar 2022
Office of Postdoctoral Affairs and the Zuckerman Institute Programs Office, Columbia University Academic Application Boot Camp Establishing positive lab culture with a lab manual	Sep 2021
Organization for Human Brain Mapping, Student and Postdoc Special Interest Group Navigating a Career in Academia	June 2021
McDonnel Academy International Symposium, Washington University Workshop: Memory, Culture, and Brain Session: Inside the Head Originally scheduled for Oct 2020; canceled due to COVID-19	canceled
Candid Conversations with Faculty, Northwestern University	Oct 2020
Columbia University Career Panel Series, Office of Postdoctoral Affairs Academic Careers	June 2020
Pursuing Academic Research Following Graduate School, Association for Psychological Science Originally scheduled for May 2020; canceled because of COVID-19	canceled
Cognitive Neuroscience Society Trainee Association Professional Development Panel	May 2020
Columbia Neuroscience Society Stories in Science Journal Club	Nov 2019
Memory Disorders Research Society Organized Symposium, New York, NY	Oct 2019

The Ubiquitous and Adaptive Function of Episodic Memory

Office of Research Compliance & Training, and Mind Brain Behavior Institute, Columbia University — Oct 2019
Creating a Lab Manual

Columbia University Postdoctoral Society — May 2019
Social Media for Early Career Researchers

Center for Teaching and Learning, Columbia University — Apr 2019
Creating a Course

Women in Science at Columbia: After Hours Series, Columbia University — Jan 2019
Communicating Science

Science of Understanding, Madison, WI — July 2018

Women in Science at Columbia: Research Symposium, Columbia University — Apr 2018
Facing forward: Effective science communication

Research Methods Symposium, Teachers College, Columbia University — Apr 2017
Brain and being: Subjectivity in the age of neuroimaging

Cognitive Neuroscience Society Meeting Invited Symposium, San Francisco, CA — Mar 2017
The lapsing brain: How attentional fluctuations impact cognition

INVITED SOCIETY MEMBERSHIPS

Memory Disorders Research Society — 2017 –
Executive Committee Member (Chair for 2024-2025) — 2023 –
Justice, Equity, Diversity, & Inclusion Committee Member — 2021 – 2023

TEACHING

Course Instructor

PSYCH C120 / COGSCI C100: Basic Issues in Cognition, UC Berkeley — 2027 –
Course instructor (undergraduate lecture course; one semester a year or every other year)

PSYCH 220A: Proseminar: Human Learning & Memory, UC Berkeley — 2026 –
Course instructor (graduate seminar; one semester a year or every other year)

PSYCH 128: Topical Seminars in Cognitive Psychology: Memory – Brain to Behavior, UC Berkeley — 2025 –
Course instructor (undergraduate seminar; one semester a year or every other year)

PSYCH 290Q: Seminars: Cognition – Memory Systems in Cognition, UC Berkeley — Fall 2024
Course instructor (graduate seminar)

Non-mnemonic Functions of Memory Systems, Columbia University — 2018 – 2024
Course instructor (graduate & advanced undergraduate seminar; one semester a year)

The Brain & Memory, Columbia University — 2017 – 2024
Course instructor (undergraduate seminar; one semester a year)

Cognitive Neuroscience, Columbia University — 2019 – 2023
Course instructor (undergraduate lecture course; one semester a year)

Mind, Brain, & Behavior, Columbia University — 2018
Course instructor (undergraduate lecture course)

Guest Instructor

PSYCH H194A: Honors Seminar, UC Berkeley — Fall 2026
Guest instructor (undergraduate Honors seminar; course instructor: Dr. Silvia Bunge)
Lecture: Publishing Journal Articles: Peer Review 101

PSYCH 375: Teaching Psychology, UC Berkeley — Fall 2026
Guest instructor (graduate seminar; course instructor: Dr. Arianne Eason)
Lecture: Inclusive Teaching and Mentoring

PSYCH 293: Second-Year Seminar on Professional Development, UC Berkeley — Spring 2026
Guest instructor (course instructor: Dr. Allison Harvey)
Lecture: Giving an Effective Talk

PSYCH 210A: Proseminar: Cognition, Brain, and Behavior — Spring 2026
Guest instructor (course instructors: Dr. Amitai Shenhav & Dr. Rich Ivry)
Lecture: Discussion of recent papers in the cognitive neuroscience of memory

PSYCH Post-Bac Professional Development Class, UC Berkeley — Fall 2025
Guest instructor (course instructor: Dr. Melissa Bayne)
Lecture: Q&A from post-bac attendees

PSYCH H194A: Honors Seminar, UC Berkeley — Fall 2025
Guest instructor (undergraduate Honors seminar; course instructor: Dr. Aaron Fisher)
Lecture: Publishing Journal Articles: Peer Review 101

PSYCH 375: Teaching Psychology, UC Berkeley — Fall 2025
Guest instructor (graduate seminar; course instructors: Dr. Ozlem Ayduk & Dr. Lance Kriegsfeld)
Lecture: Inclusive Teaching and Mentoring

PSYCH H194B: Honors Seminar, UC Berkeley — Spring 2025
Guest instructor (undergraduate Honors seminar; course instructor: Dr. Richard Ivry)
Lecture: Publishing Journal Articles: Peer Review 101

PSYCH C127: Cognitive Neuroscience, UC Berkeley — Fall 2024
Guest instructor (undergraduate lecture; course instructor: Dr. Richard Ivry)
Lecture: Memory for Real-Life Events

PSYCH 292: Introduction to the Profession of Psychology, UC Berkeley — Fall 2024
Guest instructor (graduate seminar; course instructor: Dr. Ozlem Ayduk)
Lecture: From Manhattan to Berkeley: Struggles and successes in life and science

Computational Neuroscience: Vision, Cold Spring Harbor Lab — Summer 2024
Guest instructor (summer school; lectures: Vision from the Retina to the Hippocampus; Attention and Perception in Memory Systems)

Research Seminar in Cognition, Columbia University — 2021
Guest instructor (graduate seminar; course instructor: Dr. Lila Davachi)

Communicating Science, Columbia University — 2018
Guest instructor (graduate seminar; course instructor: Dr. Rae Silver)

Communicating Science, Columbia University — 2017

Guest instructor (graduate seminar; course instructor: Dr. Rae Silver)

Graduate Student Instructor

Human Learning, University of California, Davis 2012
Teaching assistant & lab instructor (undergraduate lecture course; course instructor: Dr. Andrew Yonelinas)

Cognitive Neuroscience, University of California, Davis 2011
Teaching assistant (undergraduate lecture course; course instructor: Dr. George R. Mangun)

Introduction to Cognitive Psychology, University of California, Davis 2010
Teaching assistant & guest lecturer (undergraduate lecture course; course instructor: Dr. Steven J. Luck)

Introduction to Cognitive Psychology, University of California, Davis 2008
Teaching assistant (undergraduate lecture course; course instructor: Dr. Katherine Gibbs)

MENTORING

Postdoctoral Researchers

Aslıhan İmamoğlu, University of California, Berkeley	2026 –
Emily Meschke, Columbia University	2026 –
Melisa Gumus, University of California, Berkeley	2025 –
Serra Favila, Columbia University (NIH D-SPAN F99/K00; afterward: faculty at Brown University)	2019 – 2024
Halle Dimsdale-Zucker, Columbia University (NIH NRSA F32; afterward: faculty at UC Riverside)	2019 – 2021
Eren Günseli, Columbia University (afterward: faculty at Sabancı University)	2017 – 2019

PhD Students (Primary advisor or co-advisor)

Nikita Sossounov, University of California, Berkeley	2026 –
Jennifer Park, University of California, Berkeley	2025 –
Zall Hirschstein, Columbia University	2023 –
Cheyenne Wakeland-Hart, Columbia University (NSF GRFP award)	2021 –
Craig Poskanzer, Columbia University	2021 – 2026
Manasi Jayakumar, Columbia University (afterward: faculty at Oberlin College)	2018 – 2024
Michael Cohanpour, Columbia University (NIH NRSA F31 Award; afterward: industry)	2019 – 2023
Hannah Tarder-Stoll, Columbia University (afterward: NSERC postdoc award; faculty at York University)	2018 – 2023

PhD Students (Secondary advisor)

Jorge Mallea, Columbia University (afterward: postdoc at Universidad de Valparaiso)	2020 – 2024
Celia Durkin, Columbia University (afterward: postdoc at University of Minnesota)	2018 – 2023
Jonathan Nicholas, Columbia University (afterward: postdoc at NYU)	2018 – 2023
Paul Bloom, Columbia University (NSF GRFP Award; afterward: postdoc, faculty at Columbia)	2018 – 2022
Monica Thieu, Columbia University (NSF GRFP Hon. Men.; afterward: faculty at U of San Diego)	2018 – 2022
Brian Silston, Columbia University (afterward: Director of Center for Brain, Mind and Society)	2019 – 2021
Ellen Tedeschi, Columbia University (afterward: industry)	2017 – 2020
Erin Kendall Braun, Columbia University (afterward: industry)	2016 – 2018

PhD Students (Supervision of collaborative project)

Caroline Lee, Columbia University	2024 –
Jiawen Huang, Columbia University	2022 – 2025
Nick Hoang, University of Toronto	2021 – 2024

Lab Staff (Post-Bac Researchers)

Narjes Al-Zahli, Columbia University & UC Berkeley (afterward: PhD student at Princeton)	2023 – 2025
Raheema Javid, Columbia University (afterward: Master's student at KAUST; awarded NSF GRFP)	2023 – 2025
Aria Tsegai-Moore, Columbia University, Bridge to PhD Scholar (afterward: industry)	2021 – 2023
Zall Hirschstein, Columbia University (afterward: PhD Student at Columbia University)	2020 – 2023
Nicholas Ruiz, Columbia University (afterward: PhD at Temple; postdoc at Yale; NSF GRFP,NIH F99/K00)	2017 – 2020

Undergraduate Students

Martha Ramos, University of California, Berkeley (Research Experience Pathways Work-Study)	2026 –
Jansun Ear, University of California, Berkeley (Supervised Independent Study and Research)	2026 –
Elisa Hu, University of California, Berkeley (Supervised Independent Study and Research)	2026 –
Jonah Ismael, University of California, Berkeley (Supervised Independent Study and Research)	2026 –
Sally Ismael, University of California, Berkeley (Supervised Independent Study and Research)	2026 –
Kaylee Wang, Columbia University (Honors student; afterward: consulting firm in NYC)	2020 – 2022
Edoardo Spolaore, Columbia University (Honors student; afterward: Med School at Vanderbilt)	2019 – 2021
Tamar Mosulishvili, Columbia University (Honors student; afterward: Med School at Dartmouth)	2018 – 2020
Nikita Datta, Columbia University (Honors student; afterward: Columbia Law School)	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

STUDENT THESIS AND EXAM COMMITTEES

Undergraduate Thesis Mentor or Reader

Maria I. Castañeda Barba, Psychology, University of California, Berkeley (Reader) 2025
Title: Visual stimulation and learning outcomes:
Understanding fidgetiness and focus in screen-based settings

Kaylee Wang, Psychology, Columbia University (Mentor) 2022
Title: Eye movements support similar image discrimination

Edoardo Spolaore, Psychology, Columbia University (Mentor) 2021
Title: Multi-step prediction: Is there a trade-off between retrieval and encoding?

Tamar Mosulishvili, Psychology, Columbia University (Mentor) 2020
Title: The effects of indirect reward on attention capture

Nikita Datta, Psychology, Columbia University (Mentor) 2019
Title: Conceptual and perceptual fluency in familiarity and recollection

Master's Degree Committees

Zall Hirschstein, Psychology, Columbia University 2025
Title: Decoupling lower-level and higher-level visual features in naturalistic scenes

Craig Poskanzer, Psychology, Columbia University 2023

Title: Switching between external and internal attention in hippocampal networks

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 2020
Title: Probability, uncertainty, and reward rate affect different aspects of anticipatory behavior

Hannah Tarder-Stoll, Psychology, Columbia University 2020
Title: Multi-step prediction and integration in naturalistic environments

Paul Bloom, Psychology, Columbia University 2019
Title: Longitudinal growth charts for amygdala reactivity to emotional faces: A multiverse approach

Celia Durkin, Psychology, Columbia University 2019
Title: The temporal dynamics of abstraction

Jonathan Nicholas, Psychology, Columbia University 2019
Title: Uncertainty-based arbitration between incremental and episodic control over decisions

Monica Thieu, Psychology, Columbia University 2019
Title: Emotion expression and categorial perception

Brian Silston, Psychology, Columbia University 2017
Title: Effects of threat on ongoing cognition and behavior in dynamic virtual environments

Ellen Tedeschi, Psychology, Columbia University 2017
Title: The effects of aging on curiosity and memory

Qualifying Exam Committees

Maggie Vashel, Psychology, University of California, Berkeley (served as Chair) 2026
Jianing Mu, Neuroscience, University of California, Berkeley 2026
Carolyn Irving, Neuroscience, University of California, Berkeley 2025
Ani Abovian, Psychology, University of California, Davis 2024

Dissertation Committees (Multi-Year Commitment; Year of Completion is Noted)

Elizabeth Cisneros, Psychology, University of California, Berkeley in progress (2026 – present)

Jianing Mu, Neuroscience, University of California, Berkeley in progress (2026 – present)

Carolyn Irving, Neuroscience, University of California, Berkeley in progress (2025 – present)

Craig Poskanzer, Psychology, Columbia University 2026
Title: Switching between internal and external attention

Jiawen Huang, Psychology, Columbia University 2025
Title: How prior knowledge scaffolds memory - a "kind of naturalistic" approach

Jack Burgess, Neuroscience Institute, Carnegie Mellon University 2025

Title: Imagination boosts strategy learning in artificial and human agents

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

Michael Cohanpour, Neurobiology & Behavior, Columbia University 2023
Title: The cognitive and neural mechanisms of curiosity

Matthew Siegelman, Psychology, Columbia University 2023
Title: Generating structured stimuli for investigations of human behavior and brain activity
with computational models

Celia Durkin, Psychology, Columbia University 2023
Title: The Beholder's Share: Bridging art and neuroscience to study subjective experience

Nicholas Singletary, Neurobiology & Behavior, Columbia University 2023
Title: How we know when we don't know enough:
Neural representations of probabilistic inference and information demand

Jonathan Nicholas, Psychology, Columbia University 2023
Title: Hindsight for foresight: Adaptive uses of memory in value-based decision making

Dara Huggins-James, Psychology, Columbia University 2022
Title: A diversity-conflict model of inclusion

Paul Bloom, Psychology, Columbia University 2022
Title: Into the multiverse: Methods for studying developmental neuroscience

Monica Thieu, Psychology, Columbia University 2022
Title: Exploring perception and categorization of social and affective stimuli

Brian Silston, Psychology, Columbia University 2021
Title: Motivational influences on environmental and information exploration, cognition, memory and behavior

Nora Rouast, Experimental Psychology, University of Oxford 2021
Title: Mutual influences between memory and attention

Zachary Bucknoff, Psychology, Columbia University 2020
Title: Motivator and moralizer: How agency shapes choice and judgment

Ellen Tedeschi, Psychology, Columbia University 2020
Title: Knowledge for the sake of knowledge: Understanding the relationship between curiosity, exploration and reward

Linbi Hong, Electrical Engineering, Columbia University 2019
Title: Mapping the spatiotemporal interactions of the human brain's attention reorienting and
arousal systems using multimodal recording techniques

Emily Cowan, Cognitive Neuroscience, New York University — 2019
Title: The effect of sleep on the neural organization of memory traces

Raphael Gerraty, Psychology, Columbia University — 2018
Title: Brain network mechanisms in learning behavior

Erin Kendall Braun, Psychology, Columbia University — 2018
Title: Brain Mechanisms of adaptive memory: Neuromodulation and behavior in humans

Judy Xu, Psychology, Columbia University — 2018
Title: Understanding the behavioral and neurocognitive relation between mind wandering and learning

Matti Vuorre, Psychology, Columbia University — 2018
Title: Using visual illusions to examine action-related perceptual changes

Hongmi Lee, Cognitive Neuroscience, New York University — 2018
Title: Mnemonic content representations in human posterior parietal cortex

Andrew Heusser, Cognitive Neuroscience, New York University — 2016
Title: The role of neural oscillations in the encoding and organization of sequential events

UNIVERSITY SERVICE

UC Berkeley Psychology Department Service

Faculty Search Committee Co-Chair, for Assistant Teaching Professor in Quantitative Methods	2026 –
Futures Committee	2026 –
Diversity, Equity, Inclusion, Belonging, and Justice Committee	2024 – 2026

UC Berkeley Helen Wills Neuroscience Institute Service

Neuroscience PhD Program Grad Committee, Faculty Academic Advisor for Cognitive Neuroscience	2026 –

UC Berkeley Campus Service

Member, Campus Advisory Committee on Work and Family	2026 –
Interviewer for Regents' & Chancellor's Scholarships	2025 – 2026
Interviewer for Fiat Lux Scholarships	2025

Columbia University Psychology Department Service

Colloquium Committee, organizing departmental colloquia	2020 – 2023
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 2017 – 2020
Presidential Scholars in Society and Neuroscience, application reviewer 2020
Faculty panel for Bridge to Ph.D. participants, graduate admissions advice for under-represented groups 2020
Faculty panel of awardees of the Lenfest Junior Faculty Development Grant 2019
Faculty panel for Bridge to Ph.D. participants, graduate admissions advice for under-represented groups 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)
National Science Foundation
    Division of Behavioral and Cognitive Sciences
    Cognitive Neuroscience Panel
    Science of Learning and Augmented Intelligence Panel
    Ad-hoc reviewer for Cognitive Neuroscience
    Ad-hoc reviewer for Perception, Action, & Cognition
Netherlands Organisation for Scientific Research

Reviewer — Journals

Attention, Perception, & Psychophysics
Behavioural Neurology
Brain
Brain Research
Cerebral Cortex
Cerebral Cortex Communications
Cognitive Neuroscience
Collabra: Psychology
Communications Psychology
Cortex
Current Biology
eLife
eNeuro
Journal of Cognitive Psychology
Journal of Cognitive Neuroscience
Journal of Experimental Psychology: Learning, Memory, & Cognition
Journal of Neuroscience
Memory & Cognition
Nature Communications
Nature Human Behaviour
Nature Reviews Neuroscience
Nature Reviews Psychology
Neurobiology of Aging
Neurobiology of Learning and Memory
Neuron
Neuropsychologia
Neuroscience & Biobehavioral Reviews
Oxford Open Neuroscience
PLoS ONE
Psychological Science
Psychonomic Bulletin & Review
Psychological Review
Quarterly Journal of Experimental Psychology
Trends in Cognitive Sciences
Visual Cognition

Reviewer — Other

JoCN and CNS Travel Fellowship Reviews 2022 – 2025
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)

"Memory", 4th Edition by Alan Baddeley, Michael Eysenck, and Michael C. Anderson 2024
reviewed and provided endorsement for this book
https://www.routledge.com/Memory/Baddeley-Eysenck-Anderson/p/book/9781032592084

NeurIPS Workshop Program Committee 2022
reviewed submissions for workshop on "Memory in Artificial and Real Intelligence"

Editorial Roles

Journal of Cognitive Neuroscience, Consulting Editor 2020 –
Philosophical Transactions of the Royal Society B, Guest Editor 2025 – 2026
Neuroscience Letters, Guest Editor 2016 – 2018

Edited Volumes

The Role of Hippocampal Predictions in Cognition: Bridging Perception and Memory 2026
Philosophical Transactions of the Royal Society B
https://royalsocietypublishing.org/rstb/issue/381/1954

New Perspectives on the Hippocampus and Memory, *Neuroscience Letters* 2018
https://www.sciencedirect.com/journal/neuroscience-letters/vol/680/suppl/C

Organized Conferences

Mental Representations of Possible Futures (organized with Amitai Shenhav; Berkeley, CA) Mar 2027
Bay Area Memory Meeting (BAMM!) (assisted by trainee organizers; Berkeley, CA) Sept 2026
Memory Disorders Research Society Annual Meeting (New York, NY) Oct 2019

Committees for Professional Societies

Executive Committee for the Memory Disorders Research Society 2023 – 2025
Chair of the Executive Committee for 2024-2025, Member at Large for 2023-2024

Justice, Equity, Diversity, and Inclusion (JEDI) Committee for the Memory Disorders Research Society 2021– 2023
Developing & implementing JEDI policies for the Memory Disorders Research Society

DEI & Outreach Activities

Trainee Coordinator for Reviewer Zero 2020 –
pre-review mentorship network to illuminate hidden curriculum of peer review

Mock Interviews for Cientifico Latino 2022 – 2026
mock interviews for Latino graduate school applicants in Psychology; https://www.cientificolatino.com/

Mock Interviews for Minnesota Inclusive Neuroscience Development Scholars (MINDS) 2026
mock interviews for graduate school applicants in Neuroscience
https://med.umn.edu/neuroscience/diversity-inclusion/training-career-research

Black in Neuro Week Sponsor 2025
monetary contributions and in-kind services (feedback on CVs, cover letters, and other application materials)

International Online Mentoring Program, Organization for Human Brain Mapping 2025
paired with a trainee based at an international university, to provide career advice and feedback

Mentor for Cientifico Latino Graduate Student Mentorship Initiative 2024 – 2025
mentorship for Latino graduate school applicant in Psychology; https://www.cientificolatino.com/

Researcher Catalysts Interview 2024
interview for organization that exposes high school students to researchers in STEM

Black in Neuro Week Sponsor 2022 – 2023

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

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; https://www.blackinneuro.com/

Let's Talk Grad School 2020 – 2021
graduate school advice for under-represented minoritized trainees; organized by Dr. Margaret Echelbarger

Women in Learning mentor 2020 – 2021
paired with a trainee to provide career advice and feedback

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

Stories of Women in Neuroscience Dec 2026
Interviewed about my career and research for a podcast series that profiles women in neuroscience
https://www.storiesofwin.org/

Brown Daily Herald Sep 2026
Interviewed about our paper examining hippocampal mechanisms that resolve competition in memory & perception (Favila & Aly, 2026)
https://www.browndailyherald.com/article/92a56be0-5a0d-4ec7-a3fe-252ba72491b6

Daily Neuron
Feature about a theme issue that I co-edited for Philosophical Transactions of the Royal Society July 2026
https://dailyneuron.com/hippocampus-memory-prediction-perception/

The Transmitter Mar 2026
Interviewed about a proposed NIH policy that would restrict sharing of human brain imaging data
https://www.thetransmitter.org/data-sharing/neuroscientists-challenge-nihs-proposed-human-data-access-policy/

Nature Feb 2026
Interviewed for an article about how lab manuals can improve lab culture
https://www.nature.com/articles/d41586-026-00390-6

Medscape Medical News Aug 2025
https://www.medscape.com/viewarticle/simple-noninvasive-eye-tracking-may-flag-rule-out-cognitive-2025a1000lk9
Provided expert commentary on a PNAS paper showing eye movement changes that track memory decline

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
Discusses our work to increase equity and fairness in peer review

Science Friday (WNYC Studios and NPR) Feb 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 Feb 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 Feb 2024
Interviewed about the challenges to the traditional view of the medial temporal lobe as a memory system

Researcher Catalysts Feb 2024
https://researchercatalyst.wixsite.com/researcher-catalysts/general-8
Interview for organization that exposes high school students to researchers in STEM

The Transmitter Jan 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 Oct 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 Dec 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 Mar 2022
https://open.spotify.com/episode/324j048T8uZEifnLncBW5Z?si=I0K0e3peSP-0mOzQvImVCg&nd=1
Interviewed for a podcast about Columbia faculty's research and experience in academia

CBC Radio (CBC Newfoundland Morning) Jan 2022
Interviewed about how the COVID-19 pandemic has affected people's sense of time and memory for life details

The Washington Post Jan 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 Nov 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 Oct 2021
https://www.greymattersjournalcu.org/post/mind-the-migraine
Interviewed about my experience as a migraine sufferer

National Public Radio Aug 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 Apr 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's *Monitor* Apr 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 Jan 2021
Interviewed for a cognitive neuroscience podcast by Dr. Jonathan Peelle
Aimed at undergraduate students and a lay audience

Harvard Women in Psychology Sep 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 Aug 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 Nov 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 Oct 2017
https://www.lesliegoldmanwrites.com/pdfs/who.pdf
Interviewed about memory and how to improve it