Brynn E. Sherman

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EDUCATION & RESEARCH EXPERIENCE

2022- **University of Pennsylvania**
Postdoctoral Researcher
Advisor: Anna Schapiro

2017-2022 **Yale University**
PhD, Cognitive Psychology
Advisor: Nicholas Turk-Browne

2015-2017 **New York University**
Lab Manager/Assistant Research Scientist
Advisor: Lila Davachi

2012-2015 **New York University**
Bachelor of Science, *summa cum laude*
Neural Science with High Honors
Honors Thesis Advisor: Lila Davachi

AWARDS AND FELLOWSHIPS

Data Driven Discovery Initiative Fellowship, University of Pennsylvania (2023)
Trainee Professional Development Award, Society for Neuroscience (2021)
Elsevier/Vision Research Travel Award, Vision Sciences Society (2021)
Graduate Research Fellowship, National Science Foundation (2017-2020)
Sterling Prize Fellowship, Yale University (2017-2019)
Albert Borgman Thesis Prize, New York University (2016)
Sherrington Award for Undergraduate Neural Science, New York University (2016)
Phi Beta Kappa, New York University (2016)
Dean's Undergraduate Research Fund (five-time recipient), New York University (2013-2015)
CAS Women in Science Scholar, New York University (2014-2015)
CAS Presidential Honors Scholar, New York University (2013-2015)

PEER-REVIEWED PUBLICATIONS & CONFERENCE PROCEEDINGS (*equal contribution)

Yates TS, **Sherman BE**, and Yousif SR *(in press).* More than a moment: What does it mean to call something an 'event'?. *Psychonomic Bulletin & Review.*

Sherman BE, Turk-Browne NB, and Goldfarb EV *(in press).* Multiple memory subsystems: Reconsidering memory in the mind and brain. *Perspectives on Psychological Science.*

Sherman BE, Aljishi A, Graves KN, Quraishi IH, Sivaraju A, Damisah EC, and Turk-Browne NB *(in press).* Intracranial entrainment reveals statistical learning across levels of abstraction. *Journal of Cognitive Neuroscience.*

Sherman BE*, DuBrow S*, Winawer J, and Davachi L (2023). Mnemonic content and hippocampal patterns shape judgments of time. *Psychological Science, 34*(2), 221-237.

Sherman BE, Graves KN, Huberdeau DM, Quraishi IH, Damisah EC, and Turk-Browne NB (2022). Temporal dynamics of competition between statistical learning and episodic memory in intracranial recordings of human visual cortex. *Journal of Neuroscience, 42*(48), 9053-9068.

Graves KN, **Sherman BE**, Huberdeau D, Damisah E, Quraishi IH, and Turk-Browne NB (2022). Remembering the pattern: A longitudinal case study on statistical learning in spatial navigation and memory consolidation. *Neuropsychologia,* 174, 108341.

Sherman BE, Yousif SR, Reiner CL, and Keil FC (2022). The speed of statistical perception. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 44.

Sherman BE and Turk-Browne NB (2020). Statistical prediction of the future impairs episodic encoding of the present. *Proceedings of the National Academy of Sciences, 117*(37), 22760-22770.

Sherman BE, Graves KN, and Turk-Browne NB (2020). The prevalence and importance of statistical learning in human cognition and behavior. *Current Opinion in Behavioral Sciences*, 32, 15-20.

BOOK CHAPTERS

Sherman BE and Turk-Browne NB *(in press).* Attention and Memory. Chapter in M.J. Kahana & A.D. Wagner (Eds.), *Handbook of Human Memory.* Oxford University Press. Preprint: https://psyarxiv.com/xs6db/

MANUSCRIPTS

Sherman BE, Harris BB, Turk-Browne NB, Sinha R, and Goldfarb EV *(in revision)*. Hippocampal mechanisms support cortisol-induced memory enhancements. Preprint: https://www.biorxiv.org/content/10.1101/2023.02.08.527745v1

Aljishi A, **Sherman BE**, Huberdeau DM, Obaid S, Sivaraju A, Turk-Browne NB, and Damisah EC *(under review).* Statistical learning in epilepsy: Behavioral, anatomical, and causal mechanisms in the human brain. Preprint: https://doi.org/10.1101/2023.04.25.538321

Sherman BE, Huang I, Wijaya EG, Turk-Browne NB, and Goldfarb EV *(in prep).* Acute stress distinctly modulates episodic memory and statistical learning.

CONFERENCE PRESENTATIONS

Sherman BE, Siefert EM, and Schapiro, AC (2023, July). Measuring the rapid acquisition and integration of structured knowledge. Poster to be presented at the Cognitive Science Society Meeting, Sydney, NSW.

Sherman BE and Turk-Browne NB (2023, March). Learning from abstract regularities in the hippocampus and visual cortex. Talk presented at the Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.

Harris BB, **Sherman BE**, Turk-Browne NB, Sinha R, and Goldfarb EV (2022, December). Hydrocortisone alters the formation of alcohol-related episodic memories. Poster presented at the Annual Meeting of the American College of Neuropsychopharmacology, Phoenix, AZ.

Sherman BE, Huang I, Wijaya EG, Turk-Browne NB, and Goldfarb EV (2022, November). Acute stress modulates the use of hippocampal subsystems during learning. Poster presented at Society for Neuroscience Meeting, San Diego, CA.

Harris BB, **Sherman BE**, Turk-Browne NB, Sinha R, and Goldfarb EV (2022, November). Hydrocortisone alters neural mechanisms supporting emotional episodic memory. Talk presented at Society for Neuroscience Meeting, San Diego, CA.

Sherman BE, Yousif SR, Reiner CL, and Keil FC (2022, July). The speed of statistical perception. Flash talk presented at the Annual Conference of the Cognitive Science Society, Virtual.

Sherman BE, Aljishi A, Graves KN, Quraishi IH, Sivaraju A, Damisah EC, and Turk-Browne NB (2022, May). Shared and distinct representations of visual regularities across levels of abstraction. Poster presented at Vision Sciences Society, St. Pete Beach, FL.

Graves KN, **Sherman BE**, and Turk-Browne NB (2022, May). Distributional biases in spatial memory during virtual navigation. Poster presented at Vision Sciences Society, St. Pete Beach, FL.

Sherman BE, Aljishi A, Graves KN, Quraishi IH, Sivaraju A, Damisah EC, and Turk-Browne NB (2021, November). Mechanisms and dynamics of statistical learning across levels of abstraction. Poster presented at Society for Neuroscience Meeting, Virtual.

Graves KN, **Sherman BE**, Quraishi IH, Damisah EC, and Turk-Browne NB (2021, November). Medial temporal lobe codes for distorted spatial memory during virtual navigation. Poster presented at Society for Neuroscience Meeting, Virtual.

Aljishi A, **Sherman BE**, Huberdeau DM, Sivaraju A, Turk-Browne NB, and Damisah EC (2021, November). Multimodal interrogation of statistical learning and episodic memory in human epilepsy. Poster presented at Society for Neuroscience Meeting, Virtual.

Graves KN, **Sherman BE**, Huberdeau D, Damisah E, Quraishi IH, and Turk-Browne NB (2021, August). Remembering the pattern: a case study on statistical learning in spatial navigation and memory consolidation. Poster presented at Context and Episodic Memory Symposium, Philadelphia, PA.

Sherman BE, Graves KN, Huberdeau DM, Benjamin CFA, Quraishi IH, Damisah EC, and Turk-Browne NB (2021, May). Dynamics of category-level statistical learning from intracranial recordings in visual cortex. Talk presented at Vision Sciences Society, Virtual.

Reiner C, Yousif SR, **Sherman BE**, and Keil FC (2021, May). Common structure underlying visual and non-visual judgments of randomness. Poster presented at Vision Sciences Society, Virtual.

Sherman BE and Turk-Browne NB (2020, June). Visual statistical learning distorts feature memory. Poster presented at Vision Sciences Society, Virtual.

Graves KN, **Sherman BE,** and Turk-Browne NB (2020, June). Closer than it appeared: Distorted spatial memory during virtual navigation. Poster presented at Vision Sciences Society, Virtual.

Sherman BE, Ellis CT, Benjamin CFA, Gerrard JL, Spencer DD, and Turk-Browne NB (2019, October). Dynamic interactions between statistical learning and episodic memory. Poster presented at Society for Neuroscience Meeting. Chicago, IL.

Sherman BE and Turk-Browne NB (2019, May). Regularity-induced attentional biases and their mnemonic consequences. Poster presented at Vision Sciences Society. St. Pete Beach, FL.

Sherman BE and Turk-Browne NB (2018, November). How does the hippocampus simultaneously process instances and regularities? Poster presented at Society for Neuroscience Meeting. San Diego, CA.

Sherman BE and Turk-Browne NB (2018, May). Simultaneous learning of episodes and regularities. Talk presented at Manhattan Area Memory Meeting. New York, NY.

Sherman B, DuBrow S, Winawer J, and Davachi L (2017, June). Memory representations mediate temporal duration judgments. Talk presented at Manhattan Area Memory Meeting. New York, NY.

Sherman B, DuBrow S, Winawer J, and Davachi L (2017, May). Assessing the role of working memory representations in temporal duration judgments. Poster presented at Context and Episodic Memory Symposium. Philadelphia, PA.

DuBrow S, **Sherman B,** Winawer J, and Davachi L (2016, May). Measuring neural dynamics underlying short duration estimation with fMRI. Poster presented at Context and Episodic Memory Symposium. Philadelphia, PA.

Sherman B, DuBrow S, Winawer J, and Davachi L (2016, April). A neural investigation of temporal duration compression across boundaries. Poster presented at Annual Meeting of the Cognitive Neuroscience Society. New York, NY.

DuBrow S, **Sherman B,** and Davachi L (2015, May). Opposing influences of event boundaries on judgments of time. Poster presented at Context and Episodic Memory Symposium. Philadelphia, PA.

DuBrow S, **Sherman B**, and Davachi L (2015, March). The role of the hippocampus in temporal integration across boundaries. Poster presented at Annual Meeting of the Cognitive Neuroscience Society. San Francisco, CA.

INVITED TALKS

University of Chicago, Cognition Workshop (October 2022)
Yale University, Interdisciplinary Stress Seminar (September 2022)
University of Oregon, Sarah DuBrow Memorial Symposium (July 2022)
Northeastern University, Interdisciplinary Affective Science Lab (December 2020)
University of Pennsylvania, Computational Cognitive Neuroscience Lab (November 2020)
University College London, Visual Perception & Memory and Space Labs (March 2020)
University of Oregon, Kuhl & Zeithamova Labs (July 2018)

MENTORSHIP

Jade Nguyen (Penn undergraduate; 2023 – present)
Kayla Caldwell (Penn undergraduate; 2023)
Tereza Okálová (Penn undergraduate; 2022)
Elaine Wijaya (Yale undergraduate; 2022)
Isabella Huang (Yale undergraduate; 2020 – 2023)
Ayman Aljishi (Yale post-graduate; 2021-2022)
Caroline Reiner (Yale undergraduate; 2020-2022)
Jessie Cheung (Yale undergraduate; 2020-2021)
Marc Harary (Yale undergraduate; 2019)

AD HOC REVIEWING

Attention, Perception, & Psychophysics; BMC Neuroscience; Cerebral Cortex; Communications Psychology; Frontiers in Psychology; Journal of Cognitive Neuroscience; Journal of Experimental Psychology: Learning, Memory, and Cognition; Learning & Behavior; NeuroImage; Quarterly Journal of Experimental Psychology; Scientific Reports

SERVICE & OUTREACH

Guest on Nature & Nurture Podcast (Episode #87: Sleep, Stress, & Memory; 2023)
UPenn DivE In (Diversity & Equity Initiative in Mind Sciences) Weekend Mentor (2022)
Memory Disorders Research Society (MDRS) Conference, Lead Trainee Volunteer (2022)
Wu Tsai Institute Summer Graduate Leader (2021)
Yale Brain Education Day Volunteer (2019, 2021)
Panelist on Career Pathways in Neuroscience, Yale Neuroscience Club (2020)
Manhattan Area Memory Meeting (MAMM) Student Organizer (2019)
Panelist on Graduate Student Life, Yale Psychology New Graduate Student Orientation (2019)
Yale Psychology Department Colloquium Committee (2018-2019; 2019-2020)
New Haven Science Fair Judge (2018, 2019)
Yale MRRC Neuroimaging Outreach Event (2018, 2019)
Yale Psychology Department Interview Day Committee (2018)
NYC Brain Awareness Week Volunteer (2016, 2017)
NYU Strive for College Mentor and Director of Curriculum (2013-2015)

TEACHING EXPERIENCE

Guest Lecturer (Neuroimaging methods), *Biopsychology*, Spring 2023 (Franklin & Marshall College)
Teaching Fellow, *Cognitive Neuroscience*, Spring 2020 (Yale University)
Teaching Fellow, *Introduction to Psychology*, Fall 2019 (Yale University)
Teaching Fellow, *Introduction to Psychology*, Spring 2019 (Yale University)
Teaching Fellow, *Human Brain*, Fall 2018 (Yale University)