Anna C. Schapiro

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Employment

2019 –	Assistant Professor, Department of Psychology, University of Pennsylvania
2015 – 2019	Postdoctoral Fellow, Center for Sleep and Cognition, Harvard Medical School

Education

2014	Princeton University – Ph.D. in Psychology and Neuroscience
2009	Stanford University – B.S. in Symbolic Systems, concentration in Neuroscience

Awards and honors

2023	Cognitive Neuroscience Society Young Investigator Award
2022	Scialog Fellow for the Molecular Basis of Cognition
2021	Association for Psychological Science Rising Star Award
2019	Elected to Memory Disorders Research Society
2019	Advances in Sleep and Circadian Science Travel Award
2018	Sleep Research Society Trainee Merit Award
2017	Inaugural Corkin Award, Memory Disorders Research Society
2016	Ruth L. Kirschstein National Research Service Award, Individual Postdoctoral Fellowship (NRSA F32), National Institute of Neurological Disorders and Stroke
2013	Letter of Commendation for Outstanding Teaching, Princeton University
2012	Rumelhart Memorial Travel Award, Neural Computation and Psychology Workshop, San Sebastian, Spain
2012	Summer Institute in Cognitive Neuroscience Fellow, Santa Barbara, CA
2010	National Science Foundation Graduate Research Fellowship
2009	Firestone Medal for Excellence in Undergraduate Research, Stanford
2009	K. Jon Barwise Award for Distinguished Contributions to the Symbolic Systems Program, Stanford University
2009	Symbolic Systems departmental honors, with distinction, Stanford University
2009	Phi Beta Kappa, elected to Stanford chapter

Publications

Preprints

1. Zhou, Z., Yeung, G., & **Schapiro, A.C.** Self-recovery of memory via generative replay. *arXiv*. doi: doi.org/10.48550/arXiv.2301.06030.
2. Sucevic, J. & **Schapiro, A.C.** A neural network model of hippocampal contributions to category learning. *bioRxiv*. doi: doi.org/10.1101/2022.01.12.476051.

3. Solomon, S.H. & **Schapiro, A.C.** Structure shapes the representation of a novel category. *PsyArXiv*. doi: doi.org/10.31234/osf.io/59x6h.

4. Vogelstein, J.T., …, **Schapiro A.C.,**… Yang, W. Prospective learning: Back to the future. *arXiv*. arxiv.org/abs/2201.07372.

5. Zhou, Z., Singh, D., Tandoc, M.C., **Schapiro, A.C.** Distributed representations for human inference. *bioRxiv*. doi: doi.org/10.1101/2021.07.29.454337.

Journal Articles

6. Singh, D., Norman, K.A., **Schapiro, A.C.** (2022) A model of autonomous interactions between hippocampus and neocortex driving sleep-dependent memory consolidation. *Proceedings of the National Academy of Sciences.*

7. Plate, R. C., **Schapiro, A.C.**, & Waller, R. (2022). Emotional congruency facilitates statistical learning. *Affective Science.*

8. Pudhiyidath, A., Morton, N.W., Viveros Duran, R., **Schapiro, A.C.,** Momennejad, I., Hinojosa-Rowland, D.M., Molitor, R.J., & Preston, A.R. (2022). Representations of temporal community structure in hippocampus and precuneus predict inductive reasoning decisions. *Journal of Cognitive Neuroscience.*

9. Zeng, T., Tompary, A., **Schapiro, A. C.**, & Thompson-Schill, S. (2021). Tracking the relation between gist and item memory over the course of long-term memory consolidation. *eLife.* 10, e65588.

10. Cowan E.T., **Schapiro, A.C.,** Dunsmoor, J.E., & Murty, V.P. (2021). Consolidation as an adaptive process. *Psychonomic Bulletin & Review. 28*(6), 1796-1810.

11. Tandoc, M.C., Bayda, M., Poskanzer, C., Cho, E., Cox, R., Stickgold, R., & **Schapiro, A.C**. (2021). Examining the effects of time of day and sleep on generalization. *PLOS One.* 16 (8), e0255423.

12. Kumar, M., Michael Anderson, Antony, J., Baldassano, C., Brooks, P. P., Cai, M. B., … **Schapiro, A.C.,**… Norman, K. A. (2021). BrainIAK: The Brain Imaging Analysis Kit. *Aperture.*

13. Denis, D., **Schapiro, A.C.,** Poskanzer, C., Bursal, V., Charron, L., Morgan, A., & Stickgold, R. (2020). Memories are selected for consolidation during sleep based on initial encoding strength: The roles of item exposure and visualization. *Learning and Memory.* 27 (11), 451-456

14. Zhou, Z., Singh, D., Tandoc, M., & **Schapiro, A.C.** (2020). Interleaving facilitates the rapid formation of distributed representations. In *Proceedings of the 42nd Annual Conference of the Cognitive Science Society.*

15. Zeng, H., Tompary, A., **Schapiro, A. C.,** & Thompson-Schill, S. L. (2020). The relation between gist and item memory over a month. In *Proceedings of the 42nd Annual Conference of the Cognitive Science Society.*

16. Ellis, C.T., Baldassano, C., **Schapiro, A.C.**, Cai, M., & Cohen, J.D. (2020). Facilitating open-science with realistic fMRI simulation: validation and application. *PeerJ.* 8:e8564, doi: 10.7717/peerj.8564.

17. Karnauskas, K.B., Miller, S.L., & **Schapiro, A.C.** (2020). Fossil fuel combustion is driving indoor CO_2 toward levels harmful to human cognition. *GeoHealth*, 4, e2019GH000237. https://doi.org/10.1029/2019GH000237.

18. Richards, B.A., …, **Schapiro, A.C.** et al. (2019). A deep learning framework for neuroscience. *Nature Neuroscience.* 22(11), 1761-1770.

19. **Schapiro, A.C.**, Reid, A.G., Morgan, A., Manoach, D.S., Verfaellie, M., & Stickgold, R. (2019). The hippocampus is necessary for the consolidation of a task that does not require the hippocampus for initial learning. *Hippocampus.* 29(11), 1091-1100.

20. Cox, R., Van Bronkhorst, M.L.V., Bayda, M., Gomillion, H., Cho, E., Parr, E., Manickas-Hill, O.P., **Schapiro, A.C.**, & Stickgold, R. (2018). Sleep selectively stabilizes contextual aspects of negative memories. *Scientific Reports.* 8(1), 17861.

21. **Schapiro, A.C.**, McDevitt, E.A., Rogers, T.T., Mednick, S.C., & Norman, K.A. (2018). Human hippocampal replay during rest prioritizes weakly learned information and predicts memory performance. *Nature Communications.* (9) 3920-3931.

22. Cox, R., **Schapiro, A.C.,** & Stickgold, R. (2018). Variability and stability of large-scale cortical oscillation patterns. *Network Neuroscience.* 2(4), 481-512.

23. Honey, C.J., Newman, E.L., & **Schapiro, A.C.** (2017). Switching between internal and external modes: a multi-scale learning principle. *Network Neuroscience.* 1(4), 339-356.

24. **Schapiro, A.C.***, McDevitt, E.A.*, Chen, L., Norman, K.A., Mednick, S.C., & Rogers, T.T. (2017). Sleep benefits memory for semantic category structure while preserving exemplar-specific information. *Scientific Reports.* 7, 14869.

25. Cox, R., **Schapiro, A.C.,** Manoach, D.S., & Stickgold, R. (2017). Individual differences in frequency and topography of slow and fast sleep spindles. *Frontiers in Human Neuroscience.* 11, 433.

26. **Schapiro, A.C.,** Turk-Browne, N.B., Botvinick, M.M., & Norman, K.A. (2017). Complementary learning systems within the hippocampus: A neural network modeling approach to reconciling episodic memory with statistical learning. *Philosophical Transactions of the Royal Society B.* 372(1711), 20160049.

27. **Schapiro, A.C.**, Turk-Browne, N.B., Norman, K.A., & Botvinick, M.M. (2016). Statistical learning of temporal community structure in the hippocampus. *Hippocampus,* 26(1), 3-8.

28. Schlichting, M.L., Guarino, K.F., **Schapiro, A.C.,** Turk-Browne, N.B., & Preston, A.R. (2016). Hippocampal structure predicts statistical learning and associative inference abilities during development. *Journal of Cognitive Neuroscience.* 29(1), 37-51.

29. **Schapiro, A.C.**, Gregory, E., Landau, B., McCloskey, M., Turk-Browne, N.B. (2014). The necessity of the medial temporal lobe for statistical learning. *Journal of Cognitive Neuroscience,* 26(8), 1736-1747.

30. **Schapiro, A.C.**, Rogers, T.T., Cordova, N.I., Turk-Browne, N.B., & Botvinick, M.M. (2013). Neural representations of events arise from temporal community structure. *Nature Neuroscience,* 16(4), 486-492.

31. **Schapiro, A.C.**, McClelland, J.L., Welbourne, S.R., Rogers, T.T., & Lambon Ralph, M.A. (2013). Why bilateral damage is worse than unilateral damage to the brain. *Journal of Cognitive Neuroscience.* 25(12), 2107-2123.

32. Gershman, S.J., **Schapiro, A.C.**, Hupbach, A., Norman, K.A. (2013). Neural context reinstatement predicts memory misattribution. *Journal of Neuroscience.* 33(20), 8590-8595.

33. **Schapiro, A.C.**, Kustner, L.V., & Turk-Browne, N.B. (2012). Shaping of object representations in the human medial temporal lobe based on temporal regularities. *Current Biology,* 22(17), 1622-1627.

34. **Schapiro, A.C.** & McClelland, J.L. (2009). A connectionist model of a continuous developmental transition in the balance scale task. *Cognition.* 110(3), 395-411.

Chapters and commentaries

35. Solomon, S.H. & **Schapiro, A.C.** (2020). Semantic search as pattern completion across a concept. *Trends in Cognitive Sciences.* 24(2), 95-98.
36. Antony, J.W., & **Schapiro, A.C.** (2019). Active and effective replay: Systems consolidation reconsidered again. *Nature Reviews Neuroscience.* 20(8), 506-507.
37. **Schapiro A.C.,** & Turk-Browne N.B. (2015) Statistical Learning. In: Arthur W. Toga, editor. Brain Mapping: An Encyclopedic Reference. Academic Press: Elsevier. pp. 501-506.
38. Diuk, C., **Schapiro, A.C.**, Cordova, N.I., Ribas-Fernandes, J., Niv, Y., & Botvinick, M.M. (2013). Divide and conquer: Task decompositions and hierarchical reinforcement learning in humans. In *Computational and Robotic Models of the Hierarchical Organization of Behavior*. Springer Berlin Heidelberg. pp. 271-291.
39. Thomas, M.S.C., McClelland, J.L., Richardson, F.M., **Schapiro, A.C.**, & Baughman, F. (2009). Dynamical and Connectionist Approaches to Development: Toward a Future of Mutually Beneficial Co-evolution. In J.P. Spencer, M. S. C. Thomas, & J. L. McClelland, (Eds). *Toward a unified theory of development: Connectionism and dynamic systems theory re-considered.* New York: Oxford.

Grants

National Institutes of Health, R21 MH128788, "The emergence of abstract structure knowledge across learning and sleep", 2022-2024, Principal Investigator ($150,00 annual direct costs)

National Institutes of Health, R01 RF NS127128, "Hippocampal-cortical contributions to world building in freely behaving macaques", 2022-2027, Co-Investigator (PI: K. Hoffman) ($76,275 annual direct costs)

National Institutes of Health, R01 DA055259, "The influence of mesolimbic-hippocampal interactions on episodic memory during active information seeking", 2022-2027, Co-Investigator (PI: V. Murty) ($10,903 annual direct costs)

Charles E. Kaufman Foundation, KA2020-114800, "Mechanisms of generalization: The role of neural inhibitory processes and time of day", 2020–2022, Principal Investigator ($68,182 annual direct costs)

National Institutes of Health, R21 DA043568-01A1, "Influence of reward on memory consolidation in adults and adolescence", 2019–2021, Co-Investigator (PI: V. Murty) ($13,924 annual direct costs)

University of Pennsylvania Chronobiology and Sleep Institute, "Modulation of Slow Wave Activity using Wearable Technology as a Novel Treatment for Major Depressive Disorder", 2020, Co-Investigator ($50,000)

Invited colloquium and seminar talks

Learning Salon, September 2022

Intel Labs, *Neuroscience & AI Seminar*, July 2022

University of York Athena SWAN lecture, June 2022

Max Planck Institute, Berlin, *Schuck Lab*, May 2022

MRC Cognition and Brain Sciences Unit, Cambridge, *Chaucer Club*, April 2022

Washington University in St. Louis, *NeuroImaging Community seminar series*, February 2022

University of Hamburg, *Cognitive Psychology Research Colloquium*, December 2021

Princeton University, *Psychology Department Cognitive Talk Series*, November 2021

Columbia University, *Center for Theoretical Neuroscience*, June 2021

Barcelona Computational, *Cognitive and Systems Neuroscience Seminar*, May 2021

University of Illinois, *Cognitive Brown Bag*, April 2021

University of California Los Angeles, *Cognitive Psychology Forum*, January 2021

University of Zurich, *Institute of Neuroinformatics Colloquium*, December 2020

Tel Aviv University, *School of Psychological Sciences Colloquium*, December 2020

New York University, *Concepts and Categories Seminar*, December 2020

University of Texas, Austin, *Cognitive Neuroscience Seminar*, November 2020

Georgia Institute of Technology, *Psychology Department Colloquium*, November 2020

Duke University, *Center for Cognitive Neuroscience Colloquium*, November 2020

Temple University, *Memory Meeting*, November 2020

Vanderbilt University, *Cognition & Cognitive Neuroscience Colloquium*, October 2020

Johns Hopkins University, *Intelligent Systems Center seminar*, July 2020

Brown University, *Computation Seminar Series*, May 2020

University of Toronto, *Ebbinghaus Empire seminar*, February 2020

Rotman Research Institute, *Rotman Research Institute Rounds*, February 2020

University College London, *Brain Meeting seminar*, February 2020

National Institutes of Health, *Human Cortical Physiology and Neurorehabilitation Section*, June 2019

University of Oxford, *Cognitive & Behavioural Neuroscience*, May 2019

Google DeepMind, *Neuroscience team*, May 2019

Cardiff University, *School of Psychology*, May 2019

University of Bristol, *Neural Dynamics seminar*, May 2019

Hebrew University, *Cognitive and Social seminar*, January 2019

Bar Ilan University, *Cognitive Neuroscience Lab*, January 2019

Bard College, *Bard Summer Research Institute*, July 2018

Brown University, *Providence Sleep Research Interest Group*, May 2018

University of Iowa, *Iowa Neuroscience Institute*, April 2018

Stanford University, *Department of Psychology*, November 2017

Harvard University, *Cognition, Brain, and Behavior*, October 2017

Boston University, *Brain, Behavior, and Cognition,* October 2017

Tufts University, *Cognitive and Brain Science,* October 2017

Brown University, *Cognition seminar*, April 2017

UC San Diego, *Temporal Dynamics of Learning Center*, March 2017

University College London, *Affective Brain Lab*, October 2016

Weill Cornell Medical College, *Sackler Institute*, April 2015

Invited symposium and workshop talks

EdukCircle International Convention on Psychology, September 2022

Neurobiology of Cognition Gordon Research Conference, July 2022

From Neuroscience to Artificially Intelligent Systems, *Cold Spring Harbor Laboratory,* April 2022

Max Planck Institute for Human Cognitive and Brain Sciences, *Cognition Academy*, January 2021

OBHM, *Prospects in artificial intelligence neuroscience* symposium, June 2020

COSYNE, '*Memory, modularity, and attention: Efficient information dispatching in neural computations*' workshop, Breckenridge, CO, March 2020

Bridging Replay and Reactivation, Chicago, IL, October 2019

Memory Disorders Research Society, New York City, October 2019

The Royal Society, *Memory reactivation: replaying events past, present and future*, Newport Pagnell, UK, May 2019

COSYNE, '*Sleep: models and experiments on replay, consolidation, and off-line processing*' workshop, Cascais, Portugal, March 2019

Deep Learning and the Brain, Jerusalem, Israel, January 2019

Cognitive Computational Neuroscience, *What is systems consolidation for? Examining the potential utility of memory transformation for humans and artificial intelligence*, Philadelphia, PA, September 2018

Science of Understanding Workshop, Madison, Wisconsin, July 2018

Hungarian Academy of Sciences, *Hippocampal Network Across the Lifespan Symposium*, Budapest, Hungary, May 2018

Park City Winter Conference on the Neurobiology of Learning and Memory, *Representation of Contextual Spaces by Cortico-Hippocampal Networks*, Park City, Utah, January 2018

Haskins Laboratories, *McDonnell Foundation Workshop: The Future of Statistical Learning,* New Haven, Connecticut, November 2017

COSYNE, *'Perception and Learning of Temporal Structure in Sensory Streams' workshop,* February 2017

UC Riverside, *Riverside Enhanced Memory & Sleep meeting*, November 2016

COSYNE, *'What Can Sleep Tell Us About Memory Consolidation' workshop*, March 2015

Teaching

2022	Instructor for *Seminar in Sleep and Memory* (PSYC 429), U Penn
2020	Instructor for *Memory* (PSYC 159), U Penn
2019	Instructor for *Sleep and Memory* (PSYC 541), U Penn

2019	Lecturer for Systems Neuroscience (NGG 573), U Penn
2019	Lecturer for Intro to Experimental Psychology (PSYC 1), U Penn
2016	Co-instructor for *Conscious States: Waking, Sleeping, and Dreaming* (MBB 980A), Harvard College
2015	Princeton Teaching Transcript Program https://www.princeton.edu/mcgraw/gs/transcript/
2012	Teaching Assistant for *Introduction to Connectionist Models: Bridging Between Brain and Mind* (PSY/NEU 330), Princeton.
2007	Student Initiated Course on philosophy of mind, Stanford

Professional activities and service

At the University of Pennsylvania:

2019 –	University of Pennsylvania Psychology Department Colloquium Committee (chair 2020-2021)
2021	Career panel discussion and mock interviews for the MindCORE DivE In event, which brought students from underrepresented backgrounds to campus to learn about graduate school.
2021	Faculty mentor for the Underrepresented Minority Application Support Program through the Neuroscience Graduate Group Action Against Bias initiative

Thesis committees for Department of Psychology PhD students:
    Long Ni (chair)
    Tima Zheng
    Clara Raithel
    Camilla Van Geen
Thesis committees for Neuroscience Graduate Group PhD students:
    Catrina Hacker
    Simon Bohn
    Daniel Schonhaut
    Ilenna Jones
Thesis committees for School of Engineering and Applied Science PhD students:
    Ari Benjamin

Elsewhere:

2022 –	Section Editor, *Open Mind*
2020 –	Member of Board of Reviewing Editors for *eLife*
2020 –	Affiliate faculty of bioRxiv (www.biorxiv.org/about-biorxiv)
2022	Organizer of the *Memory Disorders Research Society* meeting in Philadelphia School of Arts and Sciences Conference Support Grant ($5000)

2022, 2023	Chair of the *COSYNE* workshops
2021	Debate panelist for *Neuromatch* conference on *Learning vs. Computation*
2021	Organizer of the Cognitive Science Society affinity group for Neural Network Modeling
2020	Awards committee for Cognitive Science Society
2020	Talk session chair for International Sleep Reactivation Workshop
2020	Talk session chair for *Neuromatch* conference
2020	Deep learning Q&A session for *Neuromatch Academy*
2020	Panelist for Cognitive Computational Neuroscience workshop, *The use of linear models in cognitive neuroscience*
2018	Co-chair for Society for Neuroscience nanosymposium, *Animal Cognition and Behavior: Learning and Memory: Cortical-Hippocampal Interactions*
2016	Postdoctoral steering committee for Harvard's Mind Brain Behavior program
2013	Co-organizer of the first annual Manhattan Area Memory Meeting
2013	Graduate student committee for the neuroscience Ph.D. track at Princeton
2011	Organizing committee for Department of Psychology graduate student visiting day at Princeton
2010	Organizing committee for Department of Psychology graduate student orientation at Princeton
2007 – 2009	Advising Fellow for the Symbolic Systems Program at Stanford
2008	Talk session chair at the PsyPAG annual conference, University of Manchester
2006 – 2008	Focus Assistant and Resident Assistant for the Symbolic Systems theme house at Stanford

Ad hoc reviewing for:

Cerebral Cortex; Cognition; Cognitive Neuropsychology; Cognitive Psychology; Cognitive Science; Cortex; Current Biology; Cognitive Neuropsychology; eLife; Experimental Brain Research; Frontiers in Psychology; Hippocampus; Human Brain Mapping; Journal of Cognitive Neuroscience; Journal of Experimental Psychology: General; Journal of Experimental Psychology: Learning, Memory, and Cognition; Journal of Neuroscience; Learning and Memory; Learning and Motivation; Memory and Cognition; Nature; Nature Communications; Nature Human Behaviour; NeurIPS, Neuropsychologia; Open Mind; PLOS Biology; PLOS Computational Biology; PLOS ONE; Proceedings of the National Academy of Sciences; Psychological Bulletin; Psychological Review; Psychological Science; Psychonomic Bulletin and Review; Royal Society Open Science; Scientific Reports; Sleep; Trends in Cognitive Science

Mentoring

Postdoctoral Fellows
Brynn Sherman (2022-)
Sarah Solomon (2019-)
Emily Cowan (2019- ; co-advisor: Vishnu Murty, Temple University)

Cybelle Smith (2019- ; primary advisor: Sharon Thompson-Schill)
    NIH Ruth L. Kirschstein National Research Service Award, Individual Postdoctoral
    Fellowship (NRSA F32)
Alexa Tompary (2021- ; primary advisor: Sharon Thompson-Schill)
    NIH K99 grant
Elizabeth McDevitt (2021- ; primary advisor: Kenneth Norman, Princeton University)
    NIH K99 grant

Graduate Students
Marlie Tandoc (2019-)
    Natural Sciences and Engineering Research Council of Canada Fellow
Zhenglong Zhou (2019-)
    National Science Foundation Graduate Research Fellow
Elizabeth Siefert (2021-)
    National Science Foundation Graduate Research Fellow
    Trainee Professional Development Award from the Society for Neuroscience
Dhairyya Singh (2021-)
    Trainee Professional Development Award from the Society for Neuroscience

Research Assistants
Elizabeth Siefert (2019-2021)
Dhairyya Singh (2019-2021)
Rishi Krishnamurthy (2022-)

Undergraduates:
Jianing Mu (Haverford '22)
Jefrey Lopez (Lafayette College '23)
    Summer Undergraduate Internship Program
Cody Dong (U Penn '22)
    Greenberg Undergraduate Research Fellowship Award
    Ruth Marcus Kanter College Alumni Society Undergraduate Research Grant
    U Penn School of Arts and Sciences Undergraduate Travel Award
Jayme Banks (U Penn '21)
    Ruth Marcus Kanter College Alumni Society Undergraduate Research Grant
Tiffany Paul (U Penn '21)
Adam Kirsh (U Penn '20)
Olivia Manickas-Hill (Harvard '18)
Daniel Toker (Princeton '13)
Kaitlin Henderson (Princeton '12)
Aaron Trippe (Princeton '12)
Omoshalewa Bamkole (Princeton '11)
Lauren Kustner (Princeton '11)

Research training

2009 – 2015 Graduate Student
        Computational Memory Lab, Princeton University, P.I. Ken Norman

Botvinick Lab, Princeton University, P.I. Matt Botvinick
Turk-Browne Lab, Princeton University, P.I. Nick Turk-Browne

2006 – 2009 Research Assistant
PDP Lab, Stanford University, P.I. Jay McClelland

2008   Summer Research Assistant
Neuroscience and Aphasia Research Unit, University of Manchester,
P.I. Matthew Lambon Ralph

2006   Summer Research Assistant
Computational Cognitive Science Group, MIT, P.I. Josh Tenenbaum
TedLab, MIT, P.I. Ted Gibson

Conference talks

Schapiro, A.C. Distributed representations for human inference. *Talk delivered at the Memory Disorders Research Society meeting.* (2021, October).

Schapiro, A.C. (2020, August). Interleaving facilitates the rapid formation of distributed representations. *Talk delivered at the Context and Episodic Memory Symposium.*

Schapiro, A.C. (2018, November). Enhancement and forgetting of semantic memories across offline periods. *Talk delivered at the Society for Neuroscience Meeting minisymposium, San Diego.*

Schapiro, A.C. (2018, April). Enhancement and prioritization of structured information over sleep and wake. *Talk delivered at the International Conference on Learning and Memory.*

Schapiro, A.C., Turk-Browne, N.B., Botvinick, M.M., & Norman, K.A. (2017, June). Complementary learning systems within the hippocampus: reconciling episodic memory with statistical learning. *Talk delivered at the BCBL Conference on Interdisciplinary Advances in Statistical Learning, Bilbao, Spain.*

Schapiro, A.C., McDevitt, E.A., Mednick, S.C., Rogers, T.T., Norman, K.A. (2017, May). Enhancement and prioritization of structured information over sleep and wake. *Talk delivered at the Context and Episodic Memory Symposium, Philadelphia.*

Schapiro, A.C. (2017, September). Learning and consolidation of structured information. *Talk delivered at the Memory Disorders Research Society meeting, Chicago.*

Schapiro, A.C., Turk-Browne, N.B., Botvinick, M.M., & Norman, K.A. (2016, August). Complementary learning systems within the hippocampus. *Talk delivered at the 15th Neural Computation and Psychology Workshop, Philadelphia.*

Schapiro, A.C., Rogers, T.T., McDevitt, E.A., Mednick, S.C., & Norman, K.A. (2015, May). Human hippocampal replay prioritizes weakly-learned information and predicts memory performance. *Data blitz delivered at the Manhattan Area Memory Meeting, Princeton.*

Schlichting, M.L., Guarino, K.F., **Schapiro, A.C.,** Turk-Browne, N.B., & Preston, A.R. (2015, April). Structural development of hippocampal subfields is related to statistical learning and inference. *Talk delivered at the Austin Conference on Learning and Memory biannual meeting, Austin.*

Schapiro, A.C., Norman, K.A., Turk-Browne, N.B., & Botvinick, M.M. (2014, November). Rapid learning of complex temporal regularities in the hippocampus: Evidence from fMRI and a neural network model. *Talk delivered at the Society for Neuroscience Meeting, Washington, D.C.*

Schapiro, A.C., Norman, K.A., Turk-Browne, N.B., & Botvinick, M.M. (2014, June). Rapid learning of complex events in the hippocampus: Evidence from fMRI and neural network modeling. *Talk delivered at the Manhattan Area Memory Meeting, New York City.*

Schapiro, A.C., Gregory, E., Landau, B., McCloskey, M., Turk-Browne, N.B. (2013, May). The necessity of the medial temporal lobe for statistical learning. *Data blitz delivered at the Context and Episodic Memory Symposium, Philadelphia.*

Schapiro, A.C., Rogers, T.T, Cordova, N.I., Turk-Browne, N.B., &. Botvinick, M.M. (2012, July). Neural representations of events arise from temporal 'community' structure. *Talk delivered at the Neural Computation and Psychology Workshop, San Sebastian, Spain.*

Botvinick, M.M, **Schapiro, A.C.**, Cordova, N.I., Turk-Browne, N.B., & Rogers, T.T. (2012, April). Events as categories. *Talk delivered at the Cognitive Neuroscience Society Meeting, Chicago.*

Schapiro, A.C., Kustner, L.V., & Turk-Browne, N.B. (2011, November). Multi-voxel object representations in the human medial temporal lobe are shaped by incidental learning of temporal regularities. *Talk delivered at the Society for Neuroscience meeting, Washington, D.C.*

Schapiro, A.C., McClelland, J.L., Welbourne, S.R., Rogers, T.T., & Lambon Ralph, M.A. (2009, November). A computational account of the differences between unilateral and bilateral damage. *Talk delivered and poster presented at the Computational Cognitive Neuroscience Conference, Boston.*

Conference posters

Solomon, S.H., & **Schapiro, A.C.** (2020, May). Learning the internal structure of novel categories. *Poster presented at the Cognitive Neuroscience Society meeting.*

Zhou, Z., Tandoc, M., Singh, D., & **Schapiro, A.C.** (2020, May). Behavioral evidence that the rapid formation of distributed representations benefits inference. *Poster presented at the Cognitive Neuroscience Society meeting.*

Smith, C., Thompson-Schill, S., & **Schapiro, A.C.** (2020, May). Hierarchical statistical learning: Behavioral, neuroimaging, and neural network modeling investigations. *Data blitz and poster presented at the Cognitive Neuroscience Society meeting.*

Sucevic, J. & **Schapiro, A.C.** (2019, October). A hippocampal subfield model of category learning. *Poster presented at the Society for Neuroscience Meeting, Chicago.*

Schapiro, A.C., Reid, A.G., Morgan, A., Manoach, D.S., Verfaellie, M., & Stickgold, R. (2018, November). Hippocampal contributions to sleep-dependent consolidation of non-hippocampal motor sequence learning. *Poster presented at the Society for Neuroscience Meeting, San Diego.*

Pudhiyidath, A., **Schapiro, A.C.,** Molitor, R.J., & Preston, A.R. (2018, November). Hippocampal representations of temporal statistics predict subsequent reasoning. *Poster presented at the Society for Neuroscience Meeting, San Diego.*

Schapiro, A.C., Bayda, M., Cho, E., Cox, R., & Stickgold, R. (2018, June). Generalization in an object category learning paradigm is better in the morning than the evening. *Poster presented at SLEEP, Baltimore.*

Schapiro, A.C., Bayda, M., Cho, E., Cox, R., & Stickgold, R. (2018, March). Generalization in an object category learning paradigm is better in the morning than the evening. *Poster presented at the Cognitive Neuroscience Society Meeting, Boston.*

Pudhiyidath, A., **Schapiro, A.C.,** Preston, A.R. (2018, March). Neural representations of temporal statistics can predict subsequent reasoning. *Poster presented at the Cognitive Neuroscience Society Meeting, Boston.*

Schapiro, A.C., Bayda, M., Cho, E., Cox, R., & Stickgold, R. (2017, November). The role of sleep in generalizing across disjointly presented information. *Poster presented at the Society for Neuroscience Meeting, Washington, D.C.*

Cox, R., Van Bronkhorst, M., Gomillion, H., **Schapiro, A.C.**, & Stickgold, R. (2017, November). Sleep selectively enhances associative aspects of emotional memories. *Poster presented at the Society for Neuroscience Meeting, Washington, D.C.*

Cohen, J.D., Lesnick, M., Keller, B., Baldassano, C., **Schapiro, A.C.**, & Ellis, C.T. (2017, November). Using realistic, synthetic fMRI data to validate Topological Data Analysis as a tool for fMRI. *Poster presented at the Society for Neuroscience Meeting, Washington, D.C.*

Cox, R., **Schapiro, A.C.,** & Stickgold, R. (2017, June). Oscillatory network dynamics of non-rapid eye movement sleep. *Poster presented at Network Neuroscience, Indianapolis.*

Schapiro, A.C., McDevitt, E.A., Chen, L., Norman, K.A., Mednick, S.C., & Rogers, T.T. (2017, June). Sleep benefits memory for semantic category structure while preserving individual exemplars. *Poster presented at SLEEP, Boston.*

Cox, R., van Bronkhorst, M., Gomillion, H., **Schapiro, A.C.**, Stickgold, R. (2017, June). Sleep selectively enhances associative aspects of emotional memories. *Poster presented at SLEEP, Boston.*

Schapiro, A.C., Turk-Browne, N.B., Botvinick, M.M., & Norman, K.A. (2016, November). Complementary learning systems within the hippocampus: A neural network modeling approach to reconciling episodic memory and statistical learning. *Poster presented at the Society for Neuroscience Meeting, San Diego.*

Schapiro, A.C., Rogers, T.T., McDevitt, E.A., Mednick, S.C., & Norman, K.A. (2016, June). Human hippocampal replay prioritizes weakly-learned information and predicts memory performance. *Poster presented at SLEEP, Denver.*

Schapiro, A.C., Rogers, T.T., McDevitt, E.A., Mednick, S.C., & Norman, K.A. (2015, October).

Human hippocampal replay prioritizes weakly-learned information and predicts memory performance. *Poster presented at the Society for Neuroscience Meeting, Chicago.*

Guarino, K.F., Schlichting, M.L., **Schapiro, A.C.,** Turk-Browne, N.B., & Preston, A.R. (2015, October). Development of medial prefrontal cortex is related to statistical learning and inference. *Poster presented at the Society for Neuroscience Meeting, Chicago.*

Schlichting, M.L., Guarino, K.F., **Schapiro, A.C.,** Turk-Browne, N.B., & Preston, A.R. (2014, November). Structural development of hippocampal subfields is related to statistical learning and inference. *Poster presented at the Society for Neuroscience Meeting, Washington, D.C.*

Schapiro, A.C., Norman, K.A., Turk-Browne, N.B., & Botvinick, M.M. (2014, May). Learning of complex event structure in the hippocampus. *Poster presented at the Context and Episodic Memory Symposium, Philadelphia.*

Schapiro, A.C., Gregory, E., Landau, B., McCloskey, M., Turk-Browne, N.B. (2013, November). The necessity of the medial temporal lobe for statistical learning. *Poster presented at Society for Neuroscience meeting, San Diego.*

Schapiro, A.C., Rogers, T.T., Norman, K.A., Chen, L., McDevitt, E.A., Mednick, S.C. (2013, June). The role of sleep in consolidating semantic knowledge. *Poster presented at SLEEP, Baltimore.*

Schapiro, A.C., Rogers, T.T., Norman, K.A., Chen, L., McDevitt, E.A., Mednick, S.C. (2013, May). The role of sleep in consolidating semantic knowledge. *Poster presented at the Vision Sciences Society Meeting, Naples, FL.*

Schapiro, A.C., Norman, K.A., & Rogers, T.T. (2012, October). The role of sleep in consolidating semantic knowledge. *Poster presented at the Society for Neuroscience meeting, New Orleans.*

Gershman, S.J., **Schapiro, A.C.**, Hupbach, A., & Norman, K.A. (2012, October). Neural context reinstatement predicts memory misattribution. *Poster presented at the Society for Neuroscience meeting, New Orleans.*

Diuk, C., Yee, D., Ribas-Fernandes, J., Cordova, N.I., **Schapiro, A.C.**, Niv, Y., & Botvinick, M.M. (2012, October). Divide and conquer: Task decomposition in humans. *Poster presented at the Society for Neuroscience meeting, New Orleans.*

Schapiro A., Herd, S., Trippe, A., O'Reilly, R., Rogers, T., & Norman, K. (2012, July). The computational mechanisms underlying learning during sleep. *Poster presented at the Neural Computation and Psychology Workshop, San Sebastian, Spain.*

Schapiro, A.C., Kustner, L.V., & Turk-Browne, N.B. (2011, May). Contributions of visual and temporal similarity to statistical learning. *Poster presented at the Vision Sciences Society Meeting, Naples, FL.*

Schapiro, A.C., Kustner, L.V., & Turk-Browne, N.B. (2011, May). Visual similarity affects statistical learning of temporal regularities: Evidence from familiarity, implicit biases, and MTL pattern correlations. *Poster presented at the Context and Episodic Memory Symposium, Philadelphia.*

Schapiro, A.C., Rogers, T.T., & Botvinick, M. (2010, August). The structure of event representations: behavioral, imaging, and computational investigations. *Poster presented at the Cognitive Science Society Conference, Portland.*

Schapiro, A.C., McClelland, J.L., Welbourne, S.R., & Lambon Ralph, M.A. (2009, March). Modeling lateralization of semantic knowledge in the anterior temporal lobes. *Poster presented at the Cognitive Neuroscience Society Meeting, San Francisco.*