Margaret L. Schlichting, Ph.D.

May 2024

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Professional Appointments

Associate Professor 2023-present
University of Toronto, Department of Psychology

Assistant Professor 2017-2023
University of Toronto, Department of Psychology

Postdoctoral Fellow 2015-2016
The University of Texas at Austin, Center for Learning & Memory
Advisor: Alison Preston

Education

Ph.D., The University of Texas at Austin May 2015
Department of Psychology (Cognitive Neuroscience)
Dissertation: *When memories relate: Medial temporal and prefrontal contributions to memory integration and inference*
Advisor: Alison Preston
Committee: Jessica Church-Lang, Laura Colgin, Jarrod Lewis-Peacock, Russell Poldrack, David Schnyer

B.A., University of Pennsylvania May 2010
Major: Cognitive Science (Cognitive Neuroscience concentration)
Phi Beta Kappa, *summa cum laude* with departmental honors
Thesis: *Investigating overlap of perceptual and conceptual color processing through fMRI adaptation*
Research advisor: Sharon Thompson-Schill

Grants & Research Support

Extramural Awards

Relating the development of microscopic hippocampal pathways to concept learning: Complementary neural network and white matter investigations 2021-2026
Canadian Institutes of Health Research (CIHR) Project Grant
Total Value: C$634,950
Principal Applicants: Michael L. Mack (nominated), Margaret L. Schlichting

How the environment shapes what infants know and learn 2021-2023
Social Sciences and Humanities Research Council of Canada (SSHRC) Insight Development Grant
Total Value: C$74,800
Applicant: Amy S. Finn
Collaborators: Samantha Gualtieri, Margaret L. Schlichting

Enhanced communication during brain imaging of children and older adults: Cognitive neuroscience of memory across the lifespan 2020-2021

Natural Sciences and Engineering Research Council of Canada (NSERC) Research Tools and Instruments (RTI)
Total Value: C$57,527
Applicant: Morgan Barense
Co-Applicants: Amy S. Finn, Margaret L. Schlichting

Comparing the neural basis of memory integration in humans and mice 2018-2023
Canadian Institutes of Health Research (CIHR) Project Grant
Total Value: C$918,000
Principal Applicants: Katherine D. Duncan (nominated), Margaret L. Schlichting
Co-Applicants: Paul W. Frankland, Sheena A. Josselyn

Investigating the neural and behavioural development of episodic memory and control 2018-2025
Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Grant
Discovery Launch Supplement (2019)
Total Value: C$186,500
Principal Investigator: Margaret L. Schlichting

Linking memory and reasoning in the developing human brain 2017
Canada Foundation for Innovation (CFI), John R. Evans Leaders Fund (C$130,000)
Ontario Research Fund (ORF), ORF Research Infrastructure (C$130,000)
University of Toronto, Institutional match (C$65,000)
Total Value: C$325,000
Principal Investigator: Margaret L. Schlichting

Intramural Awards

SSHRC Institutional Grant (SIG): Explore Grant 2023
Total Value: C$1000

SSHRC Institutional Grant (SIG): Explore Grant 2022
Total Value: C$882.80

Start-up general research funds, University of Toronto 2017
Total Value: C$200,000

Start-up MRI scanning funds, University of Toronto 2017
Total Value: C$75,000

Imaging Research Center Pilot Grant Program, UT Austin 2016
Investigating the impact of learning-phase retrieval on knowledge formation
Total Value: US$4,010

Imaging Research Center Pilot Grant Program, UT Austin 2013
Neuroanatomical development of medial temporal lobes and prefrontal cortex
Total Value: US$4,010

Awards and Fellowships

Vincent DiLollo Early Career Award, Canadian Society for Brain, Behavior, and Cognitive Science (CSBBCS) 2024
Psychonomic Society Fellow 2022
Elected as lifetime member, Memory Disorders Research Society 2018
Rising Star early career designation, Association for Psychological Science 2018

Graduate School Continuing Fellowship (US$36,463), UT Austin	**2014-2015**
Trainee Professional Development Award (US$1,000), Society for Neuroscience (SfN)	**2015**
Best Abstract Award (US$100), Austin Conference on Learning and Memory	**2015**
National Defense Science and Engineering Graduate Fellowship (US$93,000), Department of Defense	**2011-2014**
Short Dissertation Research Grant, Department of Psychology (US$500), UT Austin	**2014**
Nominee for SfN Chapter Graduate Student Travel Award	**2014**
Graduate Dean's Prestigious Fellowship Supplement (US$1,000/year), UT Austin	**2011-2013**
Graduate Student Professional Development Award (US$500/year), UT Austin	**2011-2013**
Psychology Research Award (US$2,500), UT Austin	**2013**
National Science Foundation Graduate Research Fellowship, *Honorable Mention*	**2011**

Publications

[+] equal contributions
❖ undergraduate or postbaccalaureate mentee author
✦ graduate or postdoctoral mentee author

Refereed Journal Articles

In Preparation

Yu, W.❖, Tabassum, N.❖, Duncan, K.D., & Schlichting, M.L. *Developmental differences in attention and associative binding.* Manuscript in preparation.

Molitor, R.J., Schlichting, M.L., Mack, M.L., Guarino, K.F.❖, McKenzie, S., Eichenbaum, H., & Preston, A.R. *Hippocampus-guided reinstatement of hierarchical schemas in visual cortex during generalization*. Manuscript in preparation.

Morton, N.W, Schlichting, M.L., & Preston, A.R. *A neurocognitive model of memory integration.* Manuscript in preparation.

Coughlin, C., Schlichting, M.L., Sherrill, K.R., Moreau, M. & Preston, A.R. *Age-related differences in frontoparietal function support developmental improvements in memory-based inference.* Invited manuscript in preparation.

Submitted, Under Review & In Revision

Tarder-Stoll, H.❖, Schlichting, M.L. & Duncan, K.D. *Investigating how reward retroactively improves memory for associations and items*. Registered report, revision under review. https://osf.io/preprints/psyarxiv/hjm49

Yu, W.❖, Duncan, K.D.[+] & Schlichting, M.L.[+] *Using retrieval contingencies to understand memory integration and inference.* Under review. https://osf.io/preprints/psyarxiv/eafsh

Varga, N.L., Roome, H.E., Molitor, R.J., Martinez, L., Hipskind, E., Mack, M.L., Preston, A.R.[+], & Schlichting, M.L.[+] *Differentiation of related events in hippocampus supports memory reinstatement in development.* Revision under review. https://www.biorxiv.org/content/10.1101/2023.05.25.541743v2

2024 Vijayarajah, S.✦ & Schlichting, M.L. (accepted) Developmental refinements to neural attentional state during semantic memory retrieval through adolescence. *Cortex*. https://osf.io/preprints/psyarxiv/ptsrd

2023 Fang, X.[#], Alsbury-Nealy, B.[#], Wang, Y., Frankland, P.W., Josselyn, S.A., Schlichting, M.L.[+], & Duncan, K.D.[+] (2023). Time separating spatial memories does not influence their integration in humans. *PLOS One*. 18(8):e0289649. [+]Equal senior author contributions. [#]Equal first author contributions.

Vijayarajah, S.✦ & Schlichting, M.L. (2023). Anterior hippocampal engagement during memory formation predicts subsequent false recognition of similar experiences. *Journal of Cognitive Neuroscience*. 35(11): 1716–1740.

Vinci-Booher, S., Schlichting, M.L., Preston, A.R., Pestilli, F. (2023). Development of human hippocampal subfield microstructure and relation to associative inference. *Cerebral Cortex*. 33(18): 10207–10220.

Forest, T.A.✦, Abolghasem, Z.❖, Finn, A.S., & Schlichting, M.L. (2023). Memories of structured input become increasingly distorted across development. *Child Development*. 94(5):e279-e295.

Forest, T.A.✦, Schlichting, M.L., Duncan, K.D., & Finn, A.S. (2023). Changes in statistical learning across development. *Nature Reviews Psychology.* 2: 205-219.

Abolghasem, Z.❖, Teng, T.H.-T.❖, Nexha, E.❖, Zhu, C.❖, Jean, C.S.❖, Castrillon, M.❖, Che, E.❖, Di Nallo, E.V.❖ & Schlichting, M.L. (2023). Learning strategy differentially impacts memory connections in children and adults. *Developmental Science.* e13371.

2022 Vijayarajah, S.✦, McAlister, E.❖ & Schlichting, M.L. (2022). Encoding-phase orientation toward complex meaning over visual style benefits picture memory. *Memory*. 31(2):259-269.

Woodbury, M.✦, Duan, C.❖, Brol, E.❖, Seeger, R.P.❖, & Schlichting, M.L. (2022). Prior spatial knowledge differentially impacts learning in children and young adults. *Proceedings of the Annual Meeting of the Cognitive Science Society.* Toronto, Ontario, Canada: Cognitive Science Society. 1094-1101.

Vijayarajah, S.✦ & Schlichting, M.L. (2022). Individual-specific versus shared cognitive states differently support complex semantic and perceptual judgments. *Proceedings of the Annual Meeting of the Cognitive Science Society.* Toronto, Ontario, Canada: Cognitive Science Society. 3272-3279.

Schlichting, M.L., Guarino, K.F.❖, Roome, H.E.✦, & Preston, A.R. (2022). Developmental differences in memory reactivation relate to encoding and inference in the human brain. *Nature Human Behaviour.* 6(3), 415-428.

Forest, T.A.✦, Finn, A.S. & Schlichting, M.L. (2022). General precedes specific in memory representations for structured experience. *Journal of Experimental Psychology: General.* 151(4), 837–851.

Alsbury-Nealy, K., Wang, H., Gordienko, A., Howarth, C., Schlichting, M.L., Duncan, K.D. (2022). OpenMaze: An open-source toolbox for creating virtual navigation experiments. *Behavior Research Methods.* 54: 1374–1387.

2021 Heffernan, E.M., Schlichting, M.L., & Mack, M.L. (2021). Learning exceptions to the rule in human and model via hippocampal encoding. *Scientific Reports.* 11: 21429.

Schlichting, M.L.[+], Gumus, M., Zhu, T., & Mack, M.L.[+] (2021). The structure of hippocampal circuitry relates to rapid category learning in humans. *Hippocampus.* 31(11): 1179-1190.

2020 Morton, N.W, Schlichting, M.L., & Preston, A.R. (2020). Representations of common event structure in medial temporal lobe and frontoparietal cortex support efficient inference. *Proceedings of the National Academy of Sciences U.S.A.* 117, 29338–29345.

Yu, W.❖, Schlichting, M.L.+, & Duncan, K.D.+ (2020). Measuring memory integration: a metric tapping memory representation rather than inference. *Proceedings of the Annual Meeting of the Cognitive Science Society.* Toronto, Ontario, Canada: Cognitive Science Society. 1355-1361.

Forest, T.A.✦, Finn, A.S., & Schlichting, M.L. (2020). What is represented in memory after statistical learning? *Proceedings of the Annual Meeting of the Cognitive Science Society.* Toronto, Ontario, Canada: Cognitive Science Society. 1882-1888.

Vijayarajah, S.✦, McAlister, E.❖, & Schlichting, M.L. (2020). The impact of semantic versus perceptual attention on memory representation. *Proceedings of the Annual Meeting of the Cognitive Science Society.* Toronto, Ontario, Canada: Cognitive Science Society. 2307-2313.

Botvinik-Nezer, R.,… Schlichting, M.L.,… Vijayarajah, S.✦,… Nichols, T.E., Poldrack, R.A., & Schonberg, T. (2020). Variability in the analysis of a single neuroimaging dataset by many teams. *Nature* 582, 84–88.

Kim, H., Schlichting, M.L., Preston, A.R., Lewis-Peacock, J.A. (2020). Predictability changes what we remember in familiar temporal contexts. *Journal of Cognitive Neuroscience.* 32(1): 124-140.

2019 Schlichting, M.L.+, Mack, M.L.+, Guarino, K.F.❖, Preston, A.R. (2019) Performance of semi-automated hippocampus subfield segmentation methods across ages in a pediatric sample. *Neuroimage.* 191, 49-67.

Olsen, R.K., Daugherty, A.M., Carr, V.A., La Joie, R., Amaral, R.S.C., Bakker, A., Berron, D., Burgen, A., Augustinack, J.C., Amunts, K., Bocchetta, M., Chakravarty, M.M., Chételat, G., de Flores, R., DeKraker, J., Ding, S.-L., Geerlings, M.I., Insausti, R., Johnson, E.G., Kanel, P., Kedo, O., Keresztes, A., Lee, J.K., Mueller, S.G., Mulligan, E.M., Palombo, D.J., Pasquini, L., Pluta, J., Wang, L., Schlichting, M.L., Stark, C.E.L., Steve, T., Yushkevich, P.A., Wisse, L.E.M. (2019) Progress Update from the Hippocampal Subfields Group. *Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring.*

Ramsaran, A.I., Schlichting, M.L., Frankland, P.W. (2019). The ontogeny of memory persistence and specificity. *Developmental Cognitive Neuroscience.*

2018 Duncan, K.D.+ & Schlichting, M.L.+ Hippocampal representations as a function of time, subregion, and brain state. *Neurobiology of Learning & Memory.* 153(Part A): 40-56.

Spalding, K.N., Schlichting, M.L., Zeithamova, D., Preston, A.R., Tranel, D., Duff, M.C., Warren, D.E. (2018). Impairments in memory for associative inference following damage to the ventromedial prefrontal cortex. *Journal of Neuroscience*. 38(15): 3767-3777.

2017 Schlichting, M.L., Frankland, P.W. (2017). Memory allocation and integration in rodents and humans. *Current Opinion in Behavioral Sciences* 17, 90-98.

Schlichting, M.L., Guarino, K.F.❖, Schapiro, A.C., Turk-Browne, N.B., Preston, A.R. (2017). Hippocampal structure predicts statistical learning and associative inference abilities during development. *Journal of Cognitive Neuroscience* 29, 37-51.

2016 Schlichting, M.L., Preston, A.R. (2016). Hippocampal-medial prefrontal circuit supports memory updating during learning and post-encoding rest. *Neurobiology of Learning & Memory* 134, 91-106.

2015 Schlichting, M.L., Mumford, J.A., Preston, A.R. (2015). Learning-related changes in item representations reveal dissociable integration and separation signatures in the hippocampus and prefrontal cortex. *Nature Communications* 6:8151.

Schlichting, M.L., Preston, A.R. (2015). Memory integration: Neural mechanisms and implications for behavior. *Current Opinion in Behavioral Sciences* 1, 1-8.

Yushkevich, P.A. et al. (2015). Quantitative Comparison of 21 Protocols for Labeling Hippocampal Subfields and Parahippocampal Subregions in In Vivo MRI: Towards a Harmonized Segmentation Protocol. *NeuroImage* 111, 526-541.

2014 Hsu, N.S., Schlichting, M.L., Thompson-Schill, S.L. (2014). Feature diagnosticity affects representations of novel and familiar objects. *Journal of Cognitive Neuroscience* 26:12, 2735-2749.

Schlichting, M.L., Preston, A.R. (2014). Memory reactivation during rest supports upcoming learning of related content. *Proceedings of the National Academy of Sciences U.S.A.* 111:44, 15845-15850.

Schlichting, M.L., Zeithamova, D., Preston, A.R. (2014). CA_1 subfield contributions to memory integration and inference. *Hippocampus* 24:10, 1248-1260.

2012 Zeithamova, D.+, Schlichting, M.L.+, Preston, A.R. (2012). The hippocampus and inferential reasoning: Building memories to navigate future decisions. *Frontiers in Human Neuroscience* 6:70.

2011 Hsu, N.S., Kraemer, D.J.M., Oliver, R.T., Schlichting, M.L., Thompson-Schill, S.L. (2011). Color, context and cognitive style: Variations in color knowledge retrieval as a function of task and subject variables. *Journal of Cognitive Neuroscience* 23:9, 2544–2557.

Book Chapters

2017 Preston, A.R., Molitor, R.J., Pudhiyadath, A., Schlichting, M.L. (2017). Schemas. In J.H. Byrne (Ed.), *Learning and Memory: A Comprehensive Reference, 2nd ed. Volume III: Memory Systems* (H. Eichenbaum, Volume Ed.). New York: Elsevier.

Schlichting, M.L., Preston, A.R. (2017). The hippocampus and memory integration: Building memories to navigate future decisions. In D.E. Hannula & M.C. Duff (Eds.), *The Hippocampus from Cells to Systems: Structure, Connectivity, and Functional Contributions to Memory and Flexible Cognition.*

Invited Commentaries

2017 Schlichting, M.L. (2017). How the brain links related memories. Web-based article for *Nature Partner Journals (npj) Science of Learning Community*.

Other Non-Refereed

2023 Shmuel, J.❖+, Pallas, D.❖+, Huang, T.❖+, & Schlichting, M.L. Unconscious working memory and incubation in insight problem solving. *Inkblot, The Undergraduate Journal of Psychology, University of Toronto.* [Note: this undergraduate-led paper describes the results of a group research project carried out in my Human Memory and Learning Laboratory course.]

Scholarly Presentations

+ equal contributions
❖ undergraduate or postbaccalaureate mentee author
✦ graduate or postdoctoral mentee author

Invited Talks

2023 Schlichting, M.L. (Nov 2023). Memory in the developing brain. Invited speaker at University of Texas at Dallas, Center for Vital Longevity.

Schlichting, M.L. (May 2023). Developmental differences in memory reactivation during learning. Invited speaker at University College London, Child Vision Lab & Vision@UCL series.

Schlichting, M.L. (April 2023). Invited speaker at Clinical Neuropsychology Rounds, York University.

Schlichting, M.L. (March 2023). Invited speaker at Columbia Psychology Departmental Seminar Series, Columbia University.

2022 Schlichting, M.L. (Jan 2022). Developmental differences in memory representation. Invited speaker at the Developmental Science Colloquium speaker at University of Maryland, Department of Human Development and Quantitative Methodology.

Schlichting, M.L. (Jan 2022). Developmental differences in memory representation. Invited speaker at the Max Planck Institute for Human Development, Lifespan Age Differences in Memory Representations (LIME) & Lifespan Rhythms of Memory and Cognition (RHYME) Team Meeting.

2021 Schlichting, M.L. (Fall 2021; declined due to COVID-19). Invited Speaker for Undergraduate Psychology Event at King's University College in London, ON.

2020 Schlichting, M.L. (March 2020; cancelled due to COVID-19). Linking memories in the brain: Using neuroimaging to understand memory and its development. Invited Neuroimaging Rounds speaker at the Hospital for Sick Children (SickKids).

Schlichting, M.L. (Feb 2020). Linking memories in the brain: Using neuroimaging to understand memory and its development. Invited Neuroimaging Rounds speaker at Toronto Western Hospital.

2019 Schlichting, M.L. (Apr 2019). Linking memories in the brain: Using neuroimaging to understand memory and its development. Invited Colloquium Speaker at University of Western Ontario in London, ON.

Conference Presentations

2024 Forest, T.A.✦, Schlichting, M.L., Finn, A.S. (anticipated June 2024) Developmental shifts in the formation and representation of statistical memories. Talk presented at the Interdisciplinary Advances in Statistical Learning Conference in San Sebastian, Spain.

Vijayarajah, S.✦, Schlichting, M.L. (Apr 2024). Cross-participant neural alignment of attentional states during encoding is linked to better memory in adults and children. Poster presented at the Cognitive Neuroscience Society annual meeting in Toronto, Canada.

2023 Huang, D.❖+, Vijayarajah, S.✦+, Schlichting, M.L. (Nov 2023). Attention to general versus specific aspects of visual experience differently engages lateral occipital and parietal cortex in children and adults. Poster presented at the Society for Neuroscience annual meeting in Washington, DC.

Vijayarajah, S.✦, Schlichting, M.L. (Nov 2023). Developmental differences in parietal cortex and hippocampal engagement during precise memory formation. Poster presented at the Society for Neuroscience annual meeting in Washington, DC.

Woodbury, M.✦, Vijayarajah, S.✦, Schlichting, M.L. (Nov 2023). Prefrontal engagement during retrieval of overlapping memories at specific and general levels of detail in adolescents and adults. Poster presented at the Society for Neuroscience annual meeting in Washington, DC.

Castrillon, M.❖+, Woodbury, M.✦+, Vijayarajah, S.✦, Schlichting, M.L. (Nov 2023). Individual differences in ventrolateral prefrontal cortex thickness and memory performance in adolescents and adults. Poster presented at the Society for Neuroscience annual meeting in Washington, DC.

Daugherty, A., Canada, K., Rahman, G., Brown, T.T., … Schlichting, M.L. … Yushkevich, P., Carr, V. (Nov 2023). Reliable consensus protocol to segment subfields within the hippocampal body on high-resolution in vivo MRI from the Hippocampal Subfields. Poster presented at the Society for Neuroscience annual meeting in Washington, DC.

McArthur, A.✦, Schlichting, M.L. (Nov 2023). Influence of semantic and perceptual processing on reasoning and memory in children and adults. Poster presented at the Society for Neuroscience annual meeting in Washington, DC.

Wang, Y., Jung, J.H., Yan, C., Schlichting, M.L., Duncan, K.D., Frankland, P.W., Josselyn, S.A. (Sept 2023). Identifying and manipulating a hippocampal engram supporting memory integration. Presentation at IBRO 11th World Congress of Neuroscience.

Woodbury, M.✦, Blumenthal, A.✦, Hung, N❖., Shahezian, M., Im, J., Saharov, D., Chen, K.❖, Zhao, S.❖, Hoang, B., Huynh, T.Q.❖, Clarke, C.❖, Abolghasem, Z.❖, Yang, T.❖, Castrillon, M❖., Schlichting, M.L.+ & Mack, M.L.+ (July 2023). Category learning differs over development by category-defining feature and task framing. Poster presented at the Canadian Society for Brain, Behaviour and Cognitive Science Annual Meeting in Guelph, ON.

McArthur, A.W.D.✦, Guarino, K.F.❖, Preston, A.R., Mack, M.L., & Schlichting, M.L. (July 2023) Reasoning about specific versus general associations shows protracted development throughout adolescence. Poster presented at the Canadian Society for Brain, Behaviour and Cognitive Science Annual Meeting in Guelph, ON.

Vijayarajah, S.✦, Schlichting, M.L. (July 2023). Cognitive orientation impacts later differentiation of conceptually similar memories in anterior hippocampus and parietal cortex. Poster presented at the Canadian Society for Brain, Behaviour and Cognitive Science Annual Meeting in Guelph, ON.

Woodbury, M.✦, Duan, C.❖, Brol, E.❖, Seeger, R.P.❖, & Schlichting, M.L. (May 2023). Prior spatial knowledge differentially impacts learning in children and young adults. Data blitz talk presented at the Toronto Area Memory Group meeting.

Abolghasem, Z.❖, Teng, T.H.-T.❖, Nexha, E.❖, Zhu, C.❖, Jean, C.S.❖, Castrillon, M.❖, Che, E.❖, Di Nallo, E.V.❖ & Schlichting, M.L. (May 2023). Learning strategy differentially impacts memory connections in children and adults. Talk presented at the Context and Episodic Memory Symposium in Orlando, FL. [role: presenting author]

2022 Abolghasem, Z.❖, Teng, T.H.-T.❖, Nexha, E.❖, Zhu, C.❖, Jean, C.S.❖, Castrillon, M.❖, Che, E.❖, Di Nallo, E.V.❖ & Schlichting, M.L. (Nov 2022). Learning strategy differentially impacts memory connections in children and adults. Talk presented at the Psychonomic Society Annual Meeting in Boston, MA. [role: presenting author]

Varga, N.L.✦, Roome, H.E., Molitor, R.J., Martinez, L., Hipskind, E.M., Mack, M.L., Preston, A.R.+, & Schlichting, M.L.+ (Nov 2022). Differentiation of related events in hippocampus is associated with successful memory reinstatement in development. Talk presented at the Psychonomic Society Annual Meeting in Boston, MA.

Varga, N.L.✦, Roome, H.E., Molitor, R.J., Martinez, L., Hipskind, E.M., Mack, M.L., Preston, A.R.+, & Schlichting, M.L.+ (Nov 2022). Differentiation of related events in hippocampus supports memory reinstatement in development. Poster presented at the Society for Neuroscience annual meeting in San Diego, CA.

Coughlin, C., Schlichting, M.L., Sherrill, K.R., Moreau, M. & Preston, A.R. (Nov 2022) Age-related differences in frontoparietal function support developmental improvements in memory-based inference. Talk presented at the Society for Neuroscience annual meeting in San Diego, CA.

Vijayarajah, S.✦, & Schlichting, M.L. (Nov 2022) Cognitive orientation during learning impacts subsequent neural representation of conceptual information. Poster presented at the Society for Neuroscience annual meeting in San Diego, CA.

Forest, T.A.✦, Schlichting, M.L., & Finn, A.S. (Nov 2022). Statistical learning in the child brain. Poster presented at the Society for Neuroscience annual meeting in San Diego, CA.

Woodbury, M.✦, & Schlichting, M.L. (Sept 2022). Developmental differences in resolving memory competition during retrieval of specific and general memories. Poster presented at Flux Congress in Paris, France.

Vijayarajah, S.✦, & Schlichting, M.L. (Sept 2022). Developmental change in hippocampal and prefrontal engagement during preparatory retrieval cues. Poster presented at Flux Congress in Paris, France.

Forest, T.A.✦, Schlichting, M.L., & Finn, A.S. (Sept 2022). Statistical learning in the child brain. Poster presented at Flux Congress in Paris, France.

Woodbury, M.✦, Duan, C.❖, Brol, E.❖, Seeger, R.P.❖, & Schlichting, M.L. (July 2022). Prior spatial knowledge differentially impacts learning in children and young adults. Talk presented at the Annual Meeting of the Cognitive Science Society in Toronto, Canada.

McArthur, A.✦, Guarino, K.F.❖, Preston, A.R., & Schlichting, M.L. (July 2022). Reasoning about specific relations versus general associations shows protracted development throughout adolescence. Poster presented at the Annual Meeting of the Cognitive Science Society in Toronto, Canada.

Vijayarajah, S.✦ & Schlichting, M.L. (July 2022). Individual-specific versus shared cognitive states differently support complex semantic and perceptual judgments. Poster presented at the Annual Meeting of the Cognitive Science Society in Toronto, Canada.

Vijayarajah, S.✦, Schlichting, M.L. (May 2022). Anterior hippocampal engagement during memory formation is associated with orientation to meaning and predicts subsequent false recognition. Data blitz talk presented at the Toronto Area Memory Group meeting.

Vijayarajah, S.✦ & Schlichting, M.L. (April 2022). Developmental refinements to neural states during semantic memory retrieval through adolescence. Poster to be presented at the Cognitive Neuroscience Society (CNS) Annual Meeting in San Francisco, CA.

2021 Heffernan, E.M., Schlichting, M.L., & Mack, M.L. (Nov 2021). Learning Exceptions to the Rule in Human and Model via Hippocampal Encoding. Talk presented at the Psychonomic Society Annual Meeting.

Fang, X.F.✦+, Alsbury-Nealy, K.+, Wang, Y., Josselyn, S.A., Frankland, P.W., Schlichting, M.L.+, Duncan, K.D.+ (Nov 2021). Temporal Proximity Does Not Influence Behavioral Integration of Spatial Memories Across Experiences in Humans. Poster presented at the Society for Neuroscience Annual Meeting.

Vijayarajah, S.✦ & Schlichting, M.L. (Sept 2021). Developmental refinement of attention impacts semantic memory retrieval through adolescence. Flash talk and poster presented at Flux Congress.

Abolghasem, Z., Castrillon, M., Di Nallo, E.V., Jean, C.S., Nexha, E., Prosser, E.A., Teng, T.H., Ho, A., Mei, J., Che, X., Zhu, C. & Schlichting, M.L. (Sept 2021). The influence of encoding strategy on memory integration across development. Poster presented at Flux Congress.

Forest, T.A.✦, Abolghasem, Z., Finn, A.S., & Schlichting, M.L. (Sept 2021). Young children form highly specific memory for structured experiences. Poster presented at Flux Congress.

Varga, N.L., Roome, H.E., Molitor, R.J., Martinez, L., Hipskind, E., Mack, M.L., Preston, A.R.+, Schlichting, M.L.+ (Apr 2021). Evidence for different hippocampal codes yet similar neocortical reinstatement memories across development. Talk presented at the Society for Research in Child Development biennial meeting.

Coughlin, C., Schlichting, M.L., Sherrill, K.R., Moreau, M. & Preston, A.R. (Apr 2021). Angular Gyrus Recruitment During Inference Tracks Developmental Differences in Reasoning. Poster presented at the Society for Research in Child Development biennial meeting.

Vijayarajah, S.✦ & Schlichting, M.L. (Apr 2021). Using fMRI to decode attention to semantic versus perceptual features over development. Poster presented at the Society for Research in Child Development biennial meeting.

Coughlin, C., Schlichting, M.L., Sherrill, K.R., Moreau, M. & Preston, A.R. (Mar 2021). Developmental differences in posterior parietal cortex function during memory-guided inference. Poster presented at the Cognitive Neuroscience Society (CNS) Virtual Meeting.

Vijayarajah, S.✦ & Schlichting, M.L. (Jan 2021). Differential engagement of prefrontal and medial temporal lobe cortex during memory formation under semantic versus perceptual attention conditions. Poster presented at the Society for Neuroscience (SfN) Global Connectome virtual meeting.

2020 Vijayarajah, S.✦, McAlister, E.❖, & Schlichting, M.L. (Nov 2020). The impact of semantic versus perceptual attention on memory representation. Poster presented at the Psychonomic Society Annual Meeting.

Morton, N.W, Schlichting, M.L., Preston, A.R. (Aug 2020). Representations of common event structure in medial temporal lobe and frontoparietal cortex support efficient inference. Talk presented at the Context and Episodic Memory Symposium virtual meeting.

Yu, W.❖, Schlichting, M.L.+, & Duncan, K.D.+ (July 2020). Measuring memory integration: a metric tapping memory representation rather than inference. Poster presented at the Annual Meeting of the Cognitive Science Society virtual meeting.

Forest, T.A.✦, Finn, A.S., & Schlichting, M.L. (July 2020). What is represented in memory after statistical learning? Poster presented at the Annual Meeting of the Cognitive Science Society virtual meeting.

Vijayarajah, S.✦, McAlister, E.❖, & Schlichting, M.L. (July 2020). The impact of semantic versus perceptual attention on memory representation. Poster presented at the Annual Meeting of the Cognitive Science Society virtual meeting.

2019 Gumus, M., Zhu, T., Schlichting, M.L.+, Mack, M.L.+. (Oct 2019). Hippocampal white matter microstructure predicts rapid category learning. Poster presented at the Society for Neuroscience annual meeting in Chicago, IL.

Morton, N.W., Molitor, R.J., Schlichting, M.L., Mack, M.L., McKenzie, S., Preston, A.R. (Oct 2019). Human hippocampus and medial prefrontal cortex represent hierarchical task schemas. Poster presented at the Society for Neuroscience annual meeting in Chicago, IL.

Varga, N.L.✦, Roome, H.E.✦, Molitor, R.J., Martinez, L., Hipskind, E.M., Preston, A.R.+, Schlichting, M.L.+. (Oct 2019). Evidence for differential neural reinstatement of associative memories in children and adults. Poster presented at the Society for Neuroscience annual meeting in Chicago, IL.

Blumenthal, A.✦, Savel, K.❖, Huynh, T.❖, Dagleish, B.❖, Rivera, R.❖, Gontarz, Z.❖, Vucorovic, M.❖, McRae, K., Mack, M.L.+, Schlichting, M.L.+ (Oct 2019). Developmental differences in real-world concepts: More knowledge or different knowledge? Poster presented at the Cognitive Development Society annual meeting in Louisville, KY.

Abolghasem, Z.❖, Finn, A.S.+, Schlichting, M.L.+ (Oct 2019). A child's view is unique: developmental differences in what is important in naturalistic scene images. Poster to be presented at the Cognitive Development Society annual meeting in Louisville, KY.

Schlichting, M.L. (Oct 2019). Developmental differences in memory representation. Talk presented at the Memory Disorders Research Society (MDRS) Annual Meeting in New York, NY.

Forest, T.A.✦, Finn, A.S. & Schlichting, M.L. (June 2019). What is represented in memory after statistical learning: Evidence from adults and children. Talk presented at the Interdisciplinary Advances in Statistical Learning Conference in San Sebastián, Spain.

Vijayarajah, S.✦ & Schlichting, M.L. (June 2019). Semantic versus perceptual attention impacts encoding mechanisms in hippocampus and prefrontal cortex. Talk presented at the Canadian Society for Brain, Behaviour and Cognitive Science Annual Meeting in Waterloo, ON.

Forest, T.A.✦, Finn, A.S. & Schlichting, M.L. (June 2019). What is represented in memory after statistical learning: Evidence from adults and children. Talk presented at the Canadian Society for Brain, Behaviour and Cognitive Science Annual Meeting in Waterloo, ON.

Vijayarajah, S.✦ & Schlichting, M.L. (May 2019). Selective attention to semantic versus perceptual features mediates memory for complex illustrations. Poster presented at the Context and Episodic Memory Symposium in Philadelphia, PA.

Morton, N.W, Schlichting, M.L., Preston, A.R. (May 2019). Events with common structure become organized within a hierarchical cognitive map in hippocampus and frontoparietal cortex. Poster presented at the Context and Episodic Memory Symposium in Philadelphia, PA.

Varga, N.L.✦, Roome, H.E.✦, Preston, A.R.*, Schlichting, M.L.* (April 2019). Neural evidence for reinstatement of associative memories in children and adults. Poster presented at the Austin Conference on Learning and Memory in Austin, TX.

Varga, N.✦, Roome, H.E.✦, Preston, A.R., Schlichting, M.L. (Mar 2019). Neural evidence for reinstatement of associative memories in children and adults. Poster presented at the Society for Research in Child Development biennial meeting in Baltimore, MD.

Yu, W.❖, Duncan, K.D., Schlichting, M.L. (Mar 2019). How Does the Similarity of Related Experiences Impact Memory Representation Over Development? Poster presented at the Society for Research in Child Development biennial meeting in Baltimore, MD.

Nealy, K., Josselyn, S.A., Frankland, P.W., Schlichting, M.L., Duncan, K.D. (Feb 2019). Does the temporal proximity of related events drive memory integration. Poster presented at the Lake Ontario Visionary Establishment annual LOVE Conference in Niagara Falls, Ontario.

Schlichting, M.L. (Jan 2019). Integrating related memories in support of flexible behaviour. Talk presented at the Park City Winter Conference in Park City, UT.

2018 Schlichting, M.L., Mack, M.L., Guarino, K.F.✦, Preston, A.R. (Nov 2018). Comparison of semi-automated hippocampal subfield segmentation methods in a pediatric sample. Poster presented at the Society for Neuroscience annual meeting in San Diego, CA.

Vijayarajah, S.✦ & Schlichting, M.L. (Nov 2018). Selective attention to perceptual and semantic features impacts neural engagement and memory behaviour. Poster presented at the Society for Neuroscience annual meeting in San Diego, CA.

Schlichting, M.L. (Oct 2018). Development of memory integration. Talk presented at the Memory Disorders Research Society (MDRS) Annual Meeting in Toronto, ON.

Schlichting, M.L., Guarino, K.F.❖, Roome, H.E.✦, Preston, A.R. (July 2018). Pattern classification reveals developmental differences in how memories influence new learning. Poster presented at the Canadian Society for Brain, Behaviour and Cognitive Science Annual Meeting in St. John's, NL.

Vijayarajah, S.✦ & Schlichting, M.L. (July 2018). Selective attention at encoding impacts memory representation. Poster presented at the Canadian Society for Brain, Behaviour and Cognitive Science Annual Meeting in St. John's, NL.

Yu, W.❖, Schlichting, M.L.+, Duncan, K.D.+ (May 2018). Measuring memory integration. Data blitz talk presented at Toronto Area Memory Group meeting.

2017 Schlichting, M.L., Guarino, K.F.❖, Roome, H.E.✦, Preston, A.R. (Nov 2017). Opportunity to link related memories during encoding reveals adolescent-specific neural strategy. Poster presented at the Society for Neuroscience annual meeting in Washington, DC.

Kim, H., Schlichting, M.L., Preston, A.R., Lewis-Peacock, J.A. (Nov 2017). The precision of memory-based prediction biases memory pruning. Poster presented at the Society for Neuroscience annual meeting in Washington, DC.

Schlichting, M.L., Guarino, K.F.❖, Roome, H.E.✦, Preston, A.R. (June 2017). Pattern classification reveals developmental differences in how memories influence new learning. Talk presented at the International Workshop on Pattern Recognition in Neuroimaging in Toronto, ON.

Kim, H., Schlichting, M.L., Preston, A.R., Lewis-Peacock, J.A. (May 2017). The precision of memory-based prediction biases memory pruning. Poster presented at the Context and Episodic Memory Symposium in Philadelphia, PA.

Schlichting, M.L., Guarino, K.F.❖, Roome, H.E.✦, Preston, A.R. (Apr 2017). Linking and differentiating memories across development: Neural mechanisms and behavioral outcomes. Talk presented at the Society for Research in Child Development biennial meeting in Austin, TX.

2016 Kim, H., Schlichting, M.L., Preston, A.R., Lewis-Peacock, J.A. (Nov 2016). The precision of memory-based prediction biases memory pruning. Poster presented at the Psychonomic Society Annual Meeting in Boston, MA.

Schlichting, M.L., Guarino, K.F.❖, Preston, A.R. (Nov 2016). Developmental differences in hippocampal-prefrontal mediated memory updating. Poster presented at the Society for Neuroscience annual meeting in San Diego, CA.

Molitor, R.J., Schlichting, M.L., Mack, M.L., Guarino, K.F.✦, McKenzie, S., Eichenbaum, H., Preston, A.R. (Nov 2016). Reinstatement of schemas in sensory neocortex is guided by medial prefrontal cortex and hippocampus. Poster presented at the Society for Neuroscience annual meeting in San Diego, CA.

Schlichting, M.L., Guarino, K.F.❖, Preston, A.R. (Sept 2016). Developmental differences in hippocampal-prefrontal mediated memory updating. Poster presented at the Flux Congress annual meeting in St. Louis, MO.

Schlichting, M.L., Guarino, K.F.❖, Schapiro, A.C., Turk-Browne, N.B., Preston, A.R. (May 2016). Structural development of hippocampus and medial prefrontal cortex is related to statistical learning and inference. Poster presented at the Context and Episodic Memory Symposium in Philadelphia, PA.

Morton, N.W., Schlichting, M.L., Preston, A.R. (May 2016). Developing a neurocognitive model of memory integration. Talk presented at the Context and Episodic Memory Symposium in Philadelphia, PA.

Molitor, R.J., Schlichting, M.L., Mack, M.L., Guarino, K.F.❖, McKenzie, S., Eichenbaum, H., Preston, A.R. (May 2016). Generalization of schema representations to novel contexts is supported by hippocampus and medial prefrontal cortex. Poster presented at the Context and Episodic Memory Symposium in Philadelphia, PA.

2015 Schlichting, M.L., Mumford, J.A., Preston, A.R. (Oct 2015). Learning-related changes in item representations reveal dissociable integration and separation signatures in hippocampus and prefrontal cortex. Talk presented at the Society for Neuroscience annual meeting in Chicago, IL.

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

Morton, N.W., Schlichting, M.L., Preston, A.R. (Oct 2015). Developing a neurocognitive model of memory integration. Poster presented at the Society for Neuroscience annual meeting in Chicago, IL.

Spalding, K.N., Schlichting, M.L., Zeithamova, D., Preston, A.R., Duff, M.C., Tranel, D., Warren, D.E. (Oct 2015). Impairments in associative inference following damage to the ventromedial prefrontal cortex. Poster presented at the Society for Neuroscience annual meeting in Chicago, IL.

Molitor, R.J., Schlichting, M.L., Mack, M.L., Guarino, K.F.❖, McKenzie, S., Eichenbaum, H., Preston, A.R. (Oct 2015). Schema representations in hippocampus and medial prefrontal cortex support generalization in novel contexts. Poster presented at the Society for Neuroscience annual meeting in Chicago, IL.

Schlichting, M.L., Mumford, J.A., Preston, A.R. (May 2015). Learned item representations reveal dissociable integration and separation signatures in medial prefrontal cortex and medial temporal lobe. Talk presented at the Context and Episodic Memory Symposium in Philadelphia, PA.

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

Kim, H., Schlichting, M.L., Preston, A.R., Lewis-Peacock, J.A. (Apr 2015). Shifting the granularity of context-based predictions modulates memory pruning. Poster presented at the Austin Conference on Learning and Memory biannual meeting in Austin, TX.

2014 Schlichting, M.L., Guarino, K.F.❖, Schapiro, A.C., Turk-Browne, N.B., Preston, A.R. (Nov 2014). Structural development of hippocampal subfields is related to statistical learning and inference. Poster presented at the Society for Neuroscience annual meeting in Washington, DC.

Schlichting, M.L., Guarino, K.F.❖, Preston, A.R. (Sept 2014). Medial temporal lobe structure relates to individual differences in memory and reasoning ability across development. Poster presented at the Flux Congress annual meeting in Los Angeles, CA.

Schlichting, M.L., Preston, A.R. (May 2014). Offline reactivation and functional coupling support formation of relational memory networks. Talk presented at the Context and Episodic Memory Symposium in Philadelphia, PA.

2013 Schlichting, M.L., Preston, A.R. (Nov 2013). Replay during on- and offline periods supports formation of relational memory networks. Poster presented at the Society for Neuroscience annual meeting in San Diego, CA.

Schlichting, M.L., Preston, A.R. (Jan 2013). Hippocampal-neocortical functional connectivity reveals memory integration signature that persists during post-encoding rest. Poster presented at the Institute for Neuroscience symposium, UT Austin.

2012 Schlichting, M.L., Preston, A.R. (Oct 2012). Hippocampal-neocortical functional connectivity reveals memory integration signature that persists during post-encoding rest. Poster presented at the Society for Neuroscience annual meeting in New Orleans, LA.

Hsu, N.S., Schlichting, M.L., Thompson-Schill, S.L. (Apr 2012) Feature diagnosticity affects semantic representations of novel and common object categories. Poster presented at the Cognitive Neuroscience Society annual meeting in Chicago, IL.

Schlichting, M.L., Zeithamova, D., Preston, A.R. (Feb 2012). Study-test representational similarity within hippocampus demonstrates reactivation of integrated representations during novel inference. Poster presented at the Institute for Neuroscience symposium, UT Austin.

2011 Schlichting, M.L., Zeithamova, D., Preston, A.R. (Nov 2011). Study-test representational similarity within hippocampus demonstrates reactivation of integrated representations during novel inference. Poster presented at the Society for Neuroscience annual meeting in Washington, D.C.

Hsu, N.S., Schlichting, M.L., Thompson-Schill, S.L. (Apr 2011) Feature diagnosticity affects the representation of novel object categories. Poster presented at the Cognitive Neuroscience Society annual meeting in San Francisco, CA.

2010 Hsu, N.S., Kraemer, D.J.M., Oliver, R.T., Schlichting, M.L., Thompson-Schill, S.L. (Apr 2010). Functional magnetic resonance imaging (fMRI) evidence for multiple color knowledge representations influenced by context and cognitive style. Talk presented at the Cognitive Neuroscience Society annual meeting in Montreal, Canada.

Intramural Presentations

2024 Huang, D.❖+, Vijayarajah, S.✦+, Schlichting, M.L. (April 2024). Attention to general versus item-specific aspects of visual experience differently engages lateral occipital and parietal cortex in children and young adults. Poster presented at the Psychology Undergraduate Research Community Undergraduate Symposium, University of Toronto.

Castrillon, M.❖+, Woodbury, M.✦+, Vijayarajah, S.✦, Schlichting, M.L. (April 2024). Individual differences in ventrolateral prefrontal cortex thickness and memory performance in adolescents and adults. Poster presented at the Psychology Undergraduate Research Community Undergraduate Symposium, University of Toronto.

von Rosen, S.❖+, McArthur, A.W.D.✦+ & Schlichting, M.L. (March 2024) Developmental Change in Perceptual versus Semantic Processing During Decision-Making. Research Opportunities Program (ROP) Poster presented at the University of Toronto Undergraduate Research Forum.

McArthur, A.W.D.✦ & Schlichting, M.L. (Feb 2024). Relational reasoning development: Number and complexity of relations. Talk presented at Developmental Interest Group (DIG) talk series, University of Toronto.

Woodbury, M.✦, Blumenthal, A.✦, Hung, N❖., Shahezian, M., Im, J., Saharov, D., Chen, K.❖, Zhao, S.❖, Hoang, B., Huynh, T.Q.❖, Clarke, C.❖, Abolghasem, Z.❖, Yang, T.❖, Castrillon, M❖., Schlichting, M.L.+ & Mack, M.L.+ (Jan 2024). Category learning differs over development by category-defining feature and task framing. Talk presented at Developmental Interest Group (DIG) talk series, University of Toronto.

2023 Duong, J.❖+, McArthur, A.W.D.✦+, & Schlichting, M.L. (Sept 2023). Developmental differences in the influence of perceptual and semantic processing on memory and task switching during analogical reasoning. Research Opportunities Program (ROP) Poster presented at the University of Toronto Undergraduate Research Forum.

McArthur, A.W.D.✦ & Schlichting, M.L. (July 2023). Relational reasoning development: Number and complexity of relations. Research talk presented at the Summer Psychology Research Initiative (SPRINT) outreach program.

McArthur, A.✦, Guarino, K.F.❖, Preston, A.R., & Schlichting, M.L. (March 2023). Reasoning about specific relations versus general associations shows protracted development throughout adolescence. Talk presented at Developmental Interest Group (DIG) talk series, University of Toronto.

McArthur, A.✦, Guarino, K.F.❖, Preston, A.R., & Schlichting, M.L. (March 2023). Reasoning about specific relations versus general associations shows protracted development throughout adolescence. Data blitz talk presented at the Ebbinghaus Empire talk series, University of Toronto.

Vijayarajah, S.✦ & Schlichting, M.L. (March 2023). Developmental refinement in neural engagement during semantic factual retrieval. Talk presented at Developmental Interest Group (DIG) talk series, University of Toronto.

2022 Woodbury, M.✦, Duan, C.❖, Brol, E.❖, Seeger, R.P.❖, & Schlichting, M.L. (Dec 2022). Prior spatial knowledge differentially impacts learning in children and young adults. Talk presented at Developmental Interest Group (DIG) talk series, University of Toronto.

2020 Vijayarajah, S.✦, Schlichting, M.L. (Feb 2020). The impact of category vs. item-specific attention on memory representation. Talk presented at Developmental Interest Group (DIG) talk series, University of Toronto.

Forest, T.A.✦, Finn, A.S., Schlichting, M.L. (Feb 2020).What is represented in memory after statistical learning across development? Talk presented at Developmental Interest Group (DIG) talk series, University of Toronto.

2019 Vijayarajah, S.✦, Schlichting, M.L. (September 2019). Semantic versus perceptual attention impacts encoding mechanisms in hippocampus and medial temporal lobe cortex. Data blitz talk presented at Ebbinghaus Empire Meeting, University of Toronto.

Blumenthal, A.B.✦, Mack, M.L., Schlichting, M.L. (September 2019). Developmental differences in concept knowledge. Data blitz talk presented at Ebbinghaus Empire Meeting, University of Toronto.

DeMarinis, C.❖, Tarder-Stoll, H.❖, Schlichting, M.L., Duncan, K.D. (March 2019). The retroactive influence of reward on associative memory and memory integration. ROP Poster presented at the University of Toronto Undergraduate Research Forum.

Zhou, C.M.❖, Vijayarajah, S., Schlichting, M.L. (March 2019). A lack of awareness: no correlation between self-reported confidence levels and task performance. ROP Poster presented at the University of Toronto Undergraduate Research Forum.

Seeger, R.❖, Vanasse Grosdidier, I.❖, Duan, C.❖, Brol, E.❖, Schlichting, M.L. (March 2019). Examining the effects of delay in spatial layout learning in adults. ROP Poster presented at the University of Toronto Undergraduate Research Forum.

Tabassum, N.❖, Yu, W.❖, Abolghasem, Z.❖, Duncan, K.D., Schlichting, M.L. (March 2019). Analysis of neuropsychological & neurodevelopmental measures in adults and young adolescents may reveal links to memory performance of related events. ROP Poster presented at the University of Toronto Undergraduate Research Forum.

Martinez, L.❖, Varga, N.L.§, Roome, H.E., Preston, A.R.*, Schlichting, M.L.* (April 2019). Neural evidence for reinstatement of associative memories in children and adults. Poster presented at Longhorn Research Poster Session for undergraduate research at UT Austin in Austin, TX.

2018 Yu, W.❖, Duncan, K.D., Schlichting, M.L. (Dec 2018). How does increased similarity impact memory integration over development? Data blitz talk presented at Developmental Interest Group (DIG) talk series, University of Toronto.

Schlichting, M.L. (Mar 2018). Encoding of interrelated memories across development. Talk presented at the Ebbinghaus Empire Meeting, University of Toronto.

Schlichting, M.L. (Feb 2018). Linking memories in the brain: Using neuroimaging to understand memory integration and its development. Invited talk presented at the Developmental Interest Group (DIG) talk series, University of Toronto.

2017 Schlichting, M.L. (Dec 2017). Linking memories in the brain: Using neuroimaging to understand memory integration and its development. Invited talk presented at the Rotman Rounds talk series, Rotman Research Institute, Toronto.

2016 Schlichting, M.L., Mack, M.L., Preston, A.R. (Apr 2016). Investigating the impact of learning-phase retrieval on knowledge formation. Talk presented at Psychology department cognitive neuroscience area meeting, UT Austin.

2015 Schlichting, M.L., Mumford, J.A., Preston, A.R. (Nov 2015). Learning-related changes in item representations reveal dissociable integration and separation signatures in hippocampus and prefrontal cortex. Talk presented at the Center for Learning and Memory annual retreat, UT Austin.

Schlichting, M.L. (Oct 2015). Linking memories in the brain: Neuroimaging approaches to understanding memory integration and its development. Talk presented at Psychology department cognitive neuroscience area meeting, UT Austin.

Schlichting, M.L., Guarino, K.F.❖, Preston, A.R. (Mar 2015). Development of memory-based inference. Talk presented at Psychology department developmental area meeting, UT Austin.

2013 Schlichting, M.L., Zeithamova, D. (Oct 2013). Reactivation of existing knowledge affects new learning and inference. Talk presented at the Center for Learning and Memory annual retreat, UT Austin.

Schlichting, M.L., Preston, A.R. (Apr 2013). Linking episodes during learning and rest. Talk presented at Psychology department cognitive neuroscience area meeting, UT Austin.

2011 Schlichting, M.L. (Dec 2011) Forming links between memories. Talk presented at Psychology department cognitive neuroscience area meeting, UT Austin.

Schlichting, M.L. (Nov 2011). Study-test representational similarity demonstrates reactivation of integrated representations during inference. Talk presented at the Center for Learning and Memory annual retreat, UT Austin.

2009 Schlichting, M.L., Shukla, M., Gebhart, A., Aslin, R.N. (July 2009). Infants' selective attention to temporal structures. Poster presented at the CVS Undergraduate Fellowship Poster Session, University of Rochester.

2008 Schlichting, M.L., Marsolek, C.J. (July 2008). Modeling monkeys: Exploring antipriming using neurocomputational models. Poster presented at the Summer Undergraduate Research Symposium, University of Minnesota.

Schlichting, M.L. (July 2008). Antipriming in neurocomputational models. Talk presented at the Research Experience for Undergraduates seminar, University of Minnesota.

Other Research Experience

Center for Visual Science's Summer Research Fellowship Program — Summer 2009
University of Rochester, Department of Brain & Cognitive Sciences, Rochester Baby Lab
Advisor: Dick Aslin

REU Program in the Cognitive and Behavioral Sciences — Summer 2008
University of Minnesota, Department of Psychology, Marsolek Lab
Advisor: Chad Marsolek

Teaching and Advising

Courses

Human Memory & Learning Laboratory, PSY379 — **Fall 2020, 2021, 2022**
Cognitive Neuroscience, PSY493 — **Winter 2020, 2021, 2022, 2023**
Topics in Developmental Cognitive Neuroscience, PSY5311 (graduate seminar) — **Fall 2019**
Human Memory, PSY372 — **Fall 2018, 2019, 2020, 2022 & Summer 2021, 2022, 2023**
Tools of Developmental Neuroscience, PSY410 (undergraduate seminar) — **Winter 2018, 2019**

Guest lectures

"Memory Development," Studying the Growing Brain: The Latest Findings from Developmental Cognitive Neuroscience (graduate seminar) taught by Jessica Church-Lang, UT Austin, February 2015
"Memory I: From Cells to Systems," Cognitive Neuroscience taught by Alison Preston, UT Austin, March 2013
"Methods in Cognitive Neuroscience: Brain Perturbations," Cognitive Neuroscience taught by Alison Preston, UT Austin, Jan 2013

Select Advisees

University of Toronto

Current Primary and Co-Supervisions:

Graduate Students, Postdoctoral Fellows & Lab Managers
- Alexander McArthur, Graduate Student (2021-present)
- Cory McKenzie, Outside Project Student (2022-present; primary supervisor: Paul Frankland)
- Merron Woodbury, Graduate Student (2020-present)
- Sagana Vijayarajah, Postdoctoral Fellow (2023-present)

Undergraduates
- Wangjing Yu, Independent Project Student, co-supervised with Katherine Duncan (2016-present)
  - Current position: Graduate student in Psychology PhD program, Columbia University
- Zahra Abolghasem, Independent Project/Honors Thesis Student, co-supervised with Amy Finn (2018-2020)
  - Current position: Graduate student in Psychology PhD program, UBC
- Tri Quang (David) Huynh, Independent Project Student (2019-present)
- Sarah Ripley, Independent Project Student (2020)
- Sherry Li, Mini-Thesis Student (2020)
- Emma Laker, Research Opportunity Program Student (2019-2020)
- Freeman Chan, Research Opportunity Program Student (2019-2020)
- Jaden Murray, Research Opportunity Program Student (2019-2020)

Current Committee Memberships:

Emily Heffernan, Graduate Student supervised by Michael Mack
- Role: PhD Committee Member (2023-present)

Erika Wharton-Shukster, Graduate Student supervised by Amy Finn
- Role: PhD Committee Member (2022-present)

Sofiya Zbranaska, Graduate Student supervised by Sheena Josselyn
- Role: PhD Committee Member (2023-present)

Ariana Giuliano, Graduate Student co-supervised by Asaf Gilboa and Morris Moscovitch
- Role: PhD Committee Member (2020-present)

Former Primary and Co-Supervisions:

Sagana Vijayarajah, Graduate Student (2017-2023)
Zahra Abolghasem, Post-baccalaureate Lab Manager (2020-present)
Tess Forest, Outside Project Student (2017-2022; primary supervisor: Amy Finn)
Xiaoping Fang, Postdoctoral Fellow, co-supervised with Katherine Duncan (2019-2021)
Current position: Assistant Professor at Beijing Language and Culture University
Anna Blumenthal, Postdoctoral Fellow, co-supervised with Michael Mack (2018-2020)
Sarah Berger, Post-baccalaureate Lab Manager (2019-2020)
Current position: Graduate student in Psychology PhD program, University of Western Ontario
Ziyao Chen, Work-Study Lab Programmer (2018)
Sakshaat Choyikandi, Work-Study Research Assistant (2018)
Chuyun Shen, Post-baccalaureate Lab Manager and Research Assistant (2018)
Hailey Benedict, Post-baccalaureate Lab Manager and Research Assistant (2017-2018)
Sam Bray Kingissepp, Post-baccalaureate Lab Manager and Research Assistant (2017-2018)
Eryk Brol, Work-Study Lab Programmer (2017-2018)
Isabelle Vanasse Grosdidier, Post-baccalaureate Lab Manager and Research Assistant (2018-2019)
Julia Pearce, Independent Project Student (2018-2019)
Tina Farokhifar, Honours Thesis Student (2018-2019)
Chunan (Lana) Duan, Research Assistant (2017-2018)
Current position: Graduate student in IMS PhD program, University of Toronto (Supervisor: Paul Frankland)
Hannah Tarder-Stoll, Undergraduate Thesis Student, co-supervised with Katherine Duncan (2017-2018)
Current position: Postdoctoral Fellow at Rotman Research Institute at Baycrest Hospital
Carissa DeMarinis, Research Opportunity Program Student (2018-2019)
Current position: Law student, University of Toronto

<u>Former Committee Memberships</u>:

Anuya Patil, Graduate student supervised by Katherine Duncan
Role: Non-Supervisory PhD Committee Member (2024)
Natalia Ladyka-Wojcik, Graduate student supervised by Morgan Barense
Role: Non-Supervisory PhD Committee Member (2023)
Charlotte Leferink, Graduate student supervised by Dirk Bernhardt-Walther
Role: Non-Supervisory PhD Committee Member (2023)
Kyle Nealy, Graduate Student supervised by Katherine Duncan
Role: MA Thesis Subsidiary Advisor (2017-2018)
Erika Wharton-Shukster, Graduate Student supervised by Amy Finn
Role: MA Thesis Subsidiary Advisor (2017-2018)
Vincent Man, Graduate student supervised by Wil Cunningham
Role: Non-Supervisory PhD Committee Member (2018)
Melissa Hebscher, Graduate student supervised by Asaf Gilboa
Role: Non-Supervisory PhD Committee Member (2018)
Tess Forest, Graduate Student supervised by Amy Finn
Role: PhD Committee Member (2018-2022)
Julie Sato, Graduate student supervised by Margot Taylor
Role: PhD Committee Member (2018-2021)
Samantha Audrain, Graduate student supervised by Mary Pat McAndrews
Role: PhD Committee Member (2018-2020)
Emily Heffernan, Graduate Student supervised by Michael Mack
Role: MA Thesis Subsidiary Advisor & Outside Project Supervisor (2019-2020)
Elizabeth Long, Graduate Student supervised by Wil Cunningham
Role: MA Thesis Subsidiary Advisor (2019-2020)

The University of Texas at Austin

Sharon Noh, Graduate Student in Preston Lab (consultant for ongoing projects; 2020)
Nicole Varga, Postdoctoral Fellow in Preston Lab, co-supervised with Ali Preston (2018-present)
Christine Coughlin, Postdoctoral Fellow in Preston Lab (secondary mentor for ongoing projects; 2016-present)
Hannah Roome, Postdoctoral Fellow in Preston Lab (secondary mentor for ongoing projects; 2016-2020)
Katharine Guarino, Post-baccalaureate Research Assistant in Preston Lab (2013-2016)
Current position: Graduate student in Psychology PhD program, Loyola University Chicago
Tammy Tran, senior honors thesis in Psychology (2012-2013)
Thesis: The interactions between past and present memories: The role of memory strength
Current position: Graduate student in Neuroscience PhD program, Johns Hopkins University
Kevin DeLuca, independent study in Psychology (2011-2013)
Current position: Senior Research Specialist in Economics Department, Princeton University

Select Awards and Grants to Advisees

Ontario Graduate Scholarship (OGS; C$15,000) **2023-2024**
Awarded to Merron Woodbury, Graduate student
Total Value: C$15,000

University of Toronto Excellence Award (UTEA) **Summer 2023**
Awarded to Tiantian (Tien) Yang, Undergraduate student
Total value: C$7,500

University of Toronto Excellence Award (UTEA) **Summer 2023**
Awarded to Cindy Jean, Undergraduate student
Total value: C$7,500

Natural Sciences and Engineering Research Council of Canada (NSERC) **Summer 2023**
Undergraduate Student Research Award (USRA)
Awarded to Mariana Castrillon, Undergraduate student
Total Value: C$4,500

Natural Sciences and Engineering Research Council of Canada (NSERC) **Summer 2022**
Undergraduate Student Research Award (USRA)
Awarded to Mariana Castrillon, Undergraduate student
Total Value: C$4,500

University of Toronto Excellence Award (UTEA) **Summer 2021**
Awarded to Daniel Wurgaft, Undergraduate student
Total value: C$7,500

Natural Sciences and Engineering Research Council of Canada (NSERC) **Summer 2021**
Undergraduate Student Research Award (USRA)
Awarded to Eden Prosser, Undergraduate student
Total Value: C$4,500

Natural Sciences and Engineering Research Council of Canada (NSERC) **Summer 2022**
Undergraduate Student Research Award (USRA)
Awarded to Mariana Castrillon, Undergraduate student
Total Value: C$4,500

Natural Sciences and Engineering Research Council of Canada (NSERC) **2019-2022**
Canada Postgraduate Scholarships - Doctoral Program (PGS-D)
Awarded to Sagana Vijayarajah, Graduate student
Total Value: C$63,000

Natural Sciences and Engineering Research Council of Canada (NSERC) **Summer 2019**
Undergraduate Student Research Award (USRA)
Awarded to Zahra Abolghasem, Undergraduate student
Total Value: C$4,500

University of Toronto **2018, 2019**
School of Graduate Studies (SGS) Conference Grant (C$490)
Awarded to Sagana Vijayarajah, Graduate student
Total Value: C$490

University of Toronto **2018-2020**
Faculty of Arts & Science Postdoctoral Fellowship (C$22,500/year for 2 years)
Awarded to Anna Blumenthal, Postdoctoral Fellow
Total Value: C$45,000

Natural Sciences and Engineering Research Council of Canada (NSERC) **2018-2019**
Canada Graduate Scholarships - Master's Program (CGS-M; C$17,500)
Awarded to Sagana Vijayarajah, Graduate student
Total Value: C$17,500

Ontario Graduate Scholarship (OGS; C$15,000) **2017-2018**
Awarded to Sagana Vijayarajah, Graduate student
Total Value: C$15,000

Outreach

Faculty Liaison to Library Outreach, Toronto, ON **2018-2019**
NeuroQuest, Austin, TX **2013, 2015**
Developed lesson plans and organized neuroscience outreach program for local students
Girls in STEM Conference, Austin, TX **2013**
Hot Science – Cool Talks, Austin, TX **2011**
School-based outreach through Mind Science Foundation, San Antonio, TX **2011**
Big Brothers Big Sisters, Philadelphia, PA **2007-2008**
Pennvelopes pen-pal program, Philadelphia, PA **2006-2007**

Service

Professional Memberships:

Psychonomic Society (Fellow; elected)
Memory Disorders Research Society (MDRS; elected)
Cognitive Neuroscience Society
Cognitive Science Society
Flux Society for Integrative Developmental Cognitive Neuroscience
Hippocampal Subfields Segmentation Group
Psychonomic Society
Society for Neuroscience

Society for Research in Child Development
Phi Beta Kappa, Delta Chapter, May 2010

Editorial Positions:

Board of Reviewing Editors, eLife	2019-present
Meta-Reviewer, Cognitive Science Society Annual Meeting	2020
Review Editor, Frontiers in Human Neuroscience	2018-present
Guest Reviewing Editor, eLife	2019

Journal and Conference Reviewing:
***** denotes co-reviewing

BioEssays
Cerebral Cortex
Child Development
Child Development Perspectives
Cognition
Cognitive, Affective, & Behavioral Neuroscience*
Cognitive Development
Cognitive Psychology
Current Biology
eLife
Developmental Cognitive Neuroscience
Developmental Science
Developmental Psychology
Frontiers Human Neuroscience
Hippocampus
Journal of Applied Research in Memory and Cognition
Journal of Cognitive Neuroscience
Journal of Cognitive Psychology
Journal of Experimental Psychology: General
Journal of Neuroscience*
Memory & Cognition
Nature Communications
Nature Neuroscience*
NeuroImage
Neuron*
npj Science of Learning
PLOS ONE
Proceedings of the National Academy of Sciences
Royal Society Open Science
Psychonomic Bulletin & Review
Scientific Reports
Society for Research in Child Development Biennial Meeting Abstracts