

KATHERINE D DUNCAN

Assistant Professor, Department of Psychology
University of Toronto
100 St. George. St, Toronto, ON, M5S 3G3

duncan@psych.utoronto.ca
416-978-4248
duncanlab.org

EDUCATION

Ph.D. Psychology, New York University, New York, NY, USA 2006 - 2011
Advisor: Lila Davachi

B.S. Specialist in Psychology and major in Cognitive Science
University of Toronto, Toronto, ON, Canada 2001 - 2006
Advisor: Morris Moscovitch

POSITIONS HELD

Assistant Professor, Department of Psychology, University of Toronto, 2015-
Toronto, ON, Canada

Postdoctoral Research Fellow, Columbia University, 2011-2015
New York, NY, USA
Advisor: Daphna Shohamy

RESEARCH FUNDING

Using precisely timed deep brain stimulation to understand human memory
New Frontiers in Research Fund Exploration
Start Date: 2020-03-31 Duration: 2 Years
Primary Investigator Total Value: \$250,000

Canada Research Chair (Tier 2) in Memory Modulation
Canada Research Chair Program
Start Date: 2019-10-01 Duration: 5 Years
Primary Investigator Total Value: \$600,000

Understanding how neurochemicals shape human memory
Ministry of Research and Innovation Early Researcher Award
Start Date: 2019-04-01 Duration: 5 Years
Primary Investigator Total Value: \$150,000

Comparing the Neural Basis of Memory Integration in Humans and Mice
Canadian Institutes of Health Research Project Grant
Start Date: 2018-07-01 Duration: 5 Years
Nominated Primary Investigator Total Value: \$918,000
Co-Investigators: Meg Schlichting, Sheena Josselyn, Paul Frankland

How do Cholinergic Brain States Impact Memory Abilities as We Age?
Connaught Fund New Researchers Award
Start Date: 2018-04-26 Duration: 2 Years

Primary Investigator Total Value: \$35,000

Investigating the Influence of Novelty on Learning and Memory

National Sciences and Engineering Research Council

Start Date: 2016-04-01

Primary Investigator

Discovery Grant

Duration: 5 Years

Total Value: \$140,000

Dynamic Memory States in the Human Brain

Canadian Foundation for Innovation

Start Date: 2015-08-01

Primary Investigator

John R Evens Fund

Duration: 3 Years

Total Value: \$100,000

Dynamic Memory States in the Human Brain

Ontario Research Fund

Start Date: 2015-08-01

Primary Investigator

Infrastructure Program

Duration: 3 Years

Total Value: \$100,000

Can Novelty Structure Statistical Learning during Development?

University of Toronto

Start Date: 2016-11-01

Primary Investigator

Co-Investigators: Amy Finn & Chris Honey

Chair's Postdoc Program

Duration: 2 Years

Total Value: \$40,000

Memory Dysfunction in Schizophrenia and Parkinson's Disease: Investigating the Role of Dopamine using Pharmacological FMRI

Canadian Institutes of Health Research

Start Date: 2013-06-01

Postdoctoral Fellowship

Duration: 3 Years

Total Value: \$150,000

RECOGNITIONS

CIHR Canada Research Chair	2019
Ontario Early Researcher Award	2019
Elected to Memory Disorders Research Society	2018
CIHR Postdoctoral Fellowship Award	2013-2016
GSAS Dean's Student Travel Grant	2010
NYU McCracken Graduate Fellowship	2006-2011
Alumni and Friends Award, Innis College	2005
Aiming for the Top Provincial Scholarship	2001-2004
Margaret McCullough Scholarship	2001-2002
Innis College Admission Scholarship	2001
John W. Browne Admission Award	2001
Governor General's Academic Medal	2001

PEER REVIEWED PUBLICATIONS

Sharp M, **Duncan K**, Foerde K, Shohamy D (2020). Dopamine is associated with prioritization of reward- associated memories in Parkinson's disease. *Brain*. 143, 2519-253.

doi.org/10.1093/brain/awaa182

Decker AL, **Duncan K***, Finn AS*, Mabbott D* (2020). Income-related gaps in children's cognition mediated by anterior not posterior hippocampus. *Nature Communications*. 11, 4040. doi.org/10.1038/s41467-020-17854-6

- Bein O, **Duncan K**, Davachi L (2020). Mnemonic prediction errors bias hippocampal states. *Nature Communications*, 11, 3451. doi.org/10.1038/s41467-020-17287-1
- Decker AL, Finn AS*, **Duncan K*** (2020). Errors lead to transient impairments in memory formation. *Cognition*, 204, 1043382. doi.org/10.1016/j.cognition.2020.104338
- Decker AL, **Duncan K** (2020). Acetylcholine and the complex interdependence of memory and attention. *Current Opinion in Behavioral Sciences*, 32, 21-28. doi.org/10.1016/j.cobeha.2020.01.013 [senior author; 5 citations]
- Duncan K**, Semmler A, Shohamy D (2019). Modulating the use of multiple memory systems in value based decisions with contextual novelty. *Journal of Cognitive Neuroscience*, 31, 1455-1467. doi.org/10.1162/jocn_a_01447
- Lohnas L, **Duncan K**, Dowle WK, Dvinsky O, Davachi L (2018). Time-resolved neural reinstatement and separation during memory decisions in human hippocampus. *Proceedings of the National Academy of Sciences*, 115, 7418-7427. doi.org/10.1073/pnas.1717088115
- Duncan K**, Schlichting ML (2018). Hippocampal representations as a function of time, subregion, and brain state. *Neurobiology of Learning and Memory*, 153, 40-56. doi.org/10.1016/j.nlm.2018.03.006
- Duncan K**, Doll BB, Daw ND, Shohamy D (2018). More than the sum of its parts: a role for the hippocampus in configural reinforcement learning. *Neuron*, 98, 645-657. doi.org/10.1016/j.neuron.2018.03.042
- Patil A, **Duncan K** (2018). Lingering cognitive states shape fundamental mnemonic abilities. *Psychological Science*, 29, 45-55. doi.org/10.1177/0956797617728592
- Duncan K**, Shohamy D (2016). Memory states influence value-based decisions. *Journal of Experimental Psychology*:
- Tompary A, **Duncan K**, Davachi L (2016). High-resolution investigation of memory-specific reinstatement in the hippocampus and perirhinal cortex. *Hippocampus*, 26, 995-1007. doi.org/10.1002/hipo.22582
- Tompary A*, **Duncan K***, Davachi L (2015). Consolidation of associative and item memory is related to post-encoding functional connectivity between the ventral tegmental area and different medial temporal lobe subregions during an unrelated task. *Journal of Neuroscience*, 35, 7326-7331. doi.org/10.1523/JNEUROSCI.4816-14.2015
- Doll BB, **Duncan K**, Simon D, Shohamy D, Daw ND (2015). Model-based choices involve prospective neural activity. *Nature Neuroscience*, 18, 767-772. doi.org/10.1038/nn.3981
- Duncan K**, Tompary A, Davachi L (2014). Associative encoding and retrieval are predicted by functional connectivity in distinct hippocampal area CA1 pathways. *Journal of Neuroscience*, 34, 11188-11198. doi.org/10.1523/JNEUROSCI.0521-14.2014
- Duncan K**, Sadanand A, Davachi L (2012). Memory's penumbra: Episodic memory decisions induce lingering mnemonic biases. *Science*, 337, 485-487. doi.org/10.1126/science.1221936
- Duncan K**, Ketz N, Inati S, Davachi L (2012). Area CA1 as a match/mismatch detector: A high-resolution fMRI study of the human hippocampus. *Hippocampus*, 22, 389-398. doi.org/10.1002/hipo.20933
- Staresina BP, **Duncan K**, Davachi L (2011). Perirhinal and parahippocampal cortices differentially contribute to later recollection of object- and scene-related event details. *Journal of Neuroscience*, 31, 8739-8747. doi.org/10.1523/JNEUROSCI.4978-10.2011
- Duncan K**, Curtis C, Davachi L (2009). Distinct memory signatures in the hippocampus: intentional states distinguish match and mismatch enhancement signals. *Journal of Neuroscience*, 29, 131-139. doi.org/10.1523/JNEUROSCI.2998-08.2009

NON-PEER REVIEWED PUBLICATIONS:

- Duncan K**, Davachi L (2018) Disengagement with cognitive tasks decreases effect sizes. *Nature Human Behavior*, 2: 606.
- Duncan K**, Shohamy D. (2020). Memory, Reward and Decision Making. In ME Gazzaniga, GR Mangun, & D Poeppel (Ed.) *6th edition of The Cognitive Neurosciences* (pp: 617-630), Cambridge Massachusetts: MIT Press.
- Duncan K**, Shohamy D. (Under Editorial Review). Dopamine and Learning. *Oxford Handbook of Human Memory*, edited by Kahana M & Wagner A.
- Patel K*, **Katz CN***, **Duncan KD**, Valiante TA. (Under Editorial Review). Developing a Neuroprosthesis for Memory: The Past, Present, and Future. *Handbook of Neuroengineering*, edited by Nitish T.

PEER REVIEWED CONFERENCE PRECEDINGS:

- Yu W**, Schlichting ML*, **Duncan K*** (2020). Measuring memory integration: a metric tapping memory representation rather than inference. *Proceedings of the Annual meeting of the Cognitive Science Society*.

PEER REVIEWED PUBLICATIONS: IN REVISION

- Alsbury-Nealy K**, **Wang H**, **Howard C**, **Gordienko A**, **Schlichting M**, **Duncan K**. OpenMaze: An accessible yet powerful tool for building experiments in virtual 3D environments

PEER REVIEWED PUBLICATIONS: IN PREPARATION

- Jie R**, **Brauer A**, **Duncan K***, **Finn AS***. Events structure information accessibility less in children than adults. (Abridged version accepted for publication in the *Proceedings of the Annual meeting of the Cognitive Science Society*)
- Gravelsins L**, **Duncan K**, **Einstein G**. Cognition and the pharmacokinetics of the pill: Dopamine-dependent memory is affected by oral contraceptives. Preparing for submission to *Psychoneuroendocrinology*.
- Saito J**, **Duncan K**, **Fukuda K**. Similarity judgments drive distortions in long-term memory. Preparing for submission to *Psychological Science*.
- Yu W**, **Duncan K***, **Schlichting ML***. Measuring memory integration: A metric tapping memory representation rather than inference. (Abridged version accepted for publication in the *Proceedings of the Annual meeting of the Cognitive Science Society*)
- Patil A**, **Ryan JD**, **Duncan K**. Opposing mnemonic and decision biases in memory judgments.
- Tarder-Stoll H***, **Lalla A***, **Hasher L**, **Duncan K**. Aging changes the relative contributions of memory systems to decision making.
- Decker L**, **Duncan K***, **Finn AS***. Developmental gains in sustained attention influence episodic memory formation.
- Liu H**, **Duncan K***, **Finn AS***. The durability of statistical learning.
- Braun EK***, **Duncan K***, **Girgis R**, **Wood S**, **Sharp M**, **van Geen C** **Abi-Dargham A**, **Shohamy S**. Dopaminergic modulation of associative memory in healthy humans.

THESIS:

- Duncan K** (2011) Neural and cognitive mechanisms underlying human episodic memory encoding and retrieval. *Doctoral Thesis, New York University*.

INVITED AND CONFERENCE TALKS:

- "Can Recent Novelty Help You Form More Distinctive Memories." Context and Affective Memory Joint Meeting, Streamed Internationally, 2020.

“Opening Windows of Opportunity to Modify Human Memory.” McMaster University Psychology Colloquium, Oakville, 2019.

“The Lingering Influence of Novelty Shapes Fundamental Memory Processes.” Ryerson Psychological Science Seminar, 2019.

“Opening Windows of Opportunity to Modify Human Memory.” Queens University Neuroscience Colloquium, Kingston, 2019.

“Memory Recognition Shapes Future Learning and Remembering.” Memory Disorders Research Society, New York, 2019.

“The Lingering Costs and Benefits of Novelty Detection on Memory.” Context and Episodic Memory Symposium, Philadelphia, 2019.

“Opening Windows of Opportunity to Modify Human Memory.” Lake Ontario Visionary Establishment, Niagara Falls, 2019.

“Hippocampal Contributions to Configural Reinforcement Learning in Humans.” Winter Conference on the Neurobiology of Learning and Memory, Park City, 2019

“Opening Windows of Opportunity to Modify Human Memory.” Neuroscience & Mental Health Mini-Symposia Series, Hospital for Sick Children, Toronto, 2018.

“Reward, Memory and Decision Making.” Kavli Summer Institute in Cognitive Neuroscience, Lake Tahoe, 2018.

“Opening Windows of Opportunity for Enhancing Memory.” Pint of Science, Toronto, 2018.

“The lingering influence of novelty shapes fundamental memory processes.” Southern Ontario Neuroscience Society, Guelph, 2018.

“Memory States in the Human Brain and Behaviour.” Neurology Resident Education and Neuroscience Seminar Series, University of Ottawa, 2018

“Memory States in the Human Brain and Behaviour.” Plenary Symposium at Canadian Association for Neuroscience, Montreal, 2017.

“The lingering influence of novelty shapes fundamental memory processes.” Cognitive Neuroscience Society Annual Meeting, San Francisco, 2017.

“Learning from the unexpected to improve hindsight: Forming rich episodic memories may be particularly helpful when we don’t know what to learn.” Computational and Systems Neuroscience, Salt Lake City, 2017.

“Reading between the trials: How learning and memory relate to ongoing cognitive and neural processes.” Cognition and Circuits Seminar, Montreal Neurological Institute, Montreal, 2017.

“Reading between the trials: how learning and memory relate to background measures of functional connectivity.” Western University Colloquium, London, 2017.

“Reading between the trials: How ongoing cognitive and neural states influence memory performance.” Psychology Student Association Seminar, University of Toronto, Toronto, 2016.

“On the cutting edge of psychological science: Why we remember, why we forget, and why it matters.” University of Toronto Alumni Event, Toronto, 2016.

“Memory states influence value-based decision making.” University College London Affective Brain Seminar Series, London, 2016.

"Reading between the trials: How learning and memory relate to background measures of functional connectivity." Toronto Western Research Institute Imaging Rounds, Toronto, 2016.

"The influence of ongoing cognitive and neural processing on learning and memory." Ebbinghaus Empire Meeting, Toronto, 2016.

"Reading between the trials: how learning and memory relate to background measures of functional connectivity." Rotman Research Institute Rounds, Toronto, 2016.

"The penumbra of memory: How lingering biases in mnemonic processing influence memory." Neuroscience Association of Undergraduate Students Everything Neuroscience Conference, Toronto, 2015.

"Hippocampal contributions to configural probabilistic learning." Manhattan Area Memory Meeting, Princeton, NJ, 2015.

"The penumbra of memory: How lingering biases in mnemonic processing influence memories and decisions." University of Toronto, Toronto, ON, 2013.

"Recent exposure to novelty influences how memory guides decisions." Manhattan Area Memory Meeting, New York University, NY, 2013.

"The penumbra of memory: How our memories and decisions are influenced by recent mnemonic processing." Cognitive Lunch Talk Series, Columbia University, NY, 2013.

"The distinct processing demands of episodic encoding and retrieval: behavioral consequences and hippocampal mechanisms." The Rotman Research Institute, Toronto, ON, 2012.

"The tension between encoding and retrieval: An investigation of behavioral consequences and hippocampal mechanisms." Motivated Memory Group Meeting, Duke University, Durham, 2010.

"The tension between encoding and retrieval: An investigation of behavioral consequences and hippocampal mechanisms." Learning Lab Group Meeting, Columbia University, New York, 2010.

"Characterizing the variability of hemodynamic responses in the medial temporal lobe: Functional significance and implications for modeling." Center for Brain Imaging Users Group Meeting, New York, 2010.

"Relational 'match' and 'mismatch' signals in the human hippocampus are differentially modulated by active maintenance and perceptual novelty." Brown Bag Series, New York University, New York, 2008.

CONFERENCE PRESENTATIONS

Yu W, Schlichting M, **Duncan K**. Measuring memory integration: A metric tapping memory representation rather than inference. Poster presented at: Cognitive Science Society Meeting, 2020, Toronto.

Jie R, Bauer A, **Duncan K***, Finn AS*. Events structure information accessibility less in children than adults. Poster presented at: Cognitive Science Society Annual Meeting, 2020, Toronto.

Decker A, Finn AS*, **Duncan K***. We don't learn from our mistakes: Errors lead to transient impairments in memory formation. Poster presented at: Visual Science Society Annual Meeting, 2020, Pete Beach.

Dubois M, Decker A, **Duncan K**, Finn AS. Learning more when attending less: Poor attentional states enhance peripheral learning. Poster presented at: Cognitive Neuroscience Society Annual Meeting, 2020, Boston.

- Jie R, Bauer A, **Duncan K***, Finn AS*. Events structure information accessibility less in children than adults. Poster presented at: Cognitive Neuroscience Society Annual Meeting, 2020, Boston.
- Jie R, Bauer A, **Duncan K***, Finn AS*. Events structure memory less in children than adults. Poster presented at: Cognitive Development Society, 2019, Louisville.
- Decker A, **Duncan K**, Finn A. Children's Attentional States Shape Their Memory More Than Adults'. Poster presented at: Society for Research in Child Development, 2019, Baltimore.
- Decker A, **Duncan K**, Finn A, Mabbot D. Parental Income Alters Development of Anterior, but not Posterior, Hippocampus. Talk delivered at: Society for Research in Child Development, 2019, Baltimore.
- Yu W, **Duncan K**, Schlichting M. How Does the Similarity of Related Experiences Impact Memory Representation Over Development? Poster presented at: Society for Research in Child Development, 2019, Baltimore.
- Bein O, Duncan K, Davachi L. Mnemonic prediction errors bias hippocampal states. Talk delivered at: Society for Neuroscience, 2019, Chicago.
- Gravelsins, L., Ma De Sousa, A., McNamee, C., MachLab, K., Tsai, P., Velikonja, L., Demircan, B., **Duncan, K.**, Einstein, G. (2019, June). *Synthetic Estrogen and Cognition: Do Time of Oral Contraceptive Ingestion and the COMT Val158Met Polymorphism Affect Working Memory?* Talk delivered at: the Canadian Society for Brain, Behaviour, and Cognitive Science, Canada, Waterloo, ON.
- Decker L, **Duncan K***, Finn AS*. Attentional states predict memory success better in kids than adults. Poster presented at: Context and Episodic Memory Symposium, Philadelphia, 2019.
- Nealy K, Wang H, Howard C, Gordienko A, Schlichting M, **Duncan K**. OpenMaze: 3D Experiment Design Software. Poster presented at: Context and Episodic Memory Symposium, Philadelphia, 2019.
- Patil A, **Duncan K**. Measuring the neural underpinnings of lingering mnemonic states. Poster presented at: Context and Episodic Memory Symposium, Philadelphia, 2019.
- Gravelsins, L., Ma De Sousa, A., McNamee, C., MachLab, K., Tsai, P., Velikonja, L., Demircan, B., **Duncan, K.**, Einstein, G. Synthetic Estrogen and Cognition: Do Time of Oral Contraceptive Ingestion and the COMT Val158Met Polymorphism Affect Working Memory? Poster presented at the Canadian Association for Neuroscience, 2019, Canada, Toronto, ON.
- Nealy K, Schlichting M, **Duncan K**, Does the temporal proximity of related events modulate their integration in memory? Poster presented at: Lake Ontario Visionary Establishment, 2019, Niagara Falls.
- Braun EK*, **Duncan K***, Girgis R, Wood S, Sharp M, van Geen C, Abi-Dargham A, Shohamy S. Dopaminergic enhancement of associative memory in healthy humans. Talk delivered at: Society for Neuroscience, 2018, San Diego.
- Gravelsins, L, Ma De Sousa, A, McNamee, C, Machlab, K, **Duncan, K**, Einstein, G. Synthetic Estrogen and Cognition: Does Time of Oral Contraceptive Pill Ingestion Affect Working Memory? Poster presented at the Canadian Society for Brain, Behaviour and Cognitive Science, 2018, St. John's, NFL
- Patil, A., Ryan, J.D., **Duncan, K.** (May 2018) *Opposing Mnemonic and Decision-making Biases in Recognition Memory Judgments*. Talk delivered at: Annual Toronto Area Memory Group Meeting, Toronto, Canada
- Decker, A.L., **Finn, A.S.***, **Duncan, K.***, (May 2018). *Attentional states influence memory encoding*. Talk delivered at: Annual Toronto Area Memory Group Meeting, Toronto, Canada

- Yu, W, **Duncan K.***, Schlichting, AS.*, (May 2018). *Measuring memory integration. Talk delivered at: Annual Toronto Area Memory Group Meeting, Toronto, Canada*
- Lalla A, Patil A, Ryan JD, **Duncan K**. Opposing mnemonic and decision-making biases in recognition memory judgments. Poster presented at: Cognitive Neuroscience Society, 2018, Boston
- Decker A, Finn AS, **Duncan K**. How do developmental shifts in attentional control influence memory encoding? Poster presented at: Cognitive Neuroscience Society, 2018, Boston
- Braun EK, **Duncan K**, Girgis R, Wood S, Sharp M, van Geen C Abi-Dargham A, Shohamy S. Dopaminergic modulation of associative memory in healthy humans. Poster presented at: Cognitive Neuroscience Society, 2018, Boston
- Tarder-Stoll H, Lalla A, Hasher L, **Duncan K**. Does aging influence the use of episodic memory in decision making? Poster presented at: Cognitive Neuroscience Society, 2018, Boston
- Liu H, **Duncan K**, Finn AS. The Durability of Statistical Learning: Direct and Indirect Measures. Poster presented at: Cognitive Neuroscience Society, 2018, Boston
- Katz C, Barkley V, **Duncan K**, Valiante T. Memory framework for testing deep brain stimulation, augmenting memory and investigating long term accelerated forgetting in patients with epilepsy. Poster presented at: Society for Neuroscience, 2017, Washington DC
- Gerraty RT, **Duncan K**, Doll BB, Daw ND, Shohamy S. Common and distinct neural contributions to episodic and incrementally-learned value. Poster presented at: Society for Neuroscience, 2017, Washington DC.
- Sun SS, Gias M, Magen N, **Duncan K**, Ferber S. Lingering mnemonic states influence the precision of working memory. Poster presented at: Object Perception and Memory, 2017, Vancouver
- Patil, A., **Duncan, K**. (May 2017) Memory recognition criteria depend on recent experience. *Talk delivered at: Annual Toronto Area Memory Group Meeting, Toronto, Canada*
- Bauer, A., **Duncan, K***, Finn AS* (May 2017) Developmental changes in the impact of event segmentation on memory. *Talk delivered at: Annual Toronto Area Memory Group Meeting, Toronto, Canada*
- Bein O, **Duncan K**, Davachi L, “Mnemonic Prediction errors modulate hippocampal connectivity patterns”, Poster presented at: Cognitive Neuroscience Society Annual Meeting, 2017, San Francisco.
- Duncan K**, Gerraty RT, Doll BB, Daw ND, Shohamy D, “Disentangling the contributions of episodic memory and incremental learning to value-based decisions”, Poster presented at: Society of Neuroscience Annual Meeting, 2016, San Diego.
- Patil A, Mian F, Lee J, **Duncan K**, “Shifting the balance between pattern separation and completion: Recent memory retrieval increases people’s subsequent ability to recall associations”, Poster presented at: Society of Neuroscience Annual Meeting, 2016, San Diego.
- Patil, A., Duncan, K. Shifting the balance between pattern separation and completion: Recent memory retrieval increases people’s subsequent ability to recall associations. *Talk delivered at: Annual Toronto Area Memory Group Meeting, 2016, Toronto, Canada.*
- Patil A, Mian F, Sheikh J, **Duncan K**, “Shifting the balance between pattern separation and completion: Recent memory retrieval increases people’s subsequent ability to recall associations”, Poster presented at: Cognitive Neuroscience Society Annual Meeting, 2016, New York.
- Sharp M, **Duncan K**, Foerde K, Kahane R, Shohamy D, “Effects of dopamine on the consolidation of learning and memory: Implications for Parkinson’s disease”, Poster presented at: Cognitive Neuroscience Society Annual Meeting, 2016, New York.
- Lohans L, Duncan K, Thesen T, Devinsky O, Davachi L, “Modulation of mnemonic processing

based on task relevance”, Poster presented at: Cognitive Neuroscience Society Annual Meeting, 2016, New York.

Patil A, Mian F, Sheikh J, **Duncan K**, “Shifting the balance between pattern separation and completion: Poster presented at: Recent memory retrieval increases people’s subsequent ability to recall associations”, Lake Ontario Visionary Establishment, 2016, Niagara Falls.

Duncan K, Doll BB, Daw ND, Shohamy D, “Hippocampal Contributions to Configural Probabilistic Learning”, Poster presented at: Society of Neuroscience Annual Meeting, 2015, Chicago.

Sharp M, Foerde K, **Duncan K**, Shohamy D. “Effects of dopamine on the consolidation of incremental learning: Implications for Parkinson’s disease”, Poster presented at: Society of Neuroscience Annual Meeting, 2015, Chicago.

Duncan K, Doll BB, Daw ND, Shohamy D, “Contributions of episodic memory to value-based decisions.” Talk delivered at: Society for Neuroeconomics, 2014, Miami. (primary author).

Duncan K, Doll BB, Daw ND, Shohamy D, "Contributions of episodic memory to value-based decisions." Talk delivered at: Manhattan Area Memory Meeting, 2014, New York. (primary author)

Tomparly A, **Duncan K**, Davach L, “High-resolution investigation of trial-level and state-level similarity in the hippocampal subfields and MTL cortex”, Poster presented at: Society for Neuroscience Annual Meeting, 2013, San Diego.

Duncan K, Doll BB, Daw ND, Shohamy D, "Interaction between the medial temporal lobe and the striatum during configural and elemental probabilistic classification learning", Poster presented at: Society for Neuroscience Annual Meeting, 2013, San Diego.

Doll, BB, **Duncan K**, Simon DA, Shohamy D, Daw ND, "Neural correlates of model-based and model-free reinforcement learning strategies", Poster presented at: Society for Neuroscience Annual Meeting, 2013, San Diego.

Duncan K, Shohamy D, "Recent exposure to novelty influences how memory guides decisions", Poster presented at: Multidisciplinary Conference on Reinforcement Learning and Decision Making, 2013, Princeton.

Doll, BB, **Duncan K**, Simon DA, Shohamy D, Daw ND, "Neural correlates of forward planning in model-based reinforcement learning", Poster presented at: Multidisciplinary Conference on Reinforcement Learning and Decision Making, 2013, Princeton.

Duncan K, Shohamy D, “Value-based decisions are modulated by exposure to familiar vs. novel cues”, Poster presented at: Cognitive Neuroscience Society Annual Meeting, 2013, San Francisco.

Tomparly A, **Duncan K**, Davachi L, “What counts as ‘rest’?: low–frequency correlations within the medial temporal lobe during an unrelated task predict memory”, Poster presented at: Cognitive Neuroscience Society Annual Meeting, 2013, San Francisco.

Duncan K, Davachi L, “High-resolution fMRI measurements of hippocampal and medial temporal lobe subregion interactions during episodic memory formation and retrieval.” Poster presented at: Cognitive Neuroscience Society Annual Meeting, 2011, San Francisco.

Duncan K, Davachi L, “Carry-over effects provide evidence for pattern separation and completion biases.” Poster presented at: Society for Neuroscience Annual Meeting, 2010, San Diego.

Duncan K, Staresina B, Davachi L, “Temporal Dynamics of blood-oxygen-level dependent (BOLD) responses in the medial temporal lobe during associative encoding.” Poster presented at: Cognitive Neuroscience Society Annual Meeting, 2010, Montreal.

Staresina B, **Duncan K**, Davachi L, “Domain specificity in medial temporal lobe cortex during episodic memory formation.” Poster presented at: Cognitive Neuroscience Society Annual

Meeting, 2010, Montreal.

Duncan K, Ketz N, Davachi L, “‘Match’ and ‘mismatch’ signals: A high-resolution fMRI study of the human hippocampus.” Talk delivered at Cognitive Neuroscience Society Annual Meeting, 2009, San Francisco.

Duncan K, Ketz N, Davachi L, “‘Match’ and ‘mismatch’ signals: A high-resolution fMRI study of the human hippocampus.” Poster presented at: Society for Neuroscience Annual Meeting, 2008, Washington DC.

Duncan K, Davachi L, “Relational ‘match’ and ‘mismatch’ signals in the human hippocampus are differentially modulated by active maintenance and perceptual novelty.” Poster presented at: Cognitive Neuroscience Society Annual Meeting, 2008, San Francisco.

Duncan K, Davachi L, “Relational ‘match’ and ‘mismatch’ signals in the human hippocampus.” Poster presented at: Society for Neuroscience Annual Meeting, 2007, San Diego.

PROFESSIONAL ACTIVITIES:

AD HOC REVIEWER: *Nature Neuroscience, Nature: Human Behavior, Neuron, Trends in Cognitive Science, Current Biology, Journal of Neuroscience, Journal of Experimental Psychology: General, Cognition, Journal of Cognitive Neuroscience, Hippocampus, Neuropsychologia, Cerebral Cortex, Neuroimage, ELife, ENeuro, Journal of Neurophysiology, Journal of Memory and Language, Neurobiology of Learning and Memory, Social Cognitive and Affective Neuroscience, Memory & Cognition, Frontiers, and Neurocase*

AD HOC GRANT REVIEWER: *European Research Council.*

COMMITTEE MEMBERSHIP

Toronto Neuroimaging Facility’s Education Committee, Chair	2018-
Toronto Neuroimaging Facility’s Policies and Procedures Committee, Chair	2017-
Toronto Neuroimaging Facility’s Education Committee, Member	2017-2018
Psychology Undergraduate Teaching Committee, UofT, Member	2017-
Psychology Graduate Program Review Committee, UofT, Member	2017-2018
Toronto Neuroimaging Facility’s Executive Committee, Member	2016-
Psychological Instruments Museum Committee, UofT, Chair	2016-
Cognitive Science Steering Committee, UofT, Psychology Representative	2015-

WORKSHOP AND TALK SERIES COORDINATION

NSERC Doctoral Grant Writing Workshop	2019
Toronto Neuroimaging Facility User Meeting, Founder and Organizer	2017-
Neuroimaging in Python Pipelines and Interfaces Workshop, Co-organizer	2017
Introduction to Inquisit and MTurk for Online Data collection, Organizer	2016
MRI Method’s Meeting, Columbia University, Founder and Organizer	2012
Advanced MRI Workshop, NYU, Founder and Co-organizer	2010
Brown Bag Talk Series, New York University, Co-organizer	2010

TEACHING EXPERIENCE:

<i>Instructor, University of Toronto, Programming for Psychologists*</i>	2018-2020
<i>Instructor, University of Toronto, Introduction to Cognition</i>	2018-2020
<i>Instructor, University of Toronto, Cognitive Neuroscience</i>	2017-2019
<i>Instructor, University of Toronto, Cognitive Deficits in Neurological Disorders*</i>	2016-2017
<i>Instructor, New York University, Cognition</i>	2011

<i>Teaching Assistant, New York University, Cognition</i>	2010
<i>Teaching Assistant, New York University, Intermediate masters statistics</i>	2009
<i>Teaching Assistant, New York University, Lab in human cognition</i>	2008
<i>Teaching Assistant, New York University, Introduction to psychology</i>	2007

** denotes new courses developed for my department*