

PEER-REVIEWED **Bornstein AM**, Khaw MW, Shohamy D, Daw ND (2017). Reminders of past
JOURNAL choices bias decisions for reward in humans. *Nature Communications*, 8:15958.
ARTICLES doi:10.1038/ncomms15958

Bornstein AM, Norman KA (2017). Reinstated episodic context guides
sampling-based decisions for reward. *Nature Neuroscience*, 20:997-1003.
doi:10.1038/nn.4573

Bornstein AM, Daw ND (2013). Cortical and hippocampal correlates of de-
liberation during model-based decisions for rewards in humans. *PLoS Com-
putational Biology*, 9(12):e1003387. doi:10.1371/journal.pcbi.1003387

Bornstein AM, Daw ND (2012). Dissociating hippocampal and striatal contri-
butions to sequential prediction learning. *European Journal of Neuroscience*,
35:1011-1023. doi:10.1111/j.1460-9568.2011.07920.x

Preston AR, **Bornstein AM**, Hutchinson JB, Gaare ME, Glover GH, Wagner
AD (2010). High-resolution fMRI of content-sensitive subsequent memory
responses in human medial temporal lobe. *Journal of Cognitive Neuroscience*,
22:156-173. doi:10.1162/jocn.2009.21195

PEER-REVIEWED Kane GA, **Bornstein AM**, Shenhav A, Wilson RC, Daw ND, Cohen JD (2017).
ARTICLES IN Mechanisms of overharvesting in patch foraging in rodents. *Proceedings of the*
CONFERENCE *39th Annual Conference of the Cognitive Science Society*.
PROCEEDINGS

Floares A, Jakary A, **Bornstein A**, Deicken R (2006). Neural networks and
classification and regression trees are able to distinguish females with major
depression from healthy controls using neuroimaging data. *Proceedings of the*
IEEE International Joint Conference of Neural Networks, 2006, 4605-4611.
doi:10.1109/ijcnn.2006.247090

REVIEWS,
COMMENTARIES,
BOOK CHAPTERS

Bornstein AM (in press). Mixing memory and desire: How episodic memory aids goal-directed decisions. To appear in: Morris RM, Bornstein AM, Shenhav A (eds.) *Goal-Directed Decision Making: Computations and Circuits*. Amsterdam: Elsevier.

Bornstein AM, Miller KJ, Shenhav A (2015). Walking bundles of habits (and Response-Outcome associations). *European Journal of Neuroscience*, 41:1356-1357. doi:10.1111/ejn.12906

Bornstein AM (2014). Functions of the hippocampal memory system in instrumental control (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global (3614853).

Wallisch P, **Bornstein AM** (2013). Enhanced motion perception as a psychophysical marker for autism? *Journal of Neuroscience*, 33(37):14631-14632. doi:10.1523/jneurosci.2945-13.2013

Bornstein AM, Nylen EL, Steele SA (2011). Unblocking the neural substrates of model-based value. *Journal of Neuroscience*, 31(28):10117-10118. doi:10.1523/jneurosci.1883-11.2011

Bornstein AM, Daw ND (2011). Multiplicity of control in the basal ganglia: computational roles of striatal subregions. *Current Opinion in Neurobiology*, 21(3):374-380. doi:10.1016/j.conb.2011.02.009

ABSTRACTS IN
CONFERENCE
PROCEEDINGS
(SELECTED)

Hoskin AN, **Bornstein AM**, Norman KA, Cohen JD. Refresh my memory: Context information from episodic memory affects working memory maintenance. Society for Neuroscience Annual Meeting. Washington, DC. November 2017.

Bornstein AM, Aly M, Feng SF, Turk-Browne NB, Norman KA, Cohen JD. Memory-guided perception: Sampling from past experience during perceptual inference. Society for Neuroscience Annual Meeting. San Diego, CA. November 2016.

Morris RW*, Shenhav A*, **Bornstein AM**, Collins AGE, Gershman SJ, Gillan CM, Liljeholm M. Minisymposium: Understanding goal-directed decision-making in humans: computations and circuits. Society for Neuroscience Annual Meeting. Chicago, IL. October 2015.

Bornstein AM, Norman KA. Context of recalled choice events affects subsequent decisions for reward. Society for Neuroeconomics Annual Meeting. Miami, FL. September 2014. [Spotlight poster]

Bornstein AM, Khaw MW, Daw ND. Episodic cues affect decisions for reward in humans. Society for Neuroeconomics Annual Meeting. Lausanne, Switzerland. September 2013.

Khaw MW, **Bornstein AM**, Daw ND. Evidence for decision by sampling in reinforcement learning. COSYNE. Salt Lake City, Utah. March 2013.

Bornstein AM, Geib TA, Daw ND. A hippocampal-cortical network underlies model-based planning in humans. COSYNE. Salt Lake City, Utah. February 2012.

Bornstein AM, Daw ND. Computational mechanisms of transition learning in unrewarded sequences. Society for Neuroscience Annual Meeting. Chicago, IL, October 2009.

INVITED TALKS
(SELECTED)

Oct 2017	Johns Hopkins University
Feb 2015	Mood & Anxiety Disorders group, Mount Sinai School of Medicine
Jun 2014	Sackler Institute, Weill-Cornell Medical College
Mar 2014	Workshop on the Neurobiology of Prediction and Surprise, Rutgers University
Feb 2013	Functional Imaging Lab, University College London
Jun 2011	Memory and Decisions meeting, Stanford University
Jan 2011	Parallel Distributed Processing meeting, Princeton University
Jan 2011	Kavli Institute, Harvard University

TEACHING

New York University New York, NY USA

Fall 2011 Machine Learning (Graduate), Prof. Yann Lecun
 Fall 2009 Cognitive Neuroscience, Prof. Nathaniel D. Daw
 Fall 2008 Lab in Perception, Dr. Shani Offen, Prof. David J. Heeger
 Spring 2008 Cognition, Prof. Robert E. Rehder

Massachusetts Institute of Technology Cambridge, MA

Spr 1999 6.823 Computer System Architecture (Graduate), Prof. Arvind
 Fall 1999 1.00 Introduction to Computers and Engineering Problem Solving

OTHER TEACHING Fall 2016 – Present Princeton Prison Teaching Initiative (Instructor, organizer; High school & College Algebra, English Composition)

Summer 2007, 2008 Middle East Education through Technology (MEET), Jerusalem. (Lead instructor; Software development)

PROFESSIONAL ACTIVITIES 2018 Co-organizer (with Ahmed El Hady) Princeton Neuroscience Institute “Inside-out” seminar series.

2018 Co-editor (with Richard Morris & Amitai Shenhav), “Goal-Directed Decision Making: Computations and Circuits” *Elsevier*.

2015 Co-organizer (with G. Elliott Wimmer), COSYNE Workshop “Memory in action: The role(s) of the hippocampus in decisions for reward.”

2010-Present Ad-hoc reviewer: Attention, Perception, & Psychophysics; Biological Cybernetics; Cerebral Cortex; Cognitive, Affective, and Behavioral Neuroscience; Cognitive Science; Cortex; COSYNE; European Journal of Neuroscience; European Neuropsychopharmacology; Frontiers in Behavioral Neuroscience; Human Brain Mapping; ICDL; Journal of Cognitive Neuroscience; Neuroimage: Clinical; PLoS Computational Biology; PLoS ONE; PNAS; Visual Cognition

OTHER ACTIVITIES 2011-2012 New York University Graduate Forum (Moderator)
 Spr 2012 Advanced science writing workshop, Prof. Stephen Hall
 2009-2011 New York University Graduate Forum (Member)
 Fall 2010 Science writing workshop, Prof. Stephen Hall
 Jul 2010 CEU Summer School on “Probabilistic models of cognitive systems.” Budapest, Hungary
 Aug 2009 Advanced Course in Computational Neuroscience. Freiburg, Germany