

# Eric Garr, Ph.D.

Johns Hopkins University  
Department of Psychological and Brain Sciences  
Dunning Hall, room 222  
3400 N. Charles Street  
Baltimore, MD 21218  
egarr1@jh.edu

## EDUCATION and TRAINING

---

Johns Hopkins University Postdoctoral fellow	2019 – present
Graduate Center, City University of New York Ph.D. in psychology	2014 – 2019
Adelphi University B.A. in psychology (minor: philosophy)	2009 – 2013

## FELLOWSHIPS and AWARDS

---

Minnesota Symposium on Addiction Neuroscience Travel Award	2022
NIH NRSA Postdoctoral Fellowship (F32 DA054767-01A1)	2022 – 2025
Society for Neuroscience Trainee Professional Development Award	2021
Hartwell Foundation Postdoctoral Fellowship	2019 – 2020
BU Center for Systems Neuroscience Fellowship (relinquished)	2019
Best Graduate Student Poster - Brooklyn College Science Day	2018
CUNY Dissertation Fellowship	2018 – 2019
CUNY Doctoral Student Research Grant	2018
Five-Year CUNY Graduate Center Fellowship	2014
Summa Cum Laude, Adelphi University	2013
NSF Research Experience for Undergraduates, NYU	2013
Dean's List, Adelphi University	2009 – 2013
Psi Chi Honors Society	2011
Lillian Jackson Award, Adelphi University	2011
Dean's Scholarship, Adelphi University	2009

## PUBLICATIONS

---

**Garr, E.**, Padovan-Hernandez, Y., Janak, P.H., & Delamater, A.R. (2021). Maintained goal-directed control with overtraining on ratio schedules. *Learning & Memory*, 28, 435-439. [doi.org/10.1101/lm.053472.121](https://doi.org/10.1101/lm.053472.121)

Cheng, Y., Xie, X., Lu, J., Gangal, H., Wang, W., Melo, S., Wang, X., Jerger, J., Woodson, K., **Garr, E.**, Huang, Y., Janak, P., & Wang, J. (2021). Optogenetic Induction of Orbitostriatal Long-Term Potentiation in the Dorsomedial Striatum Elicits a Persistent

Reduction of Alcohol-Seeking Behavior in Rats. *Neuropharmacology*, 191, 108560. [doi.org/10.1016/j.neuropharm.2021.108560](https://doi.org/10.1016/j.neuropharm.2021.108560)

**Garr, E.** & Delamater, A.R. (2020). Chemogenetic inhibition in the dorsal striatum reveals regional specificity of direct and indirect pathway control of action sequencing. *Neurobiology of Learning and Memory*, 169, 107169. [doi.org/10.1016/j.nlm.2020.107169](https://doi.org/10.1016/j.nlm.2020.107169)

**Garr, E.**, Bushra, B., Tu, N., & Delamater, A.R. (2020). Goal-directed control on interval schedules does not depend on the action-outcome correlation. *Journal of Experimental Psychology: Animal Learning and Cognition*, 46(1), 47 – 64. [doi.org/10.1037/xan0000229](https://doi.org/10.1037/xan0000229)

**Garr, E.** (2019). Contributions of the basal ganglia to action sequence learning and performance. *Neuroscience and Biobehavioral Reviews*, 107, 279 – 295. [doi.org/10.1016/j.neubiorev.2019.09.017](https://doi.org/10.1016/j.neubiorev.2019.09.017)

**Garr, E.** & Delamater, A.R. (2019). Exploring the relationship between actions, habits, and automaticity in an action sequence task. *Learning & Memory*, 26(4), 128 – 132. [doi.org/10.1101/lm.048645.118](https://doi.org/10.1101/lm.048645.118)

**Garr, E.** (2017). What can recordings in the striatum tell us about associative learning? *The Journal of Neuroscience*, 37(50), 12091 – 12093. [doi.org/10.1523/JNEUROSCI.2770-17.2017](https://doi.org/10.1523/JNEUROSCI.2770-17.2017)

Delamater, A.R., **Garr, E.**, Lawrence, S., & Whitlow, J.W. (2016). Elemental, configural, and occasion setting mechanisms in biconditional and patterning discriminations. *Behavioural Processes*, 137, 40 – 52. [doi.org/10.1016/j.beproc.2016.10.013](https://doi.org/10.1016/j.beproc.2016.10.013)

**Garr, E.** (2016). Heterogeneous responses of tonically active interneurons in the dorsal striatum. *The Journal of Neuroscience*, 36(12), 3412 – 3413. [doi.org/10.1523/JNEUROSCI.0099-16.2016](https://doi.org/10.1523/JNEUROSCI.0099-16.2016)

## TALKS

---

Baltimore Brain Series, November 2022

Johns Hopkins University, Psychological and Brain Sciences Seminar, October 2022

Johns Hopkins University, Biopsychology Seminar, October 2021

Johns Hopkins University, Biopsychology Seminar, September 2020

Nanjing Medical University, Tianyuan Cloud Pharmacy Workshop, June 2020

Boston University, Center for Systems Neuroscience, Boston, MA, February 2019

CUNY, Cognitive and Comparative Psychology Colloquium, November 2018

Brooklyn College, Psychology Colloquium, November 2017

Gregynog Associative Learning Symposium, Wales, UK, April 2017

Eastern Psychological Association, March 2016

Eastern Psychological Association, March 2015

NYU, Symposium of the Center for Neural Science Summer Undergraduate Research Program, July 2013

## **POSTER PRESENTATIONS (selected)**

---

Cheng, Y., Magnard, R., Garr, E., & Janak, P.H. (2022). Chronic Ethanol Vapor Exposure in Adult Rats Reduces Behavior Flexibility. Gordon Research Conference: Alcohol and the Nervous System, Oxnard, CA.

Garr E., Cheng, Y., Bal, A., Brooke, S., Castell, L., & Janak, P.H. (2022). Mesostriatal dopamine is sensitive to Pavlovian information loss. Gordon Research Conference: Optogenetic Approaches to Understanding Neural Circuits and Behavior, Newry, ME.

Cheng, Y., Garr, E., Shuai, C., Malloy, N., & Janak, P. (2022). Probing the function of the dorsal striatum in rats navigating a two-step task using model-free learning. The Multi-disciplinary Conference on Reinforcement Learning and Decision Making, Providence, RI.

Garr E., Bal, A., Cheng, Y., Castell, L., Brooke, S., & Janak, P.H. (2022). Midbrain dopamine is sensitive to Pavlovian information loss. Dopamine Society, Montreal, CA.

Garr, E. & Janak, P.H. (2020). Action-outcome contingency learning engages rodent anterior cingulate cortex in an output-general manner. Pavlovian Society (virtual).

Garr, E. & Delamater, A.R. (2019). Chemogenetic inhibition reveals regional specificity of direct pathway control of action sequencing. Zuckerman Mind Brain Behavior Symposium, Columbia University, New York, NY.

Tu, N., Garr, E., & Delamater, A.R. (2019). Dorsal striatal contributions to reward devaluation effects in interval timing. Eastern Psychological Association, New York, NY.

Garr, E., Bushra, B., & Delamater, A.R. (2017). Habit formation does not depend on the correlation between response rates and reward rates. Society for Neuroscience, Washington, D.C.

Garr, E., Hanini, W.K., & Delamater, A.R. (2016). Chunked action sequences: reward devaluation and cortical substrates. Society for Neuroscience, San Diego, CA.

Garr, E. & Delamater, A.R. (2015). Action sequences are sensitive to reward devaluation. Pavlovian Society, Portland, OR.

## **TEACHING**

---

Learning (PSYC 3510), Brooklyn College <i>Lecturer</i>	2016 – 2018
Statistics in Psychological Research (PSYC 3400), Brooklyn College <i>Lab Instructor</i>	2015 – 2016
Biological Concepts and Methods I (BIO 111), Adelphi University, <i>Recitation Instructor</i>	2011 – 2013

## **STUDENTS MENTORED**

---

Andy Dong (Fall 2022)  
 Cecelia Shuai (Spring 2021)  
 Yasmin Padovan-Hernandez (Spring 2021)  
 Sara Brooke (Spring 2021)  
 Sonal Sinha (Spring 2020)  
 Noah Smith (Spring 2020)  
 Chloé Pierre-Louis (Summer 2018)  
 Badrunnesa Bushra (Fall 2017 – Spring 2018)  
 Waleed Hanini (Fall 2016)  
 Rachel Minchuk (Fall 2015 – Spring 2016)

## **SERVICE**

---

Founding member, Dopamine Society (2022)  
 Selection Committee, Early Career Colloquium, Department of Psychological and  
 Brain Sciences, Johns Hopkins University (2020-2022)  
 Research Panel, Psychology Undergraduate Steering Committee, Department of  
 Psychological and Brain Sciences, Johns Hopkins University (2019)

## **JOURNAL PEER REVIEW**

---

Behavioral and Brain Sciences  
 Current Biology  
 Journal of Experimental Psychology: Animal Learning and Cognition  
 Neurobiology of Learning and Memory  
 Neuron  
 Neuropsychobiology  
 PLOS ONE