ALYSSA H. SINCLAIR | Curriculum Vitae

Duke University, Center for Cognitive Neuroscience, Durham, NC Lab Phone: (919)-681-4601 Email: allie.sinclair@duke.edu

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ORCID 0000-0003-0447-3959

Research Interests: Prediction error, episodic memory, belief updating, hippocampus, reconsolidation

Education

Ph.D., Duke University — Psychology & Neuroscience, Cognitive Neuroscience

2018 - 2023

Advisors: Dr. R. Alison Adcock & Dr. Gregory R. Samanez-Larkin

(anticipated)

Cumulative GPA: 4.0

B.Sc. with High Distinction, University of Toronto — Psychology, Research Specialist

2014 - 2018

Valedictorian, recipient of the Governor General's Academic Medal

Cumulative GPA: 4.0

Honors Thesis: Prediction Error Influences Episodic Memory Reconsolidation

Advisors: Dr. Morgan Barense & Dr. William Cunningham

Publications

- Sinclair, A. H., Brunec, I. K., Manalili, G. M., Adcock. R. A., & Barense, M. D. (2020). Prediction errors modulate hippocampal representations and update episodic memories. BioRxiv. DOI: https://doi.org/10.1101/2020.09.29.319418
- Sinclair, A.H., Stanley, M.L., & Seli, P. (2020). Closed-minded cognition: Right-Wing Authoritarianism is negatively related to belief updating following prediction error. Psychonomic Bulletin and Review. DOI: 10.31234/osf.io/94a7v
- Stanley, M.L., Sinclair, A.H., & Seli, P. (2020). Intellectual humility and perceptions of political opponents, *Journal of Personality*, 00, 1-21. DOI: <u>10.1111/jopy.12566</u>
- Sinclair, A. H. & Barense, M. D. (2019). Prediction error and memory reactivation: How incomplete reminders drive reconsolidation. Trends in Neurosciences, 42. DOI: 10.31234/osf.io/h8fy9
- Sinclair, A. H. & Barense, M. D. (2018). Surprise and destabilize: Prediction error influences episodic memory reconsolidation. Learning & Memory, 25(8), 369-381. DOI: 10.1016/j.tins.2019.08.007

Manuscripts in Preparation

Sinclair, A.H.*, Hakimi, S.*, Stanley, M.S., Adcock, R.A., & Samanez-Larkin, G.R. (2020). An intervention to improve risk perception accuracy during the COVID-19 pandemic.

NSF Graduate Research Fellowship, National Science Foundation	\$138,000, 2019—23
Postgraduate Scholarship, Natural Sci. and Eng. Research Council of Canada	\$63,000, 2019—21
Special Topics COVID-19 Research Grant, Duke University	\$2,500, 2020
Research Germinator Award, Duke Institute for Brain Sciences	\$25,000, 2019—20
James B. Duke Graduate Fellowship, Duke University	\$20,000, 2018—2021
NSERC Canada Graduate Scholarship- Master's (Declined)	\$17,500, 2018
NSERC Undergraduate Student Research Award, University of Toronto	\$5,625, 2018
Undergraduate Research Grant, University of Toronto	\$1,500, 2018
George Mandler Research Fund, University of Toronto	\$550, 2018

Awards & Honors

Trainee Professional Development Award, Society for Neuroscience	2019
SARMAC 2019 Travel Award, Society for Applied Research on Memory & Cognition	2019
Charles Lafitte Foundation Travel Awards, Duke University	2018, 2019
Governor General's Academic Medal, Government of Canada, University of Toronto	2018
National award granted to the highest-performing undergraduate student.	
John Black Aird Scholarship, University of Toronto	2018
Awarded to the top student of the tri-campus graduating class.	
Rose Sheinin Award, University of Toronto	2018
Awarded for academic excellence in an undergraduate science program.	
Women's Centenary Silver Medal, Victoria College, University of Toronto	2018
Treble & Barber Travelling Scholarship, Victoria College, University of Toronto	2018
Dean's List Scholar, University of Toronto	2014-18
James Mark Baldwin Prize for Best Essay, University of Toronto	2017
Moscovitch Award for Outstanding Contribution to Discussion, TAMeG Conference	2017
Outstanding Poster Presentation, NeuroXchange Conference	2017
University of Toronto Scholars Award, University of Toronto	2014-17
Academic Merit Scholarships, Victoria College, University of Toronto	2014-17

Conference Talks

- Barense, M.D. & Sinclair, A.H. (2020, May). Past meets present: Prediction error drives episodic memory updating. *Cognitive Neuroscience Society*, Virtual Conference.
- **Sinclair, A.H.,** Manalili, G.M., & Barense, M.D. (2019, June). Surprise drives episodic memory updating and distortion. *Society for Applied Research on Memory and Cognition*, Cape Cod, MA.
- **Sinclair, A.H.** & Barense, M.D. (2018, May). Prediction error influences episodic memory reconsolidation. *Toronto Area Memory Group Conference*, Toronto, ON.
- **Sinclair, A.H.** & Barense, M.D. (2018, May). Prediction error influences episodic memory reconsolidation. *Undergraduate Thesis Conference*, Toronto, ON. *Awarded Notable Presentation.
- **Sinclair, A.H.** & Barense, M.D. (2018, April). Surprise and destabilize: Prediction error influences episodic memory reconsolidation. *NeuroXchange Conference*, Hamilton, ON.

Poster Presentations

- **Sinclair, A.H.**, Hakimi, S., Stanley, M.S., Adcock. R.A., & Samanez-Larkin, G.R. (2020, October). Perceived vs. actual virus transmission risk during the COVID-19 pandemic. *Society for Neuroeconomics*, Virtual Conference.
- Sinclair, A.H., Hakimi, S., Adcock. R.A., & Barense, M. D. (2020, August). Effective connectivity among cortico-hippocampal regions predicts memory for naturalistic episodes. *Context and Episodic Memory Symposium*, Virtual Conference.
- **Sinclair, A.H.**, Poh, J.H., Adcock. R.A., & Barense, M. D. (2020, May). Neural representations of emotional valence and intensity during naturalistic events. *Cognitive Neuroscience Society*, Virtual Conference.
- Sinclair, A.H., Manalili, G.M., & Barense, M. D. (2019, Nov). Surprising event boundaries modulate hippocampal activity and distort episodic memories. *Psychonomic Society*, Montreal, QC.
- Sinclair, A.H., Manalili, G.M., & Barense, M. D. (2019, Oct). Prediction errors at event boundaries drive episodic memory reconsolidation. *Society for Neuroscience*, Chicago, IL. **Trainee Prof. Dev. Award*
- **Sinclair, A.H.,** Manalili, G.M., & Barense, M.D. (2019, Apr). Neural mechanisms of prediction error and episodic memory distortion. *Smokies Cognition and Neuroscience Symposium*, Asheville, NC.
- Sinclair, A.H., Manalili, G.M., & Barense, M.D. (2019, Mar). Neural mechanisms of episodic memory reconsolidation: A critical role for prediction error. *Cognitive Neuroscience Society*, San Fran., CA.
- **Sinclair, A.H.** & Barense, M. D. (2017, Nov). Surprise and destabilize: Prediction error triggers episodic memory updating. *Society for Neuroscience*, Washington, D.C.
- **Sinclair, A.H.** & Barense, M. D. (2017, Apr). Prediction errors in episodic memory reconsolidation.

 NeuroXchange Conference, McMaster University, Hamilton, ON. *Outstanding Poster Award.

Teaching Experience

Teaching Assistant — Duke University. Drs. Karen Murphy & Minna Ng	2020
NEUROSCI101: Biological Bases of Behavior	
Teaching Assistant — University of Toronto, Dr. Brian Baigrie	
VIC171: Methodology, Theory, & Practices in the Natural Sciences	2017-2018
Independent Tutor for University and High School Students — Toronto, ON	2016-2018

Skills

- fMRI Data Collection & Analysis (FSL, SPM)
- Computational Neuroscience (NeuroHackademy 2020)
- Transcranial Magnetic Stimulation Certification
- Programming & Statistical Analysis with R, Python, Bash, MATLAB, SPSS, EyeLink

Affiliations

- Society for Neuroscience
- Cognitive Neuroscience Society
- Society for Applied Research in Memory and Cognition
- Society for Neuroeconomics

Service & Outreach

Ad Hoc Reviewer — Psychological Science, Learning & Memory, Learning & Motivation, Memory & Cognition, WIREs Cognitive Science

Nominated Representative — Graduate Student Affairs, Duke University

Graduate Student Liaison representing the Cognitive Neuroscience Program.

Project Coordinator & Mentor — Motivation & Decision Sciences Research Internship

2020-Present

Helped develop and lead a research internship program that prioritized outreach to first-generation and underrepresented students without prior research experience. Lectured, mentored, and performed administration.

Mentor — Científico Latino: Graduate School Mentorship Initiative 2019-2021

Guiding STEM graduate school applicants from underrepresented minorities. Revised graduate and NSF-GRFP applications, conducted mock interviews.

Volunteer Editor — The Inkblot: Undergraduate Journal of Psychology

Reviewed & edited papers from undergraduate psychology students.

Let's Talk Science Challenge — University of Toronto

Outreach poster fair, communicating neuroscience to middle school students.

References

Dr. R. Alison Adcock, *Duke University*

Dr. Morgan D. Barense, University of Toronto

Dr. Gregory Samanez-Larkin, Duke University

Dr. William Cunningham, University of Toronto

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