

Robyn E. Wilford

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Department of Psychology | University of Toronto, St. George Campus
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Education

PhD Student	Psychology <i>Research Area:</i> Perception, Cognition, and Cognitive Neuroscience - applying Coordination Dynamics to episodic memory and event perception Department of Psychology <i>University of Toronto, ON, Canada</i>	2022 – present
BSc	Honours Specialization in Developmental Cognitive Neuroscience <i>with distinction</i> Department of Psychology <i>Western University, ON, Canada</i>	2022

Senior Undergraduate Honours Thesis

2022	Variation, Exploration, and Selective Stabilization as a Developmental Mechanism: Investigating changes in non-linear variability in the event-scale time series of infant object interactions <i>Supervisor:</i> Dr. Michael L. Anderson
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Publications

Conference Proceedings

Wilford, R. E., Raja, V., Hershey, M., & Anderson, M. (2022). The Treachery of Images: Objects, Pictures, Words and the Role of Affordances in Similarity Judgements. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 44. Retrieved from <https://escholarship.org/uc/item/9sz5t2gn>

Invited Commentaries

Wilford, R., Ardila-Cifuentes, J., Baggs, E., & Anderson, M. L. (2022, commentary). The stimulus-response crisis. *The Behavioral and brain sciences*, 45, e39. <https://doi.org/10.1017/S0140525X21000285>

Manuscripts in Preparation

Wilford, R. E.*, Wharton-Shuckster, E.*, Finn, A., Duncan, K. (in preparation for JCogNeuro). Detecting Individualized Neural Event Boundaries Using fMRI.

Ren, H., **Wilford, R. E.**, Morton, J. B., Liu (in preparation). The relationship between individual differences in shyness and neural response to valanced feedback using a stress-induction paradigm.

Oral Presentations

Poster Presentations

- 2023 **Wilford, R. E.**, Wharton-Shuckster, E., Finn, A., Duncan, K. (2023, November 11-15). *Detecting Individualized Neural Event Boundaries Using fMRI* [Poster Presentation]. Annual Meeting of the Society for Neuroscience, Washington, D.C, USA.
- 2023 **Wilford, R. E.**, Ren, H., Morton, J. B., Liu (2023, July 22-26). *An Investigation of Shyness and Social Evaluative Stress Using Inter-subject RSA* [Poster Presentation]. The Annual Meeting of the Organization for Human Brain Mapping, Montreal, QC, Canada.
- 2022 **Wilford, R.**, Raja, V., Hershey, M., & Anderson, M. (2022, July 27-30). *The Treachery of Images: Objects, Pictures, Words and the Role of Affordances in Similarity Judgements* [Poster Presentation]. The 44th Annual Meeting of the Cognitive Science Society, Toronto, ON, Canada.
- 2020 **Wilford, R.**, Raja, V., Anderson, M.L., & the EMRG Lab (2020, February 26-28). *The EMRG Lab: Ecological Psychology Meets Neuroscience* [Poster Presentation]. Neuroscience Research Day, Western University, London, ON, Canada

Talks

- 2023 **Wilford, R.** (2023, June). *An Ecological Approach to Event Perception and Memory: Principles and Possibilities*. Berlin Workshop on Ecological Psychology, Technical University of Berlin, Berlin, Germany.
- 2022 **Wilford, R.** (2022, September). *Cofluctuations in BOLD signal: measuring relational brain dynamics using edge time series*. Toronto Neuroimaging (ToNI) Users Meeting, University of Toronto, Toronto, Canada.

Panels & Discussions

- 2023 Raja, V., **Wilford, R. E.**, Paxton, A. (2023, September; invited panelist). *Cognitive Debate: Ecological Psychology Today* [Virtual Discussion moderated by Wilson, A.]. CogIST Cognitive Science Organization, Istanbul, Turkey.
- 2021 Ardila-Cifuentes, J., & **Wilford, R.** (2021, February). *Karen Adolph: Infant Motor Development* [Dialogue with Karen Adolph]. Rotman Institute of Philosophy, London, Ontario.

Research Experience

- 2022 – present **PhD Student – *The Duncan Lab***
University of Toronto
 PI: Dr. Katherine Duncan
- 2022 – present **External Member – *The Eclectic Minds Research Group (EMRG)***
Western University
 PI: Dr. Michael L. Anderson
- 2021 – 2022 **Undergraduate Research Assistant; Lead Project Data Analyst – *Cognitive Development and Neuroimaging Laboratory***
Western University
 PI: Dr. J. Bruce Morton
- 2019 – 2022 **Undergraduate Research Assistant – *The Eclectic Minds Research Group (EMRG)***
Western University
 PI: Dr. Michael L. Anderson
- 2019 **Volunteer Research Assistant – *Infant and Child Development Lab***
Huron College (Western University)
 PI: Dr. Christine Tsang

Teaching Experience

- Fall 2023 **Teaching Assistant; Human Memory (PSY372)**
University of Toronto, Canada
- Winter 2023 **Teaching Assistant; Health Psychology (PSY333)**
University of Toronto, Canada

Academic Awards

- 2022 **Chancellor's Prize in Social Science Honors Program**
Faculty of Social Science, Western University, ON, Canada
 - top final year performance in a Social Science honours program
- 2022 **Gold Medal for Psychology Honors Specialization Developmental Cognitive Neuroscience BSc**
Department of Psychology, Western University, ON, Canada
 - highest modular average of the 2022 Psychology Honours Specialization Developmental Cognitive Neuroscience (BSc) Graduates.
- 2022 **W.J. McClelland Award – CAD \$1,600**
Department of Psychology, Western University, ON, Canada
 - top undergraduate psychology honours thesis

2019 – 2020/
2021 – 2022 **Deans Honours List**
Department of Psychology, Western University, ON, Canada

Scholarships and Grants

2023 – 2024 **Ontario Graduate Scholarship** – CAD \$15,000
Supervisor: Dr. Katherine Duncan

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Supervisor: Dr. Katherine Duncan

2022 **Doctoral Recruitment Award** – CAD \$7,500
Faculty of Arts and Sciences, University of Toronto, ON, Canada

2022 **Psychology Admission Award** – CAD \$2,500
Department of Psychology, University of Toronto, ON, Canada

2022 **Clark and Mary J. Wright Scholarship** – CAD \$1,000
Department of Psychology, Western University, ON, Canada

2021 **Natural Sciences and Engineering Research Council (NSERC)
Undergraduate Student Research Award (USRA)** – CAD \$7,500
Supervisor: Dr. J. Bruce Morton

2020 **Mitacs Research Training Award** – CAD \$6,000
Supervisor: Dr. Michael L. Anderson

Extracurriculars

2023 – present **Co-President**
Psychology Student Association
University of Toronto, Canada

2022 – present **SEAM Journal Club Co-Organizer**
Department of Psychology
University of Toronto, Canada

2022 – 2023 **Graduate Student Union Representative**
Psychology Graduate Student Association
University of Toronto, Canada

Jan 2023 **Graduate Student Panelist**
Graduate School Interviews Panel, *Psychology Undergraduate Research Community (PURC)*
University of Toronto, Canada

- Nov 2022 **Graduate Student Panelist**
 Graduate School Applications Panel, *Psychology Undergraduate Research Community (PURC)*
 University of Toronto, Canada
- 2020 – 2021 **Journal Club Committee Member**
Society of Neuroscience Graduate Students (SONGS)
 Western University, Canada
- 2019 – 2021 **Philosophy and Cognitive Science Reading Group Member**
Rotman Institute of Philosophy
 Western University, Canada
- March 2020 **Panelist**
 Community Event on How to Support Loved Ones with Mental Illness
Registered Nurses Association of Ontario (RNAO, Middlesex Branch)
 London Public Library, London, Canada

Research and Analysis Skills

Research Methods

Neuroimaging Methods:

- functional magnetic resonance imaging (fMRI) – design and analysis
- electroencephalography (EEG) – theoretical knowledge

Behavioural Methods:

- similarity judgment methodological paradigm – design and analysis
- observational research design – design and analysis

Analysis/Statistical Methods

- General Linear Model (GLM)
- Bootstrapping methods
- Multidimensional scaling
- Agglomerative hierarchical cluster analysis
- Representational Similarity Analysis (RSA)
- Recurrence Quantification Analysis (RQA)
- Multiscale Sample Entropy
- Edge timeseries analysis
- Greedy State Boundary Search analysis

Programming Languages & Software

- MATLAB
- Python
- R
- Microsoft Excel
- SPSS (Statistical Package for the Social Sciences)
- SPM12 (Statistical Parametric Mapping)