


Brady R. T. Roberts, PhD

Curriculum Vitae

 bradyrtroberts@gmail.com

 www.bradyrtroberts.ca

 @bradyrtroberts

Research Interests

- Improving memory
- Symbolism in the brain
- Imaging cognition
- Advanced meta-analysis

Teaching Interests

- Research in memory
- Brain physiology
- Methods and statistics
- Introductory psychology

Academic Appointments & Education

Postdoctoral Scholar 2023 – present
Department of Psychology, University of Chicago
Advisor: Wilma Bainbridge, PhD

Doctor of Philosophy, Cognitive Neuroscience 2019 – 2023
Department of Psychology, University of Waterloo
Advisors: Myra Fernandes, PhD & Colin MacLeod, PhD

Master of Arts, Cognitive Neuroscience 2017 – 2019
Department of Psychology, University of Waterloo
Advisors: Myra Fernandes, PhD & Dr. Colin MacLeod, PhD

Honours Bachelor of Arts, Psychology (Research Intensive Specialization) 2013 – 2017
Minor in Human Resource Management
Department of Psychology, University of Waterloo
Advisors: Myra Fernandes, PhD & Jeffrey Wammes

Additional Research Experience

Database Coordinator 2017 – 2023
Waterloo Research in Aging Participants (WRAP)
University of Waterloo

Survey Field Researcher 2019
City of Waterloo

NSERC USRA Student Researcher 2017
Cognitive Neuroscience Lab
Department of Psychology, University of Waterloo

Research Assistant 2013 – 2017
Cognitive Neuroscience Lab
Department of Psychology, University of Waterloo

Research Funding (\$233,500 total lifetime funding)

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| Postdoctoral Fellowship (PDF) Natural Sciences and Engineering Research Council of Canada (NSERC) | \$90 000 2023 – 2025 |
| Postgraduate Scholarship-Doctoral (PGS-D3) Natural Sciences and Engineering Research Council of Canada (NSERC) | \$63 000 2020 – 2023 |
| Ontario Graduate Scholarship (OGS) [award offer declined] Province of Ontario | \$15 000 2020 – 2021 |
| President’s Graduate Scholarship University of Waterloo | \$20 000 2019 – 2023 |
| Ontario Graduate Scholarship (OGS) Province of Ontario | \$15 000 2019 – 2020 |
| Graduate Scholarship / Arts Senate Graduate Scholarship University of Waterloo | \$26 000 2017 – 2019 |
| Undergraduate Student Research Award (USRA) Natural Sciences and Engineering Research Council of Canada (NSERC) | \$4 500 2017 |

Publications

Peer-Reviewed Publications (12 total; 10 as first author)

1. Fawcett, J.M., Levy, B.J., Bergström, J.B., Clark, C.A., Hertel, P.T., Hulbert, J.C., MacLeod, C.M., Todorovic, D., van Schie, K., & **The Memory Control Consortium** (accepted in principle). A multisite registered replication of the think/no-think effect. *Nature Human Behaviour*.
2. **Roberts, B.R.T.**, Forrin, N.D., McLean, D., & MacLeod, C.M. (2024). Release from response interference in color-word contingency learning. *Acta Psychologica*. [\[DOI\]](#)
3. **Roberts, B.R.T.** & Trossman, R. (2023). Face processing in ADHD: A review of the N170 event-related potential. *Canadian Journal of Experimental Psychology*. [\[DOI\]](#)
4. **Roberts, B.R.T.**, Hu, Z.S., Curtis, E., Bodner, G.E., McLean, D., & MacLeod, C.M. (2023). Reading text aloud benefits memory but not comprehension. *Memory & Cognition*. [\[DOI\]](#)

5. **Roberts, B.R.T.**, MacLeod, C.M., & Fernandes, M.A. (2023). Symbol superiority: Why \$ is better remembered than ‘dollar’. *Cognition*. [\[DOI\]](#)
6. **Roberts, B.R.T.**, Fernandes, M.A., & MacLeod, C.M. (2023). Memory for symbolic images: Findings from sports team logos. *Journal of Applied Research in Memory and Cognition*, advance online publication. [\[DOI\]](#)
7. **Roberts, B.R.T.**, MacLeod, C.M., & Fernandes, M.A. (2022). The enactment effect: A systematic review and meta-analysis of behavioral, neuroimaging, and patient studies. *Psychological Bulletin*, 148(5-6), 397-434. [\[DOI\]](#)
8. *Homann, L.A., ***Roberts, B.R.T.**, Ahmed, S., Fernandes, M. A. (2022). Are emojis processed visuo-spatially or verbally? Evidence for dual codes. *Visual Cognition*, 30(4), 267-279.
* **Both authors contributed equally to this work.** [\[DOI\]](#)
9. **Roberts, B.R.T.** & Wammes, J.D. (2021). Drawing and memory: Using drawing to alleviate concreteness effects. *Psychonomic Bulletin & Review*, 28(1), 259-267. [\[DOI\]](#)
10. **Roberts, B.R.T.**, Fernandes, M.A., & MacLeod, C.M. (2020). Re-evaluating whether bilateral eye movements influence memory retrieval. *PLOS One*, 15(1), e0227790. [\[DOI\]](#)
11. **Roberts, B.R.T.**, Wammes, J.D., & Fernandes, M.A. (2020). Drawing with your eyes: Comparable memory benefits for oculomotor and manual-motor drawing. *Mind Pad*, 9(1), 3-7. [\[DOI\]](#)
12. Wammes, J.D., **Roberts, B.R.T.**, & Fernandes, M.A. (2018). Task preparation as a mnemonic: The benefits of drawing (and not drawing). *Psychonomic Bulletin & Review*, 25(6), 2365–2372. [\[DOI\]](#)

Articles Submitted or Under Review (2 articles; 1 as first author)

1. Tharumalingam, T., Risko, E.F., **Roberts, B.R.T.** (invited revision submitted). On increasing video lecture playback speed: A meta-analysis. *Educational Psychology Review*.
2. **Roberts, B.R.T.**, Meade, M.E., & Fernandes, M.A. (invited revision submitted). Neural integration of multimodal memories following drawing: An fMRI study. *Memory & Cognition*.

Presentations

Invited Symposium Presentations (2 presentations; both as first author)

1. **Roberts, B.R.T.**, Hu, Z.S., McLean, D., & MacLeod, C.M. (2022). *Does production of text benefit both comprehension and memory?* 32nd annual meeting of the Canadian Society for Brain, Behaviour, and Cognitive Science (CSBBCS), Halifax, Nova Scotia, July 19, 2022.
2. **Roberts, B.R.T.**, MacLeod, C.M., & Fernandes, M.A. (2021). *The enactment effect: A meta-analytic review of behavioural, neuroimaging, and patient studies.* 31st annual meeting of the Canadian Society for Brain, Behaviour, and Cognitive Science (CSBBCS), Virtual Meeting, June 17, 2021.
***Honorable mention for the Donald O. Hebb Award for best spoken presentation.**

Conference Talks (9 presentations; all as first author)

1. **Roberts, B.R.T.**, MacLeod, C.M., & Fernandes, M.A. (2022). *Memory for everyday symbols*. Midway Meeting of the Memory Minds (MMMM), Chicago, Illinois, October 18, 2023.
2. **Roberts, B.R.T.**, MacLeod, C.M., & Fernandes, M.A. (2022). *Symbol superiority: Why \$ is better remembered than 'dollar'*. 32nd annual meeting of the Canadian Society for Brain, Behaviour, and Cognitive Science (CSBBCS), Halifax, Nova Scotia, July 18, 2022.
3. **Roberts, B.R.T.**, Forrin, N.D., McLean, D., & MacLeod, C.M. (2022). *Contingency learning decreases when associations are shared*. 44th annual meeting of the Cognitive Science Society (CogSci), Toronto, Ontario, July 27, 2022.
4. **Roberts, B.R.T.**, MacLeod, C.M., & Fernandes, M.A. (2022). *Symbol superiority: Why \$ is better remembered than 'dollar'*. 6th annual meeting of the Toronto Area Memory Group (TAMeG), Toronto, Ontario, May 19, 2022.
5. **Roberts, B.R.T.**, MacLeod, C.M., & Fernandes, M.A. (2022). *Symbol superiority: Why \$ is better remembered than 'dollar'*. 2022 Psychology Discovery Conference, Waterloo, Ontario, April 5, 2022.
6. **Roberts, B.R.T.**, MacLeod, C.M., & Fernandes, M.A. (2021). *The enactment effect: A meta-analytic review of behavioural, neuroimaging, and patient studies*. 62nd annual meeting of the Psychonomic Society, Virtual Meeting, November 4, 2021.
7. **Roberts, B.R.T.**, MacLeod, C.M., & Fernandes M.A. (2019). *Re-evaluating the influence of bilateral eye movements on memory performance*. 29th annual meeting of the Canadian Society for Brain, Behaviour, and Cognitive Science (CSBBCS), Waterloo, Ontario, July 8, 2019.
8. **Roberts, B.R.T.**, MacLeod, C.M., & Fernandes M.A. (2018). *The enactment effect: An integrative review*. 28th annual meeting of the Canadian Society for Brain, Behaviour, and Cognitive Science (CSBBCS), St. John's, Newfoundland, July 6, 2018.
9. **Roberts, B.R.T.**, Wammes, J.D., & Fernandes M.A. (2017). *Drawing with your eyes: Extending mnemonic research*. 47th Ontario Psychology Undergraduate Thesis Conference, Ottawa, Ontario, May 5, 2017.

Conference Posters (14 presentations; 13 as first author)

1. Sivashankar, Y., **Roberts, B.R.T.**, & Fernandes, M.A. (2024). *Enhancing memory using enactment in stroke patients: Assessing the role of semantic integration and cognitive planning*. 52nd annual meeting of the International Neuropsychological Society, New York City, NY, February 15, 2024.
2. **Roberts, B.R.T.**, Hu, Z.S., Curtis, E., Bodner, G.E., McLean, D., & MacLeod, C.M. (2023). *Reading text aloud benefits memory but not comprehension*. 14th annual meeting of the Society for Applied Research in Memory and Cognition (SARMAC), Nagoya, Japan, August 9, 2023.
3. **Roberts, B.R.T.**, MacLeod, C.M., & Fernandes, M.A. (2023). *Symbol superiority: Why \$ is better remembered than 'dollar'*. 23rd annual meeting of the Vision Sciences Society (VSS), St. Pete Beach, Florida, May 19, 2023.
4. **Roberts, B.R.T.**, MacLeod, C.M., & Fernandes, M.A. (2023). *Symbol superiority: Why \$ is better remembered than 'dollar'*. 50th annual meeting of the Lake Ontario Visionary Establishment (LOVE), Niagara Falls, Ontario, February 9, 2023.

5. **Roberts, B.R.T.**, Fernandes, M.A., & MacLeod, C.M. (2022). *Memory for sports logos: The influence of familiarity*. 63rd annual meeting of the Psychonomic Society, Boston, Massachusetts, November 19, 2022.
6. **Roberts, B.R.T.**, MacLeod, C.M., & Fernandes, M.A. (2022). *Symbol superiority: Why \$ is better remembered than 'dollar'*. Images2Symbols workshop during the 44th annual meeting of the Cognitive Science Society (CogSci), Toronto, Ontario, July 27, 2022.
7. **Roberts, B.R.T.**, MacLeod, C.M., & Fernandes, M.A. (2022). *The enactment effect: A systematic review and meta-analysis of behavioural, neuroimaging, and patient studies*. 34th annual meeting of the Association for Psychological Science (APS), Chicago, Illinois, May 28, 2022.
8. * Homann, L.A., * **Roberts, B.R.T.**, Ahmed, S., Fernandes, M. A. (2021). *Are emojis processed visuo-spatially or verbally? Evidence for dual codes*. 62nd annual meeting of the Psychonomic Society, Virtual Meeting, November 4, 2021. * **Both authors contributed equally to this work.**
9. **Roberts, B.R.T.**, MacLeod, C.M., Fernandes, M.A. (2020). *Better memory for symbols than words: A role for visual imagery*. 61st annual meeting of the Psychonomic Society, Virtual Meeting, November 19, 2020.
10. **Roberts, B.R.T.**, & Wammes, J.D. (2020). *Drawing and memory: Using visual production to alleviate concreteness effects*. 6th annual Graduate Psychology Discovery Conference, Waterloo, Ontario, October 30, 2020.
11. **Roberts, B.R.T.**, McLean, D., Forrin, N.D., Risko, E.F., & MacLeod, C.M. (2019). *Pupillometric and gaze location evidence for preferential encoding of aloud words in the production effect*. 60th annual meeting of the Psychonomic Society, Montréal, Québec, November 15, 2019.
12. **Roberts, B.R.T.**, & Wammes, J.D. (2019). *Drawing and memory: Using visual production to alleviate concreteness effects*. 29th annual meeting of the Canadian Society for Brain, Behaviour, and Cognitive Science (CSBBCS), Waterloo, Ontario, July 8, 2019.
13. **Roberts, B.R.T.**, Forrin, N.D., & MacLeod, C.M. (2018). *Sharing associations influences color-word contingency learning*. 59th annual meeting of the Psychonomic Society, New Orleans, Louisiana, November 17, 2018.
14. **Roberts, B.R.T.**, Forrin, N.D., & MacLeod, C.M. (2018). *One color, two words: The effect of sharing learning contingencies*. 4th annual Graduate Psychology Discovery Conference, Waterloo, Ontario, April 13, 2018.

Teaching Experience

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| <p>Course Instructor, Physiological Psychology University of Waterloo</p> <ul style="list-style-type: none"> ▪ Led a 100+ student lecture-style course on brain physiology and its connection to behaviour ▪ Taught a breadth of neuroscience topics ranging from neurosurgery in Ancient Egypt to recent studies on circadian rhythm ▪ Developed high-quality slides, practice quizzes, and breakout sessions | 2022 |
| <p>Course Co-Instructor, Research in Memory University of Waterloo</p> <ul style="list-style-type: none"> ▪ Facilitated an upper-year seminar course on research in memory ▪ Fostered open dialogue with a conversational style course ▪ Provided critical writing and presentation feedback to students ▪ Offered after-hours guidance for those considering further education | 2022 |

Guest Lecturer / Tutorial Leader | University of Waterloo 2018 – 2019

- Led weekly tutorials on experiment design and programming in an upper year research seminar course and on null hypothesis significance testing in a large second-year statistics course
- Presented an invited guest lecture on assessing construct validity in psychological measures

Teaching Assistant | University of Waterloo 2017 – 2023

- Teaching assistant for 15 courses, spanning every semester of graduate school for 6 years
- Assisted in administration of both upper- and lower-year psychology courses on memory, neuropsychology, neural development, statistics, and introductory topics
- Supported several business courses on entrepreneurship, practical business skills, and human resources management

Mentorship & Training

Co-Supervisor | University of Waterloo 2019 – 2022

- Mentored 4 honours thesis students and direct studies students
- Contributed to two honours theses that won departmental awards
- Trainees now in graduate school at the University of Toronto, Wilfrid Laurier University, and the Ivey Business School at Western University

Project Coordinator | University of Waterloo 2017 – 2023

- Trained and supervised 9 research assistants
- Developed a lab manual for new research assistants
- Held weekly meetings and offered opportunities for advanced training in experimental design and statistical analyses

Awards, Honours, and Certifications

Certification in Unconscious Biases 2023
LinkedIn Learning

Certification in Equity, Diversity, and Belonging 2023
LinkedIn Learning

Certification to administer the MoCA cognitive assessment 2022
Montreal Cognitive Assessment

Certification to administer Baycrest's Memory and Aging Program 2022
Baycrest Health Sciences

Honourable mention for the Donald O. Hebb Award for best spoken presentation at the 31st annual meeting [\$100] 2021
Canadian Society for Brain, Behaviour, and Cognitive Science (CSBBCS)

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| Certification in Fundamentals of University Teaching Centre for Teaching Excellence, University of Waterloo | 2019 |
| Undergraduate Student Research Award (USRA) [\$4,500] Natural Sciences and Engineering Research Council of Canada (NSERC) | 2017 |
| Certificate of Academic Excellence Canadian Psychological Association (CPA) | 2017 |
| Honours Thesis Award University of Waterloo, Department of Psychology | 2017 |
| Merit Scholarship [\$1,000] University of Waterloo | 2013 |

Community Service

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| Ad Hoc Reviewer for Psychological Bulletin, Attention, Perception, & Psychophysics, Quarterly Journal of Experimental Psychology, Memory, Journal of Cognitive Psychology, Cortex, Journal of Applied Research in Memory and Cognition, Canadian Journal of Experimental Psychology, Memory & Cognition, Psychological Research, and Mind Pad | 2019 – present |
| Co-organizer for the ReproducibiliTea journal club at the University of Chicago | 2024 – present |
| Member of the Postdoctoral Advisory Committee at the University of Chicago | 2024 – present |
| Associate Departmental Representative (ADR) for the Canadian Society for Brain, Behaviour and Cognitive Science (CSBBCS) | 2020 – 2023 |
| Head of website and communications organizational sub-committee for the annual Toronto Area Memory Group (TAMeG) conference | 2022 |
| Reviewer for the Annual Undergraduate Thesis Conference | 2019 – 2020 |
| Executive Member of the Canadian Society for Brain, Behaviour and Cognitive Science (CSBBCS) conference social planning committee | 2019 |
| Social Affairs Coordinator for the Graduate Association of Students in Psychology at the University of Waterloo | 2018 – 2019 |
| Vice-President of the Waterloo Neuroscience Club at the University of Waterloo | 2017 – 2018 |

Technical Proficiencies

R | Meta-analysis | Python | Bayesian modelling | Deep learning models | Mixed-effects modelling
| Simulated power analysis | PsychoPy | lab.js | OpenSesame | JAMOVI | JASP | SPSS |
Qualtrics | E-Prime | Structural equation modeling | Robust statistics | Non-parametric testing

Professional Affiliations

Association for Psychological Science (APS) | Cognitive Neuroscience Society (CNS) | Canadian
Psychological Association (CPA) | Canadian Society for Brain, Behaviour, & Cognitive Science
(CSBBCS) | Psychonomic Society | Cognitive Science Society (CogSci) | Vision Sciences Society
(VSS) | Society for Applied Research in Memory and Cognition (SARMAC)

References

Dr. Wilma A. Bainbridge
Assistant Professor, University of Chicago
Postdoctoral supervisor
wilma@uchicago.edu

Dr. Myra A. Fernandes
Professor, University of Waterloo
Undergraduate and graduate co-supervisor
mafernan@uwaterloo.ca

Dr. Colin M. MacLeod
Professor Emeritus, University of Waterloo
Graduate co-supervisor
cmacleod@uwaterloo.ca

Dr. Jeffrey D. Wammes
Assistant Professor, Queen's University
Undergraduate co-supervisor and collaborator
jeffrey.wammes@queensu.ca