Bryan Hughes
McGill University, Department of Biology
Bryan.Hughes2@mail.mcgill.ca

Education:

Doctorate, Doctor of Philosophy in Biology, Trent University (2025-in progress).
Supervisor: Jeff Bowman.

Doctorate, Doctor of Philosophy in Biology, Biology, McGill University (2023-2025). Degree Status: Withdrawn.
Supervisors: Debbie Kelly, Melanie Guigueno.

Master's Thesis, Master of Science, Biology, Laurentian University of Sudbury (2021-2023).
Supervisors: Albrecht Schulte-Hostedde, Jeff Bowman
Thesis: The role of animal personality in the pace-of-life of coexisting rodents

Bachelor's Honours, Bachelor of biology and environmental science, Biology and Environmental Science, Trent University (2016-2021).
Supervisor: Jeff Bowman.
Thesis: Using mass spectrometry to investigate fluorescent compounds in squirrel fur.

Grants, scholarships and monetary awards:

Scholarships: Total = $15,000 CAD

Queen Elizabeth II Graduate Scholarship in Science and Technology, Scholarship. Laurentian university of Sudbury. Value: **$15,000 CAD**

Awards: Total = $9,000 CAD

Graduate Mobility Award, Grant. McGill University. Value: **$6000 CAD**.

Canadian Society of Ecology and Evolution Student Travel Grant, Grant. Canadian Society for Ecology and Evolution. Value: **$750 CAD**.

Graduate Research Enhancement and Travel Awards, Grant. McGill University. Value **$750 CAD**.

Société Québécoise pour l'Étude Biologique du Comportement Excellence award. QCBS. Value **$1500**.

Presentations:

Academic conferences:

Canadian Society for Ecology and Evolution, Sherbrook, Quebec, Canada, July **2025**. Oral presentation: Habitat introduces location error in miniaturized GPS biologgers. (**National**). **Bryan Hughes***, Kyle Elliott, Melanie Guigueno, Debbie Kelly.

Québec center for biodiversity science (QCBS), Montréal, Québec, Canada, February **2025**. Oral presentation: Model approaches for estimating location error in miniaturized wildlife tracking devices. (**Provincial**). **Bryan Hughes***, Kyle Elliott, Debbie Kelly, Melanie Guigueno.

Société Québécoise pour l'Étude Biologique du Comportement (SQEBC), Montréal, Quebec, Canada, November **2024**. Oral presentation: Limitations in wildlife tracking GPS technology for monitoring behaviour in free-ranging birds (**Provincial**). **Bryan Hughes***, Kyle Elliott, Debbie Kelly, Melanie Guigueno.

Animal Behavior Society, London, Ontario, Canada, June **2024**. Oral presentation: Evaluating fine-scale movement in food storing corvids with an increasing reliance on caching behaviour. (**International**). **Bryan Hughes***, Kyle Elliott, Debbie Kelly, Melanie Guigueno.

Canadian Society for Ecology and Evolution (CSEE), Vancouver, British Columbia, Canada, May **2024. Invited**: Oral presentation: The value of long-term ecological studies in monitoring zoonoses. (**National**). **Bryan Hughes***, Jeff Bowman, Albrecht Schulte-Hostedde.

Société Québécoise pour l'Étude Biologique du Comportement (SQEBC), Montréal, Quebec, Canada, November **2023**. Oral presentation: Evaluating behaviours in food storing corvids with an increasing reliance on caching. (**Provincial**). **Bryan Hughes***, Kyle Elliott, Debbie Kelly, Melanie Guigueno.

Laurentian Graduate Society Student Symposium. Sudbury, Ontario, Canada. April 2023. Oral presentation: Evaluating the evolution of animal personality of coexisting rodents. (**Institutional**). **Bryan Hughes***, Jeff Bowman, Albrecht Schulte-Hostedde.

Canadian Society for Ecology and Evolution (CSEE), Winnipeg, Manitoba, Canada. June 2023. Oral presentation: Exploratory and risk-taking behaviours in coexisting rodents. Canadian society for evolution and ecology. (**Provincial**). **Bryan Hughes***, Jeff Bowman, Albrecht Schulte-Hostedde.

One Health and Development: for a world under pressure symposium, Guelph, Ontario, Canada. May 2022. Zoos as sentinels: A meta-analysis on the seroprevalence of captive zoo animals.

(**Institutional**). Pauline van Leeuwen, Sarah Falconer, Jasmine Veitch, Breanna Pyott, **Bryan Hughes***, Isabelle Zimmerman, Albrecht Schulte-Hostedde.
* = presenting author.

Workshops:

Ontario Chapter of the Wildlife Society, Guelph, Ontario Canada. Introduction to R workshop. **Bryan Hughes*** and Connor Reid.

Teaching experience:

Teaching assistantships:

Graduate Teaching Assistant - Cell and Molecular Biology, Faculty of Science, McGill University (Winter 2025).

Graduate Teaching Assistant - Cell and Molecular Biology, Faculty of Science, McGill University (Winter 2024).

Graduate Teaching Assistant - Animal Physiology, School of Natural Studies, Laurentian University of Sudbury (Winter 2023).

Graduate Teaching Assistant - Behavioural Ecology, School of Natural Studies, Laurentian University of Sudbury (Fall 2022).

Graduate Teaching Assistant - Developmental Biology, School of Natural Studies, Laurentian University of Sudbury (Winter 2022).

Graduate Teaching Assistant - Cell Biology, School of Natural Studies, Laurentian University of Sudbury (Winter 2022)

Graduate Teaching Assistant - Conservation and Biodiversity, School of Natural Studies, Laurentian University of Sudbury (Fall 2021).

Graduate Teaching Assistant - Animal Ecology, School of Natural Studies, Laurentian University of Sudbury (Fall 2021).

Undergraduate Teaching Assistant - Natural Resource Management, School of the Environment, Trent University (Winter 2021).

Undergraduate Teaching Assistant - Qualitative Research Methods School of the Environment, Trent University (Winter 2020).

Undergraduate Teaching Assistant - Introduction to Environmental Sciences and Studies School of the Environment, Trent University (Fall 2019).

Undergraduate Teaching Assistant - Introduction to Biology, Biology, Trent University (Fall 2019).

Undergraduate Teaching Assistant - Vertebrate Zoology Biology, Trent University (Winter 2018).

Academic mentorship:

Year(s)	Mentee name	Position	Institution
2024	Tanis Short †	Summer field assistant	McGill university
2023	Julia Wein *	Undergraduate reading project	McGill university
2023	Sydney Miller †	MSc student	Laurentian university
2023	Thomas Burgess †	MSc student, wildlife biologist	Trent university, Ontario ministry of natural resources
2023	Marion Sherbourne †	MSc student and wildlife biologist	Trent university, Ontario ministry of natural resources
2023	Germain Collinge-Menard	MSc student and wildlife biologist	Trent university, Ontario ministry of natural resources
2022-2023	Julia Goss *†	Undergraduate thesis and summer student	Laurentian university
2022-2023	Kyra Duval *†	Undergraduate thesis and summer student	Laurentian university
2022-2023	Cheyanne Barnes *	Undergraduate thesis	Laurentian university
2022	Owen Dyer †	MSc student	Laurentian university

* = Training related to thesis writing, project creation, data collection and analysis, editing and presenting.
† = Training related to field work, animal handling and data collection.

Publications:

Published:

Hughes, B., Mastromonaco, G. F., Bowman, J., & Schulte-Hostedde, A. (2024). Sex differences and behaviour in the pace-of-life of rodents. In Pres.

Newar, S. L., Schneiderová, I., **Hughes, B**., & Bowman, J. (2024). Ultrasound and ultraviolet: Crypsis in gliding mammals. *PeerJ*, *12*, e17048. https://doi.org/10.7717/peerj.17048

Van Leeuwen, P., Falconer, S., Veitch, J., Pyott, **B., Hughes**, Zimmermann, I., & Schulte-Hostedde, A. (2023). Zoos as Sentinels? A Meta-Analysis of Seroprevalence of Terrestrial Mammalian Viruses in Zoos. *EcoHealth*, *20*(1), 43–52. https://doi.org/10.1007/s10393-023-01635-w

Hughes, B., Bowman, J., Stock, N. L., & Burness, G. (2022). Using mass spectrometry to investigate fluorescent compounds in squirrel fur. *PLOS ONE*, *17*(2), e0257156. https://doi.org/10.1371/journal.pone.0257156

In-review:

Hughes, B., Bowman, J., & Schulte-Hostedde, A. (2024). Exploratory and risk-taking behaviours in coexisting rodents. *bioRxiv*, 2024–01.
In review at: Biological journal of the Linnean society.

Committee memberships and professional service:

Academic committees:

Ontario chapter of the wildlife society, President 2024-2025.

Ontario chapter of the wildlife society conference planning committee, co-chair, 2025.

Ontario chapter of the wildlife society conference planning committee, chair, 2024.

Trent university, department of biology, student representative 2018-2019, 2019-2020.

Trent university, department of biology: biology undergraduate society, president, 2018-2019, 2019-2021

Volunteer services:

Journal referee: *Journal of mammalogy*, *Australian journal of zoology*

Animal care technician, Ontario Turtle Conservation Center (2019-2020).

Animal care technician, Kawartha Wildlife Rescue Center (2020-2021).