

Masters/PhD Student in the Cahill Lab
Department of Biological Sciences, University of Alberta

From Dr. James Cahill, Professor:

I am seeking a creative graduate student(s) (PhD preferred, but MSc considered) to join an exciting and highly interdisciplinary project investigating plant behavioural ecology, based out of my lab at the University of Alberta (Cahill Lab: <https://cahilllab.ca/>). The main aim of the project is to identify how plants solve ecological challenges, including modified root growth in response to distributions of nutrients and neighbours. As this work is at the interface of plant biology, behavioural ecology, and cognitive sciences, student(s) will have substantial opportunity to collaborate with others across diverse disciplines. We anticipate this work will lead to novel insights about plant biology, complex problem-solving and potentially perceptions of cognition.

Prospective students must have demonstrated experience in experimental methods, be open to new ideas and express creativity in designing experiments, and support data transparency and integrity. This research discipline is often contentious, and my lab group approaches such questions without a desired outcome in mind, other than conducting strong science and reporting it accurately.

I welcome candidates from the fields of plant biology, behavioural ecology and experimental psychology. I recognize no student is likely to have all such backgrounds, and thus learning-on-the-job is expected.

PhD students will be given substantial room to develop a research project of their own interest, within the bounds of this larger research project. MSc students will be given more directed research objectives, due to the shorter program duration. Students must be able to successfully compete for a TAship within the Department of Biological Sciences. Additional information is found at: <https://www.ualberta.ca/en/graduate-programs/biological-sciences.html>.

Interested applicants can email me at james.cahill@ualberta.ca with any questions. In such correspondence, please include a current CV, your prior research experience, and motivation for this specific research program.