



Graduate Student Positions (Master's or PhD Opportunities)

We invite applications for three graduate student positions to participate in a research project to evaluate the resilience of diversified crop rotations to extreme weather events such as intense precipitation and freeze-thaw cycles in Canadian agroecosystems. In this project, we propose to investigate two aspects of potentially improved resilience of diversified crop rotations using a soil lysimeter facility at the Elora Research Station in Ontario. Graduate student 1 will assess how soil water retention and/or recharge in diversified vs. non-diversified annual cropping systems respond to individual rainfall events and consequently impact crop production. Graduate students 2 and 3 will apply winter pulse warming to simulate extreme freeze-thaw cycles and evaluate their impact on water quality and greenhouse gas emissions. The main tasks of the graduate students will be conducting field and laboratory experiments and modeling analyses.

The students will be guided by a team of researchers from the University of Guelph, University of Waterloo, Western University and collaborators from Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA).

Applicants must have specialization in agrometeorology, biogeochemistry, hydrology, soil science or a related field. Preference will be given to candidates with demonstrated skills and experience in experimental work and numerical mathematical modeling in environmental sciences, or a related field. MSc student positions can be created in lieu of a PhD position for exceptional candidates who prefer to undertake a Master's degree.

For further information regarding these positions, or to submit an application, please contact Dr. Claudia Wagner-Riddle (cwagnerr@uoguelph.ca). In your application email, please include "OMAFRA-Alliance#_yourname" in the subject line and attach a single PDF file that contains:

- Your motivation for applying to the position and your research interests
- Curriculum vitae
- Copy of transcript(s)
- Contact information for up to 3 references

Closing date: Applications will be reviewed as they are received. The positions will remain open until filled. **We thank all applicants for their interest, however, only those individuals selected for an interview will be contacted.**