



IMPROVE LIFE.

PhD position: Effect of temperature stress on wheat quality

The University of Guelph resides on the treaty lands and territory of the Mississaugas of the Credit. We recognize this gathering place where we work and learn is home to many past, present, and future First Nations, Inuit, and Métis peoples. Our acknowledgement of the land is our declaration of our collective responsibility to this place and its peoples' history, rights, and presence.

The Lyons (Department of Plant Agriculture) and Joye (Department of Food Science) Labs at the University of Guelph are seeking to fill a PhD position that bridges their research expertises on a project focusing on the effect of temperature stress on wheat quality. The candidate will be involved in a multidisciplinary, industry and society-driven research project. The effect of temperature stress will be investigated on plant physiology, wheat yield, processing quality and food safety.

Research environment

The research teams of which the successful candidate will be part are dynamic, young and ambitious teams investing in high quality research, intensive training of students, close collaboration with industry and society, and advocating equity, diversity and inclusion (EDI) principles. Both teams focus on a balanced research portfolio covering applied as well as fundamental topics.

As a PhD student in our teams, you can expect the following:

- Mentoring and support in research, outreach and career goals
- Collaborative and supportive work and research environment committed to promoting EDI
- Opportunities to establish a professional network and long-term partnerships with our partner organizations

Job responsibilities

The candidate will be responsible for wheat growth trials, wet lab work on plant and food samples, and advanced data analysis. Wet lab work will involve diverse spectroscopic, chromatographic and imaging techniques. The candidate will carry out an in-depth review of the existing relevant literature, develop standard operating procedures, and provide the project stakeholders with semesterly updates through meetings and annual reports outlining the research progress. Other tasks include general care for lab safety procedures, participating in EDI training and activities, and contributing to and supporting the organization of knowledge translation and transfer activities.

Candidate profile

The ideal candidate has a demonstrated educational background in plant biology/science and/or food chemistry/science and a keen interest in further developing their skills in research. Due to the collaborative nature of the project the candidate should be an enthusiastic team player who is able to work independently and as part of a small team, and demonstrate excellent organization and communication skills.

Required qualifications

We are looking for an enthusiastic and responsible addition to our research teams with the following qualifications:

- Holding a M.Sc. degree in a relevant field (such as (but not limited to) plant biology/science and food chemistry/science)

- Demonstrating excellent organizational, time and project management skills
- Demonstrating strong background in chemical wet lab work
- Demonstrating excellent data collection, analysis (statistics) and management skills
- Interested in close collaboration with government and industry partners
- Capable to work as an independent, critical, responsible and flexible researcher
- Open to think and work interdisciplinary
- Eager to publish in peer-reviewed journals and to deliver timely the required project reports in English
- Capable to present research results at project meetings and conferences in English
- Keen to integrate in an international research team and be an active participant in and an advocate for EDI initiatives and training

The work requires on-campus presence.

To apply, please send the following documents to ijoye@uoguelph.ca by January 31, 2024:

- A CV
- Research statement with description of past research accomplishments and current research interests (1-2 pages)
- Contact information of two references

Review will begin February 1, 2024, and applications will be considered until the position is filled, selected candidates will be contacted for an interview. The position has an anticipated start date of **May 1, 2024** (though other timelines can be accommodated). Questions about the position can be directed to ijoye@uoguelph.ca with subject line 'temperature stress and wheat quality PhD position'.