

Post-Doctoral Fellowship Position in Plant-Disease Proteomics

Department of Biological Sciences

Plant Genomics Group (www.uhriqlab.com)

Call Closes: April 28th, 2025

Introduction:

The post-doctoral fellowship position will be based in the Department of Biological Sciences at the University of Alberta, Edmonton, Alberta, Canada in the laboratory of Dr. R. Glen Uhrig, but will also intersect with several researchers from the Departments of Agriculture, Food and Nutritional Sciences and Computer Science.

The University of Alberta is a Top 5 Canadian university, with the Department of Biological Sciences offering a diverse and vibrant community for research and education. The main interests of the Uhrig lab are to understand how diel plant growth and development is regulated using advanced genomics, transcriptomics, proteomics, metabolomics and phenomics techniques. Broadly, the current project will involve elements of data acquisition, curation, integration and bioinformatic analysis, culminating in the application of machine learning aimed at assessing various plant traits.

Research and Training:

This 2 year project provides exceptional academic and professional opportunities. As such, the candidate will be part of a diverse, multifaceted project team that includes multiple other Uhrig lab members and collaborators across the University of Alberta research community. As part of this team, the PDF applicant will be expected to intersect with project collaborators and funders, and will have extensive opportunities for professional development. Further, the candidate will have opportunities for collaboration within the Uhrig lab on other on-going projects.

Research efforts will deploy quantitative proteomic approaches to better understand disease-crop relationships in *Brassica napus* (canola). The selected PDF applicant will learn a variety of cutting-edge techniques related to quantitative plant proteomics and plant disease biology, amongst others. It is expected that the outcomes of this project will feed into collaborative applied research aimed at developing more resilient canola production. Within the general scope of the project, the candidate will be encouraged to develop independent and creative lines of inquiry, with support from Dr. Uhrig and other lab members. The candidate will be given outstanding training and support in a number of aspects of science including technical skills, communication and critical thinking to prepare them for careers in academia and/or industry.



Applicant Qualifications:

The successful candidate will have most of the skills below:

1. Excellent oral and written abilities in English.
2. Ability to work both independently, as well as part of a team.
3. Extensive experience with molecular plant science and/or biochemistry mandatory.
4. Prior experience with mass spectrometry driven proteomics will be prioritized.
5. Prior experience with the implementation of R & Python will be prioritized.

Eligibility, Admissions and Finances:

Position funding aligns with University of Alberta hiring and pay schedules, including health and dental benefits (<https://www.ualberta.ca/en/human-resources-health-safety-environment/benefits-and-pay/benefits-and-pension/benefits-overview/index.html>).

The Uhrig lab encourages applicants from all backgrounds and nationalities to apply, and offers a diverse, supportive and healthy work environment.

Appointment Start Date: June 1st, 2025 (negotiable).

Contact: Interested applicants should send a 2-page CV and 2 academic references to [ruhri\[at\]ualberta.ca](mailto:ruhri[at]ualberta.ca) (www.uhriqlab.com). Short-listed applications will be asked to interview via Zoom.

