

Ph.D. Position in Plant Functional Genomics

**Department of Biological Sciences
University of Alberta
Edmonton, Alberta, Canada**

Plant Functional Genomics Group (www.uhriglab.com)

Application Deadline: April 3rd 2023

Introduction:

The Ph.D. candidate will join the multi-year; multi-institutional Genome Canada funded project TRIA-FoR. The candidate 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.

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 research focus of the Uhrig lab is to understand how plant cells regulate their function using advanced proteomics, biochemistry and genomics, focusing on the impact of post-translational modifications (PTMs). Protein phosphorylation is the most widely occurring PTM and is important for regulating diverse biological processes such as growth, signaling and responses to stress in plants. The Uhrig lab focuses on studying regulatory protein phosphorylation in a diel context using a variety of plant models.

Research and Training:

As part of the TRIA-FoR project, the Uhrig lab will employ quantitative proteomics in conjunction with advanced plant molecular biology, biochemistry, and genetics to characterize and validate host disease resistance targets related to mountain pine beetle. Correspondingly, the Ph.D. candidate will be expected to learn and deploy a variety of these cutting-edge techniques to accomplish this task working in conjunction with the research team.

The Ph.D. candidate will be expected to incorporate their findings into the larger collaborative and applied research efforts of TRIA-FoR, which is aimed at enhancing pine resiliency to mountain pine beetle. Within the general scope of the project, the Ph.D. candidate will be encouraged to develop independent and creative lines of inquiry, with support from Dr. R. Glen Uhrig and the research team. They will also be provided theoretical and hands-on training with advanced analytical technologies, in addition to professional development opportunities and support to prepare them for careers in either academia or industry.

Applicant Qualifications:

Candidates should have most of the skills below:

1. Excellent oral and written abilities in English.
2. An ability to work both independently as well as collaboratively as part of a team.
3. Prior laboratory experience.
4. Experience in plant science and/or biochemistry.
5. Tangible research experience with molecular and/or biochemical sciences (recommended).

Eligibility, Admissions and Finances:

The Uhrig lab encourages students from all backgrounds and nationalities to apply, and strives to offer a diverse, supportive, and healthy work environment.

For all admission requirements and funding details on graduate studies in the Department of Biological Sciences, please refer to the Department of Biological Sciences website (<https://www.ualberta.ca/biological-sciences/graduate-studies>). Admission is subject to academic and English language requirements set by the Department (<https://www.ualberta.ca/biological-sciences/graduate-studies/for-applicants>).

Interested students are highly encouraged to apply for eligible internal and external graduate student scholarships and will receive active support from the Uhrig lab in these funding applications (<https://www.ualberta.ca/graduate-studies/awards-and-funding/scholarships>). Additional funding and financial aid opportunities for international students: <https://www.ualberta.ca/graduate-studies/awards-and-funding/international-student-funding>.

Appointment Start Date: May-August 2023

Contact:

Interested applicants should send a 2-page CV to [ruhrig\[at\]ualberta.ca](mailto:ruhrig[at]ualberta.ca) (www.uhriglab.com) that includes references. Only short-listed applicants will have their references solicited for letters of recommendation and be asked to interview via Zoom.