

Postdoctoral Research Fellow (Crop Pathology and Genetics Lab) University of British Columbia (UBC), Vancouver

A postdoctoral research fellow position is available starting immediately in the 'Crop Pathology and Genetics Lab' under the supervision of Dr. Gurcharn S. Brar (<https://www.landfood.ubc.ca/gurcharn-singh-brar/>) at the University of British Columbia (UBC). The lab is affiliated with the Applied Biology Program in the Faculty of Land and Food Systems, and is located in the vibrant and beautiful city of Vancouver. The lab studies wheat and barley genetics (of disease resistance and other traits of interest to breeders), genetics, genomics of pathogen populations, race typing/virulence characterization of rust and leaf spotting pathogens. We use field sites, greenhouse and growth chambers, lab experiments, and genotyping/genomics methods to accomplish our research goals. In addition to international collaborations, our lab works closely with public wheat and barley breeding programs in western Canada and generating disease resistance pre-breeding germplasm is one of our foremost research priorities.

For this particular position, we are seeking a candidate with strong expertise in genomics, bioinformatics/computational biology, and NGS data analyses. Experience with portable sequencers or sequencing platforms will be an asset. The candidate is expected to work with graduate students in the lab. Specific research activities include molecular characterization (genome assembly, comparative genomics, effector mining, phylogenomics, phenotype-genotype association analyses) of wheat stripe rust and tan spot, and barley net blotch pathosystems. In addition, the postdoc will be involved in other ongoing wheat, barley, and pathogen genomics projects in the lab. Research will involve some travelling across wheat and barley growing region of western Canada during July and August. The postdoc will communicate among project collaborators (Drs. Guus Bakkeren – AAFC Summerland; Stephen Strelkov – University of Alberta; and Randy Kutcher – University of Saskatchewan) and other research collaborators in western Canada and beyond.

Required Qualifications

Applicants should have a PhD degree in Botany, Biology, Bioinformatics, Plant Science, or related field, obtained within the last 5 years. Experience in NGS data analyses and Phylogenomics is required, and experience in working with sequencing platforms (Oxford Nanopore, Illumina etc.) is a plus. Minimum salary will be CAD \$60,000 plus benefits per year. The postdoc appointment will be for one year, with the possibility for extension for three additional years.

Application Process

Interested candidates should apply by Feb. 28, 2021, but the position will be filled as soon as possible. Applicants should submit their CV and names of three referees to Dr. Gurcharn S. Brar at gurcharn.brar@ubc.ca. Please use 'PDF Application for Pathogenomics' in the subject-line.

Selection Criteria

The selection of the candidate will be based on the following criteria: 1) a PhD in an appropriate field of biological research, 2) a sound knowledge of and demonstrated experience in genomics and bioinformatics, 3) experience with molecular biology techniques, 4) ability to conduct high quality independent and innovative research with the ability to carry work through to publication, 5) well-developed verbal and written communication skills, 6) ability to work effectively both in an independent role and collaboratively with others in a diverse academic setting.

Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit, or Indigenous person. All qualified candidates are encouraged to apply; however, Canadians and permanent residents of Canada will be given priority.